

Changes in global Economic Landscape – in Search for New Business Philosophy

Proceedings of the International Scientific Conferences’

2013

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Foreword

In 2012, the Editorial Board received 24 papers, which were peer-reviewed (*anonymously*) by 2 subject experts from 11 Universities . As a result 21 of papers were accepted for publication in the Proceedings of the international Scientific Conference's "Changes in global Economic Land-scape-in Search for New Business Philosophy"

All papers divided in 3 chapters:

1. Business management;
2. Finances;
3. Other topic's

Chapter 3 devoted to wide range of topic for instance – changes in business environment, education management etc.

Larger part of papers (research results) was discussed in two international conferences:

1. the 5th International Scientific Conference "Information Society and Modern Business" "Knowledge Creation and Transfer into New Competences" was hold in Ventspils University College 26th –27th April 2012;
2. the International Conference on "International Conference on Accounting and Finance in Transition, European and World Experience and Public Policy Consideration"(9th ICAFT-2012) was hold in Riga International School of Economics and Business Administration 11th – 13th October 2012.

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THE IMPACT OF COMPLIANCE TO SARBANES-OXLEY ACT ON COMPETITIVENESS OF U.S. PUBLICLY TRADED COMPANIES IN LATVIA

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Introduction

Corporate governance is a topic that has reached a new level in the modern society, after the serious scandals in the beginning of this century such as Enron, WorldCom, Tyco and many others. The set of principles, laws, systems and institutions affecting internal control provisions have become an issue for many companies in every possible industry, and there are sets of industries with special types of regulations applying to them. The main regulation of interest in this work is Sarbanes-Oxley Act, which requires companies to use strong internal control systems. There has been a great debate regarding implementation of Sarbanes-Oxley and costs that it requires, especially in the context of small and large companies. Since 2004 Sarbanes-Oxley Act applies to all public U.S. companies with market capitalization larger than 40.43 million LVL, for companies smaller than that some parts remain voluntary, despite previous agreements to make it mandatory since July 2005, then July 2007, the congress has agreed to exempt smaller companies from some of its parts to protect smaller businesses¹.

The goal of this work is to **analyze the competitiveness of the public US companies operating in Latvia in comparison to local or other companies, which do not face such regulations**. Some of the existing research suggests that for companies which are strongly working to ensure high compliance, the ability to compete improves, but is it the case for Latvia? It is interesting to see if the companies perceive compliance as a competitive advantage or whether in the market conditions of Latvia it becomes a disadvantage due to additional costs, which are transferred to the product. The analysis focuses on the short term versus long term, as research suggests that for the long term companies' benefit of the increased reputation, also, it is expected that the general economic situation will improve and customers may be more aware and able to appreciate the difference between compliant and non-compliant companies.

The currently accepted hypothesis is:

Ho : U.S. public companies in Latvia benefit from the compliance to Sarbanes-Oxley.

Ha: U.S. public companies in Latvia are worse off by having to comply with Sarbanes-Oxley

In order to analyze the described issue, the following methods will be used:

- 1) theoretical framework for analysis of competitiveness and compliance will be set up;
- 2) analysis of the research done worldwide, to see the trends and obtain information on criteria in analysis;
- 3) analyze the possible consequences for non-compliance to these acts;
- 4) a questionnaire to branches of U.S. public companies in Latvia;
- 5) analysis of companies' competitiveness.

Corporate Governance

The well-publicized corporate failures of Enron, WorldCom, Tyco and other companies have eroded confidence of investors and changed the attitude towards the markets. As a results, nowadays corporate governance is a tool that helps companies manage risk, ensure internal controls, efficiencies when running the company and assuring growth, not only being imposed on the companies from outside. The Sarbanes-Oxley Act has become the landmark law and has changed how internal controls are mandated; it has become the corporate governance reform².

The chairman of the Committee William H. Donaldson says that "good, honest companies should fear neither Sarbanes-Oxley nor our enforcement efforts. Rather, they should recognize that the improved standards that the Act mandates and smart and fair enforcement of the laws are the right thing to do and help attract capital and investment.", he also emphasizes that it should not be just about complying with the rules, but doing the right thing, from top to bottom.³

¹ *The Sarbanes-Oxley Act of 2002.*

<http://f11.findlaw.com/news.findlaw.com/cnn/docs/gwbush/sarbanesoxley072302.pdf>

² **The Conference Board.** *Corporate Governance Best Practices, a Blueprint for the Post-Enron Era.* Page 9.

<http://media.complianceweek.com/documents/3/SR-03-05.pdf>

³ Same.

This work will focus more on the costs associated with the Section 404, thus, a deeper explanation is necessary. Section 404 is the one that has created most of the controversy, debate and interest. It is dedicated for the creation and maintenance of viable internal controls. SEC has explained that internal controls include “policies, procedures, training programs, and other processes beyond financial controls, and those are meant for safeguarding of assets against unauthorized acquisition, use, or disposition”. Companies are required to document and test the effectiveness of the internal process controls. According to Committee of Sponsoring Organizations, internal control is a process, affected by an entity’s board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- Effectiveness and efficiency of operations;
- Reliability of financial reporting;
- Compliance with applicable laws and regulations⁴.

How Sarbanes-Oxley Influences Competitiveness

Before understanding what costs are related to Sarbanes-Oxley, one must understand what are the problems faced by the agency, mostly those of separation of ownership and control. An agency problem is that managerial agents do not always have the same incentives as shareholders and they not always act in shareholders’ best interest. Thus agency costs are the costs of managers pursuing their own agendas at the expense of shareholders’ value, and, agency costs are also those that are devoted to dealing with this issue. Butler & Ribstein claim that it is not rational and that it wastes shareholder value to try to get the perfect alignment, as in this case costs of control will exceed the benefits⁵. This is something that Sarbanes-Oxley attempts to do, or another solution would be to stop hiring managerial agents and ask the owners to do the business themselves, which is an unrealistic scenario. Even more, one may argue that shareholders do their risk diversification themselves, by having a portfolio of stocks, and by forcing the managers to change their company business strategy, they are leaving the shareholders worse off. Shareholders are not interested in the internal controls as such, but only if internal controls increase the value of shares.

The attitude towards Sarbanes-Oxley differs substantially study by study. One of the cited benefits of the Act is claimed that it allows space for implementing enterprise wide risk management, as companies compliant with Sarbanes-Oxley have processes and staff in place for documenting and evaluating controls; those can now focus on operations risks rather than financial risks, which would normally take 2-3 years⁶. But what is the opinion of the companies? One study cites that out of 222 surveyed leaders 74% claim they have benefited from compliance, 79% say companies now have stronger internal controls, 47% say compliance ensures accountability of people involved in financial reporting, 33% mention decreased risk of financial fraud and 31% say reduced number of errors in financial operation, 27% claim it has improved financial reports, 25% say it empowers the audit committee by providing it with deeper information, however, only 20% say it strengthens investors view of the company, which was the primary purpose of the act⁷. It is important who performs the study or who answers the questionnaire, as if to analyze the answers of firms executives, those usually are more negative and they tend to exaggerate the costs of the Act, at the same time audit firms, who have a reason to understate the costs, report smaller costs and bigger declines in the costs⁸.

Wall Street Journal cited the chief accounting officer at General Motors, who said: “The real cost isn’t the incremental dollars, it is having people that should be focused on the business focused instead on complying with the details of the rules”⁹. This refers to the opportunity cost in the companies complying with Sarbanes-Oxley. In addition, Wallison argues that Sarbanes-Oxley forces executives to change their business strategies and become less flexible, thus reducing the value of the firms, as they are personally facing greater risks and stiffer penalties. In a sense the act forces to choose more conservative strategies and

⁴ **Tarantino, Anthony.** *Manager’s Guide to Compliance*. New Jersey : Johns Wiley & Sons, 2006. Page 21. ISBN 9780471792574

⁵ **Butler, N.Henry, Ribstein, Larry E.** *The Sarbanes-Oxley Debacle: What We’ve Learned ; How to Fix It*. Illinois: Aei Press. Page 55. ISBN 9780844771946

⁶ **Levy, Elliot.** *Fallout from Sarbanes-Oxley – are Privates and Nonprofits Next?* Page 7.
<http://www.aabri.com/manuscripts/09194.pdf>

⁷ Same.

⁸ **Coates, John C.** *American Economic Association. The Goals and Promise of the Sarbanes-Oxley Act*. Page 14.
<http://www.jstor.org/stable/30033703>

⁹ **Solomon et al.** *Wall Street Journal. Accounting fraud.* <https://www.wsjeuropesubs.com/subscriptions/>

in turn obtain less return¹⁰. Zhang also argues that direct and indirect costs of Sarbanes-Oxley outweigh the benefits, as it is too costly to eliminate all potential and existing corporate fraud. Zero fraud only can be achieved by such measures that limit most flexibility in the company, which could result in greater damage to the company than some fraud¹¹.

This means that it is impossible to calculate the full extent of regulatory framework costs for a company, as unrealized revenue due to never launched products is impossible to calculate, as well as some of the mandatory measures are a normal part of company work. But even considering these, there are a number of other costs, and Morgenstein & Nealis summarize those:

- Personal liability;
- Directors & Officers insurance;
- Director compensation;
- Audit and legal expenses;
- Controls software;
- Outsourcing;
- Lost productivity¹².

The existing studies attempt to calculate all of partly the above mentioned costs, which then would only provide a superficial image of the costs that companies incur with compliance. And, as Butler & Ribstein argues, the costs prove that the additional costs faced with deter honest people from engaging in risky but productive business rather than prevent dishonest people from circumventing the law¹³. The examples of fraud already with Sarbanes-Oxley show that even if compliance is in force, some still manage to find ways around.

The Costs for Public US Companies in Latvia

The method used for analysis in the research is a questionnaire to the branches of public U.S. companies in Latvia asking companies to analyze their competitiveness in relation to competition as well as a number of other questions, which were compared to an existing worldwide research in order to see if the costs are similar. The questions are based on the existing research in U.S., to be able to set grounds for comparison.

Based on the results of the questionnaire, companies do see that their competitiveness is impaired due to compliance to Sarbanes-Oxley, however, it was expected that the cost leaders would face most of the issues, but based on the results of the questionnaire product differentiators are at the inferior position. For some reason product differentiators see the impact of Sarbanes-Oxley more and state that they become less competitive, at the same time also saying that they see some value from Sarbanes-Oxley. As the number of companies focusing on niche customers is small in the sample size, no definitive conclusions can be reached.

Conclusions

A number of conclusions were reached:

1. “H0 : U.S. public companies in Latvia benefit from the compliance to Sarbanes-Oxley” as the null hypothesis can be rejected partially, as product differentiators do not see benefits on their competitiveness from complying with Sarbanes-Oxley, while the answers of cost leaders are more positive, but without overall agreement. Based on the fact that majority of companies are product differentiators, the alternative hypothesis “Ha: U.S. public companies in Latvia are worse off by having to comply with Sarbanes-Oxley” is applicable.
2. There are 82 branches of U.S. companies in Latvia, out of which 45 are direct representatives of publicly traded companies, which have to comply with Sarbanes-Oxley, out of those for analysis can be used results of 6 cost leaders, 25 product differentiators and 3 companies that specialize on niche customers or niche products.
3. 79% of companies which have to comply with Sarbanes-Oxley receive support for compliance from their headquarters, 48% of those receive additional funding and 30% additional

¹⁰ Wallison, Peter. *Wall Street Journal. Blame Sarbanes-Oxley*. <https://www.wsjeuropesubs.com/subscriptions/>

¹¹ Zhang, Ivy X. *Economic Consequences of the Sarbanes-Oxley Act of 2002*. Page 12.

http://w4.stern.nyu.edu/accounting/docs/speaker_papers/spring2005/Zhang_Ivy_Economic_Consequences_of_S_O.pdf

¹² Morgenstein, Marc, Nealis Peter. *The Impact of Sarbanes-Oxley on Mid-Cap Issuers*. Page 10.

<http://www.sec.gov/info/smallbus/mmorgansternmidcap.pdf>

¹³ Butler, N.Henry, Ribstein, Larry E. *The Sarbanes-Oxley Debacle: What We've Learned ; How to Fix It*. Illinois: Aei Press. Page 23. ISBN 9780844771946

headcount. It can be believed that companies which receive support from the headquarters in more substantial form are more active in compliance and see higher benefit in it.

4. The average values for the headcount expenses are 71,333 LVL, the largest value is put to the loss of productivity at 414,286 LVL annually. Audit fees are not such a concern for the companies as it more has to do with the choice of the auditor rather than special requirements.

5. There are 2 micro, 12 small, 11 medium-sized and 6 large companies in the sample size, for which respectively average compliance costs without the lost productivity are 30,250 LVL (2.36% of revenue), 5,800LVL (1.51% of revenue), 102,000 LVL (0.78% of revenue), 11,633 LVL (0.18% of revenue) respectively, the average for all companies is 83,113 LVL (1.05% of revenue). If the loss of productivity is included, the total number is up to 2.96% of revenue annually. This is consistent with the worldwide research that places compliance costs from 0.46% to 2.8%.

6. One of the main factors influencing competitiveness of companies can be the loss of productivity and the opportunity cost of compliance as such. Considering the substantial expenses of the Act every year, the impact of such costs can be exponential for the companies' development.

7. Companies spend larger amount of hours for compliance purposes than comparative studies show worldwide, on average 11,974 hours, for micro companies 2,575, small companies 5,317, and medium-sized companies 18,295. The worldwide research suggests that those are from 3,080 to 26,000 hours annually. Considering that in headquarters companies face larger amount of work to be done in connection to compliance, the higher numbers can be explained by different methodology in the study or by low productivity and lack of qualified employees in Latvia.

8. 38% of companies surveyed believe that their competitors are not compliant either because they do not have to or because they do not by choice.

9. The questions about competitive advantage have more than one answer for some companies, it indicates that some of them do not understand the concept, which is surprising, as typically large, multinational companies have strong strategic message. This may indicate the bias of the person answering the questionnaire.

10. Contrary to the expected, majority of cost leaders believe that the strictness of Sarbanes-Oxley is about right (5 out of 6) and product differentiators believe it is too strict (17 out of 25).

11. Despite believing that strictness of the Act is about right, even cost leaders consider that there should be a "lighter" version of the act for branches of public companies located outside of U.S. (5 out of 6). Product differentiators have more radical opinions, 13 out of 25 are in favor of lighter version and 9 out of 25 believe companies should be exempt.

12. Companies say that they see some value but admit that the Act takes up considerable amount of resources, the answers are similar among product differentiator and cost leaders, but as some answers indicate, the compliance measures are considered excessive and companies lack added value to the business.

13. Only one of the cost leaders has answered that they have become less competitive because of the compliance, one absorbs the costs and one claims that it even improves their public image, which is contradictory, as for cost leaders usually the price matters the most. Two respondents have answered that although it requires additional costs, it does not influence their competitiveness. It is the contrary for product differentiators, where nearly half has answered that they have become less competitive because of the compliance requirements.

14. The results of the questionnaire suggest that companies may face competition from distributors, which is a more advantageous legal form in consideration of Sarbanes-Oxley, as it not as costly as direct representation in terms of Sarbanes-Oxley.

Suggestions

As a result of those conclusions, suggestions were developed by the author:

1. The main companies should educate the local personnel more on the competitive advantage of their branch, as from the results of the questionnaire it is clear that some employees do not have a clear understanding and the overall costs might decrease if the importance of the issue is emphasized.

2. Product differentiators should consider promoting the additional compliance as a benefit of their products, this would allow to pass on the cost of compliance to the final consumer and may not result in a significant loss of competitiveness.

3. Company culture should include compliance, as this is the only way to achieve full compliance and possibly still be able to execute the strategy of choice for the companies.

4. Companies should have a strategy review, as the answers indicate that some of the companies promote compliance in terms that may not give any result, for example, for cost leaders.
5. All of the compliant companies should promote compliance among their customers and show it as a benefit and necessary requirement in modern business society, for example, when preparing company presentations, short information about Sarbanes-Oxley could be included, as well as information about compliance should be promoted on company websites and in other materials. However, the scale of this promotion would be different among cost leaders and product differentiators.
6. Companies should educate their employees on the benefits that Sarbanes-Oxley provides, in order to achieve better understanding of the Act rather than leave employees with need to do more work without clear explanation why it is needed. More information should be given to employees on what are the consequences of non-compliance. This information should be given on annual basis, not only once, and be a part of introductory model for new employees.
7. Trade associations should promote compliance and open up a discussion about compliance and competition, to ensure that it is not possible that certain companies are compliant but they face competition from by choice non-compliant competitors.
8. Local trade associations in cooperation with compliant companies could use funding to organize information courses for companies interested in internal control and compliance.
9. Voluntary compliance by local companies should be promoted. Modified, voluntary codes of conduct can be a part of local trade association membership's requirement.
10. More detailed case approach analyzing specific companies and all of their costs in relation to Sarbanes-Oxley would be required to achieve more conclusive results on the costs faced by the companies.
11. The competitiveness of direct U.S. public companies' branches in Latvia should be compared to distributors in order to reach a conclusive result on which legal form is more advantageous.
12. Considering the legislation implemented in Europe, it would be of interest to analyze how it influences the competitiveness of companies listed in Europe in comparison to companies listed in U.S. and having to be compliant with Sarbanes-Oxley.

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LATVIAN COMPANIES' ENTRY MODEL IN THE MARKET OF FRANCE

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Key words: international trade, external market, the market of France, entry modes, entry model, Latvian producers.

Introduction

Starting from classical country-based theories like Adam Smith's mercantilism theory in 16th century we do know what export is. In 2010 the Gross Domestic Product (GDP) in Latvia was 18,07 billion euro¹⁴ where goods for a value of 6,69 billion euro¹⁵ were exported. Export in 2010 constituted 36,9% of GDP in Latvia. Trade balance in France in 2010 was negative amounting of 68,9 billion euro¹⁶. Import in France in 2010 was 456.9 billion euro or 13,0% of their GDP (3497,5 billion euro in 2010). Population of Latvia is 2,07 million people¹⁷ (2011) while in France there are 65,35 million inhabitants¹⁸ (2012) and 77,1 million tourists¹⁹ in 2010 (ranking 1st place worldwide) or more than 140 million potential customers in other words. These are significant circumstances to speak about France as a potentially important external market for Latvian producers.

It is possible to find various theoretical materials about modes and models to enter external markets but just few of them concentrate on specific countries. It is required for Latvian companies to take into account the political, economic and social situation in external market as well as mentality to work out a personalised model. It is significant to concentrate on a specific market, to study it and work out a precise, business-oriented, objective and trendy entry model. These preconditions lead to a necessity to research the particular topic "Latvian Companies Entry Model in the Market of France" because no papers about this issue were presented so far.

The research is urgent because at the current economic situation every Latvian company should seriously consider entering new external markets. The goal of the research is to study the possible entry modes and to come forward with a model so that Latvian companies can successfully enter the market of France. To achieve the goal the author have set three tasks: (1)To describe theoretical aspects of international trade and possible entry modes in external markets; (2)To analyse socioeconomic situation in France and Latvian companies potentialities in the market of France and (3)To come forward with a personalised entry model for Latvian companies so that they might successfully enter the market of France. The hypothesis of the research states that for more efficient operations in the market of France Latvian companies should use a personalised entry model.

This research concentrates on Latvian companies and market of France. The author has had some comments that it may be used for companies from different markets to enter in other countries. It is true but at the same time it was not the goal. The author wanted to present progressive and trendy model in a specific and very precise field of the research.

Materials and Methods

The research was held starting from February 2010 until December 2011. In order to prepare a successful research project the author has used qualitative and quantitative research methods. The qualitative research

¹⁴ Central Statistical Bureau (Latvia). Vers. Windows 7 Ultimate. 8 May 2012 <<http://data.csb.gov.lv/Dialog/Saveshow.asp>>

¹⁵ Central Statistical Bureau (Latvia). Vers. Windows 7 Ultimate. 9 May 2012 <<http://data.csb.gov.lv/Dialog/Saveshow.asp>>

¹⁶ National Institute of Statistics and Economic Studies (France). Vers. Windows 7 Ultimate. 9 April 2011 <http://www.insee.fr/fr/themes/tableau.asp?reg_id=0&ref_id=NATTEF08467>

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¹⁸ National Institute of Statistics and Economic Studies (France). Vers. Windows 7 Ultimate. 20 March 2011 <http://www.insee.fr/fr/themes/tableau.asp?reg_id=0&ref_id=NATnon02151>

¹⁹ National Institute of Statistics and Economic Studies (France). Vers. Windows 7 Ultimate. 6 March 2011 <http://www.insee.fr/fr/themes/tableau.asp?reg_id=0&ref_id=NATTEF13532>

methods used in this paper are in-depth interviews in Latvia as well as in France, focus group discussions and participant observation. The research is divided into three parts where the first one analyses theoretical aspects of international trade and other activities in external markets, the second part is an overview and evaluation of Latvian companies activities in the market of France as well as its socioeconomic data analysis, but the third part of the research outlines Latvian companies' entry model in the market of France and there are comments of four reviewers- industry experts.

The presented entry model is based on three elements. The first one is overview of theoretical entry modes described in several books like T.Volkova "Bizness pāri robežām: Praktisks ceļvedis jaunu tirgu apgūšanā" (2010), R.W.Griffin, M.W.Pustay "International Business (5th edition)" (2007) and D.J.Daniels, L.H.Radebaugh, D.P.Sullivan "International Business: Environments and Business Operations" (2007). These books are useful to theoretically display several entry modes but do not encourage Latvian companies to operate abroad. The outcome of these materials is a clear division of possible entry modes without any tips how to use this information in business environment. Dr., prof. Tatjana Volkova shows some cases with Latvian companies but the reason is to prove the strategy written in a book not to analyse companies' experience which may be used in other cases. The book "Bizness pāri robežām: Praktisks ceļvedis jaunu tirgu apgūšanā" states out theoretical ways to enter in external markets but do not consult on steps which should be made to do business abroad. On the other hand, in books "International Business" and "International Business: Environments and Business Operations" the authors concentrate on multinational organisations with a turnover in millions which is not Latvian case. In Latvia for 97% enterprises (they are considered as SME's) these are hundreds and thousands of euros in everyday deals. So the literature is useful to read it as a background for optional entry modes but is not sufficient to understand things to do for Latvian producers to enter in external markets.

The second element is the research of the political and socioeconomic situation in France by statistical data analysis, observations while being in France and following the latest news in the period of the research. It is crucial to understand the market where you do want to place the product. So it is not possible to underestimate the usefulness of these data which should be updated on time basis to get precise information.

At the very end the author tested Latvian companies' results while discussions and interviews with the industry experts. The research has no sense if it does not help Latvian companies to enter in the market of France. So the third element of the research was to present the Latvian companies' entry model to four industry experts with a significant experience in external markets as well as in France to test it.

Results

In the research there are examined seven international trade theories. They may be divided into two groups. Classical country-based theories (starting from Adam Smith's Mercantilism Theory in 16th century, Adam Smith's Absolute Advantage Theory in 18th century, David Ricardo's Comparative Advantage Theory in 19th century as well as Heckscher-Olin Theory in 1930's) and firm-based theories (Linder Theory in 1961, Product Cycle Theory in 1970's and Porter Theory in 1990's). Actually, we can say that International trade in 2010's is a correlation of these theories. They can't be called useless or old fashioned because these theories are the basics of modern trade. Companies from various countries take part into international trade because economic resources (raw materials, capital, labour force etc.) are decomposed all over the world and for an efficient production we do need several compositions. The company's advantages in external market may be based on natural (local resources) and inherited (local know-how) aspects. In case of Latvia, natural advantage is local resources like wood (50% of the country is covered by forests) as well as labour-force which is not that expensive as in developed countries. Inherited advantage or local know-how Latvia has in several fields which have been known in Eastern Europe for years- wooden, textile, machinery industries. These are businesses where Latvian companies are competitive and could be potentially interesting partners for French enterprises.

There are four basic strategies (International, Multinational, Transnational and Global) which may be used to enter external markets. The choice is made before starting the entry in external market but after the market research is held. The decision is based on correlation of particular company's brand (image) and marketing activities as well as product price and quality.

International trade theory displays five entry modes in external markets- export, licensing, franchising, foreign branch and joint venture. Every entry mode has advantages and disadvantages. The decision which mode may be the right one is based on company's own goals, vision and the situation in the market. Anyway, before entering in external markets it is important to carry out a market research. There is not a clear mathematic formula that answers to the questions which mode should be used. Although by working out a plan how to enter in external market, it will be possible to see which model has been used. Business is a

process which means that the company may use one model to enter in the market but another one in some period of time for further development of their activities. At the same time Latvian company should choose that mode which does not bother its comparative advantage- local resources and labour-force as well as know-how.

There are three other possibilities which may be examined to enter in external market- turnkey project, management contract and cluster. Turnkey project is a deal where the company signs a contract that someone else will do all actions (agreed within a document) and will sell this project at the very end. It does not eliminate the entry in external market because the other party (which is executor in this case) will do all the operations to get there anyway. Management contract is an outsourcing service which may be useful to use consultation from industry experts. Cluster is a way of cooperation which recently gets more and more popular in Latvia.

There are a lot of potential problems when doing business in France- French is the only language in communication, company should schedule delays in money transactions and other activities, French people are used to ask a lot of information and documents for even a small project, the product must be adopted to the customer's taste and should be prepared for an immediate use. Legislation process takes a lot of time in France; bureaucracy is a common term when dealing with French institutions. Haggling is a regular action for French people so it is important to foresee a margin for a discount. The vast majority do not know Latvia and they do not trust people, companies from the Eastern Europe region. Because of the transportation costs only high added value products or products with small premium but in gross quantity may be competitive in the market of France. These are important circumstances that should be taken into account but the market of France is a way too big to postpone the entrance.

Latvian companies should use their own know-how to create a product with high added-value based on Latvia's natural and competitive advantage. There are several industries where Latvian companies have been known as proficient for a long period of time- wood, machinery, textile etc. Latvian companies may be successful in the market of France when selling product with a Scandinavian quality at Eastern Europe's price. Latvian companies should use export as an entry mode at the beginning and a personalised entry model composed of 12 steps to successfully enter the market of France.

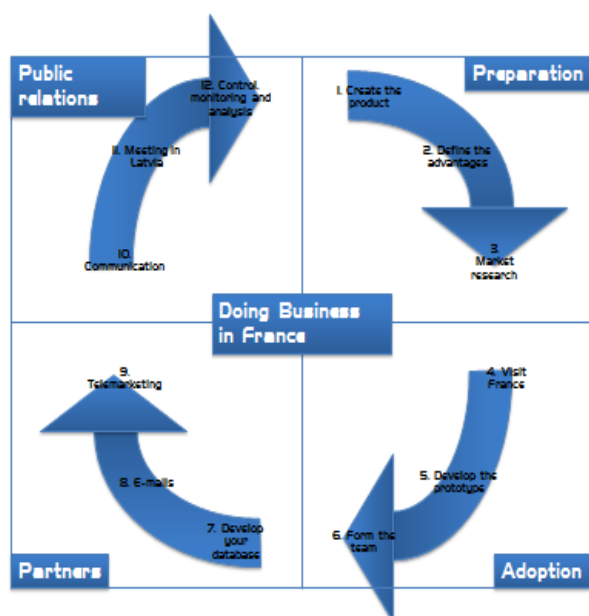


Figure 1. Latvian companies entry model.

Source: Author empirical research

The model to enter in the market of France is composed of 12 steps which are divided into four categories:

1 Preparation

1. Creating the product- company should start with the product. They may work out a new one or adjust it. Anyway, it won't be possible to enter the market with the existing one. Every market has its own

particularity which requires adjustments. Price, quality, delivery terms and flexibility are essential. French customer requires a product which is ready for an immediate use which means that Latvian producer has to adjust it to the local traditions and taste.

2. Defining advantages- SWOT analysis is necessary to define company as well as product advantages and things to improve. It is vital to compare and look on two categories- companies and products from developed countries as well as from emerging markets. It is not enough to be cheaper than French companies because in the market of France there are rivals from Eastern Europe and China too.

3. Market research- this is a correlation between first two steps of the model. Before moving on, the company should research several issues in the market- political and socioeconomic situation, legislation, potential customers and their values, habits, transportation costs, mentality, quality, price standards etc. It is not a theoretical aspect but a thing in "to do" list. Just a clear understanding of the country and its market is accepted to think about business operations there.

Examination question- are we ready to enter the market now? As Mister Donald Trump has said that the best investments in his life were projects when he didn't invest the money. Maybe it is better to refuse now to successfully enter later on.

II Adoption

4. Visiting France- the company will have some questions. It is recommended to visit France, meet industry experts as well as Latvian representatives in the Embassy of Latvia and Latvian Investment and Development Agency in France to get answers. Uncertainty and lack of information may cause important losses in the future. This is the best time not to hesitate to hire export consultant agency and use their knowledge as an outsourcing service.

5. Developing the prototype- company should adjust the product regarding the information they have got in the previous four steps. Just a prototype which is ready for use or sale means that the company is ready to enter in the market. Partners will require a prototype to see what the company wants to sell there.

6. Forming the team- the company has to form a team with experts in several fields (exporting, marketing, production, financing etc.). It is possible to use outsourcing services but the responsible person (manager) should be chosen. Do not forget about French language. It is very important for the manager to set the goal and tasks as well as divide roles and responsibilities within the team.

III Partners

7. Developing own database- it is not possible to enter the market of France on your own. Company is obliged to have a native representative, agent or distributor. Latvian enterprise should start with working out a database. Contacts may be found on the Internet, mass media and previous communication sessions. Company name, Name and Surname of a contact person, email address, phone number, website address or other information about experience is crucial. This is some kind of wish list with potential partners in the market of France.

8. Sending emails- a formal letter where presenting the company, product and express willing to cooperate should be sent to all recipients from the database. Average turnover (answers to the email) is around 1%. Be formal, punctual and precise.

9. Telemarketing- the goal of the step 8 (sending emails) was to carry out the telemarketing session. It is much easier to start conversation if there is a clue (email which was sent before in this case). Average turnover is around 5%. Company should sort the contacts after the phone call in three groups- potentially interested partners (to continue the communication), not for cooperation now (to call back in 6 months), and not interested at all (to contact in a year).

IV Public relations

10. Communication session- there will be question and answer session with potential partners. Both parties will be interested to clear up values, cooperation conditions and details about the company and product. It is suggested to stop the interconnection as fast as possible in case of bad presentiment or problems in this early phase of cooperation.

11. Meeting in Latvia- it is critical to have a meeting in Latvia. Trust is essential when being partners. The image of the company as well as country is vital. So try to be a nice host and do not forget that Latvia is not just Riga and the person is really interested to get familiar with it. Both parties are looking for confidence in this early stage of co-business.

12. Controlling, monitoring and analysing results afterwards- if the potential partner is satisfied about the results of the meeting in Latvia there is a serious reason to start cooperation which means an entry in the market of France. It is not the end of the acquisition, it is the beginning so monitoring, controlling and result analysis must be carried out.

The model is prepared based on theoretical materials as well as existing companies experience however further research and observations are important to evaluate the usefulness of it which is some kind of never-ending story.

Conclusions

Taking into account specific information about economic, political and social situation in France and its own characteristics described within this research may be important. When considering the entry in the market of France Latvian companies should pay attention on long-term business relationships and subordinate their strategy in this way but for efficient operations in the market of France Latvian companies are obliged to have a native representative (agent, salesmen or company).

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4. Julie Snasli- journalist at “Le Journal du Bois” (held in Riga, 10.06.2011.)
5. Kristaps Purmalis- senior expert in Information and Public Relations Department at Ministry of Foreign Affairs of the Republic of Latvia (held in Brussels, 30.12.2011.)
6. Loïc de Saint Quentin- secretary General at organisation AFCOBOIS (held in Paris, 8.11.2011.)
7. Mārtiņš Cīrulis- marketing manager at SIA “Eco House Industries” (held in Līgatne, 2.05.2011.)
8. Maxime Simonin Kouyoumdjian- editor-in-chief at “Architecture bois” (held in Bordeaux, 10.10.2010.)
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10. Silvestrs Ritovs- founder at SIA “Kanins” (held in Riga, 31.12.2011.)
11. Uldis Trokšs- head of the board at SIA “ScanHouse” (held in Riga, 25.12.2011.)
12. A representative from the company SARL “MAJA Construction Bois”, who preferred to stay anonymous (held in Angers, 25.04.2010.)
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FRESH LOOK AT FINE ARTS MANAGEMENT AS NEW BUSINESS PHILOSOPHY

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Abstract

Purpose Purpose of the paper is to describe new business philosophy of network economy by fine arts as role model. The aim is to identify main areas in fine arts management significantly differing from the rest industries.

Design/methodology/approach – The paper describes how information technologies and globalisation on individual level has lead to structural changes and creation of new type of economy. It summarizes management practices from role model industry – fine arts.

Findings Fine arts can be perceived as role model for future vision of network economy. The main paradigm shift in management thought is due to management outsourcing which leads to equal power position for manager and employee; intrinsic motivation and network structure which requires operating outside legal or contractual boundaries.

Originality/value Originality and value of the paper appears in combining future vision of networked economy with corresponding existing business practice in fine arts. Management outsourcing is novelty since businesses outsource any function but management.

Keywords arts management, networked economy, management outsourcing, business in fine arts, management paradigm shift

Paper type Conceptual paper

Introduction

Civilization and society has gone through different human freedom and development stages. Transformations from one stage to another has been more rapid - case of revolutions or slower and less noticable like transition from agricultural to industrial era.

With fast technological development and changing everyday life there is a question whether we are experiencing further development of existing stage or is this a transition to new one. And whether it is a new stage of social development or not, what can we expect?

Further analysis will give a possible scenario for business ecosystem development particularly paying attention to changing role of management.

New – networked economy

Information, along with knowledge and culture are the key elements of human freedom and development (Benkler, 2006). For more than 150 years most of information has been produced by corporations because both production and communication required significant financial and know-how resources available only for corporations. With widespread of internet information and communication has become decentralized. People communicate directly without corporate intermediaries. This has led to significant structural change in most of social processes including business.

One of such changes is increasing number of self-employed individuals in EU (Schmid, 2011) and increased proportion of micro enterprises. This change can be explained by:

- availability of direct information necessary for connecting suppliers, producers and consumers on individual level;
- technological development allowing to start and run business alone or in small groups without significant investments (Benkler, 2006)
- globalization and access to global labour and consumer markets allows individuals to specialize in narrow niche without being employed (Ervin Van Lun, 2011)

Benkler (2006), Van Lun (2011), describes the process as appearance of new - networked economy. This model can be described as network of highly specialized individuals or small groups of people interacting on social and economic level. . Espinosa, Harnden and Walker (2007) are more moderate and are describing end of hierarchy and birth of meta-management. They claim hierarchy as unnatural form since the structure of biological and social evolution shows emerging organisation resulting from the self-assembly of individual living beings that join others to create larger, stable structures that exhibit emergent properties (Ingber, 1998).

Taking into account above mentioned trends of human resources flowing away from corporations to self-employment and creation of small businesses, I paid attention to creative economy which according to United Nations (2010) has indicated growth rate of 14 percent worldwide over six consecutive years.

Concentric circles and vectors of creative economy

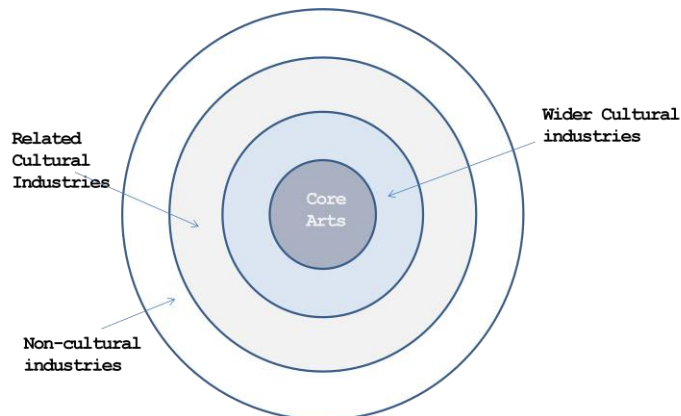


Figure 1. Concentric circles model for creative economy

One of the models describing creative economy is concentric circles model developed by Throsby (2001). It is based on two value types of goods – economic and cultural.

Throsby's model consists of three levels of circles – core arts, wider cultural industries and related cultural industries. The value of goods is most cultural type in the center of the circles and more economic in the periphery.

For wider perspective and placing all creatives into overall economy I have added one more layer –

non-cultural industries describing all other industries. It is possible to define several more specific layers but my analysis doesn't require it.

Analyzing historic and current trends like:

- development of management thought from industrial to scientific management to social person, further to organizational behaviour, knowledge management, creativity and innovations;
- growth of creative economy at 14% (United Nations) and growth of contemporary art market at 67% (Artprice);
- increasing proportion of micro enterprises and self-employment (Schmid, 2011);
- changing consumer preferences from mass products to customized one (Godin, 2011)

it is possible to draw trend vectors in concentric circles model.

All of them have the same direction - from periphery to the center of concentric circles model – core arts. This allows to draw a conclusion that fine arts can be considered as a role model for future networked economy.

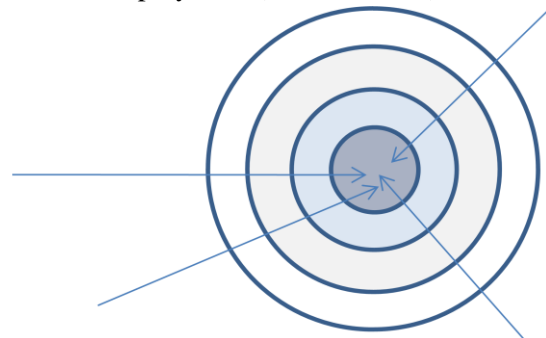


Figure 2. Trend vectors

Business in fine arts

There are several key issues significantly differentiating business in fine arts from other industries.

Abbings (2002) has identified several of them - denial of business and money, uniqueness of each product, huge differences in prices without reasoning, brand of the artist playing major role and art making should not be influenced by money.

Abbings and Klammer (1996) describes „art as activity and as experience, like religion and friendship, embody special values that are beyond measure, therefore clashes with the form of money”. This leads to unique attribute of true art world – denial of business and economy.

Artists have talent, and talent is hard to explain, therefore art has sacred status and is worshiped as much as religion. Art has a special status in society – sacred (Abbings, 2002) and religious (Ullrich, 2010) which gives it privileges compared to other industries.

Jyrama (2009) describes contemporary art market as network structure consisting of various networks, starting from quite small networks around one gallery and extending to global and international networks.

Bilton (2010) describes art world as creative friendly network where relationships are more like friendship not business. Artists collaborate in several projects simultaneously and these projects are more like lifestyle businesses not with a primary aim to earn money.

Amabile (1983) draws attention to different motivation of creative people, which is deeply intrinsic compared to many other non-creative industries where people mainly have extrinsic motivation. Artists make art for its own sake not for money or other external rewards.

Fine art according to definition is primarily for beauty rather than utility. If art has little use it becomes a luxury and thus works of art can be found primarily among wealthy people and institutions. Art products are used to mark a person's position on the social ladder (Abbings, 2002). This creates also inverse behaviour – art is purchased and consumed to prove or defend social status.

Since the ecosystem of fine arts is quite different from regular business world, arts management uses other practices than in the rest of economy.

Management in fine arts

Business management in fine arts in many cases is carried out by intermediaries – galleries, dealers, representatives, agents. Their primary role is connecting artists with art buyers. In some countries – United States, UK, France and recently China, art management as separate category is more developed than in the others. It correlates with market share of artists from mentioned countries in contemporary art market.

Kuesters (2010) explains common view of arts managers as ones taking care of non-artistic functions and enabling production of arts. Managers and artists are considered as opposing and complimentary to each other. Managers do not take part in art production and artists care only about art making. Kuesters (2010) research shows that art managers are involved more deeply in artistic content of the artists they are representing. The reason is that artistic content strongly influences finances of artist or arts organization.

Jyrämä's (2010) research shows that management practices are unwritten but well-established. Most of the information circulates informally, thus making social relationships playing key role in arts management.

When analysing functions of fine arts and its business, it is possible to identify and separate management functions from creative, although they are interrelated as shows Kuesters (2010) research.

Management outsourcing

Outsourcing has increased dramatically in recent years (McIvor, 2011) and companies outsource many of their functions. Usually outsourcing is considered when internal capability for performing function is not sufficient or when function can be performed better by external service provider.

According to McIvor's (2011) outsourcing model, when making outsourcing decision company should analyse sourcing strategy according to three dimensions – relative capability position, contribution to competitive advantage and opportunism potential.

Analysing management function in fine arts according to McIvor's model, following conclusions can be drawn:

- relative capability position – artists rather prefer making art than managing art production. In most cases artists don't have managerial experience or education, this means that managerial capability could be higher if outsourced;
- contribution to competitive advantage – in case of arts the key competitive advantage lies in artistic performance. Management is not the key differentiator from the customerpoint of view;
- opportunism potential – management outsourcing has low or none level of opportunism potential since artistic capabilities of each artist are so unique that they are hard to transfer to other artist.

Therefore management functions in fine arts can be outsourced and existing practice in leading contemporary art countries shows that it is a sustainable business operation solution.

Fine arts are representing rare case from management perspective – there are no many industries where such a key function as management can be and is outsourced. This phenomenon significantly differentiates business in fine arts from any other existing business and management practice.

Shifting management paradigm

The case of fine arts management as outsourced function requires significant existing management paradigm shift. The main reasons are following.

- Employee is employer and vice versa – artist is hiring manager for him(her)self and paying salary to manager. The power position is eliminated and this requires revision of existing management practice.
- Money or other extrinsic motivators have small effect – artists have intrinsic motivation, but most of motivational theories and management practices are built around external motivation.

- Fine arts operate in network rather than formal hierarchical entities that leads to equal rules for both manager and artist.
- Ability to operate and influence outside borders of legal entity or limits of agreement – artists are involved in many networked projects simultaneously which means that their managers should be capable to take part in those projects and influence their success.

The mix of all above mentioned factors create environment in which existing management paradigm can not operate. This means that future networked economy needs new and different management thinking and practice.

Conclusions

Fine arts management can be considered as role model for possible future economy, therefore deeper research of existing practices in fine arts management specially paying attention to outsourced management practice in networked economy should be carried out.

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SUSTAINABLE PERFORMANCE MANAGEMENT IN HOTEL INDUSTRY – A LITERATURE REVIEW

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Abstract

Purpose: The purpose of this study is to investigate the current level of development of sustainable performance management and compare it to the level of implementation in the hotel industry. Special emphasis is placed on all aspects of sustainability and on the management systems that integrate them.

Design/methodology/approach: The paper uses the method of literature review to examine the models of integrated sustainability performance management that are used, especially in the hotel industry. The analyzed papers are published by prominent journals, organizations or companies and are classified according to the sustainability issues that they address.

Findings: Research results reveal a lack of literature on integrated sustainable performance management systems in the hotel industry in comparison to other industries. There is great inconsistency in the performance management systems used and there is a great need for sustainable performance management systems and tools that would embed all features of sustainability in the hotel industry.

Practical implications: The practical implications of the research are to emphasize the importance of sustainable performance management systems and the benefits that hotel managers could have in applying them in their business and as a result enhance their operational and strategic decision-making.

Social implications: Sustainable performance management systems besides economic include social responsibility and environmental performance and by using them they increase the economic potential of environmental and social activities. Consequently they raise the quality of life not only for the hotel company but also for all stakeholders.

Originality/value: The research provides an extensive literature research and a systematic review of recent developments in sustainable performance management systems. The paper also provides a background for identifying further research and development of sustainable performance management systems in the area of hotel industry.

Keywords: Performance management and measurement, sustainability, Sustainability Balanced Scorecard, Integrated reporting, hotel industry

Paper type: Literature review

Introduction

Tourism and hotel industry have been rapidly growing in the past two decades (World Tourism Organization, 2010). With this growth, the environmental, economic and social impact rises simultaneously. The recent trends and expectations from shareholders are that these impacts should be minimized as much as possible. Sustainability has to reach a point where it has to be stopped considered as an additional cost to the company and be seen as an approach that can improve overall performance and bring benefits not only to the company but also to all stakeholders. In order to fulfill these anticipations hotel companies need to implement sustainability performance management into their business. This study has been done with the purpose of examining the development of sustainability performance management methods and the level of their implementation and usage in the hotel industry. The main research question of this paper is: 'What level of development have sustainability performance management methods that integrate sustainability performance with financial performance reached?'. There is a wide range of different performance management systems, methods, tools and techniques that deal with sustainability. In this paper we will analyze the Sustainability Balanced Scorecard and Integrated reporting. Although this is not a complete list of tools for sustainable performance management, these two are some of the most important for embedding sustainability into the core of a business. From the literature review it can be seen that these two methods are not sufficiently researched and there is a need for further research. The methodology for both the Sustainability balanced scorecard and Integrated reporting is not clearly developed and there are no guidelines that users can follow in the implementation of these methods and for the preparation of reports. Further research should be conducted towards preparing specific guidelines and examining the correlation between sustainability performance and financial performance and all the benefits that this can bring.

1. Sustainability performance management

Sustainability performance management includes all the activities that are focused on sustainability and financial performance and that help achieve a company's goals. It is a newly emerging term that integrates environmental and social information with economic business information and sustainability reporting (Schaltegger & Wagner, 2006, p. 681). Sustainability performance management has to be strategic and decision-focused in order to contribute to long term performance and value creation (Satish & Ranjani, 2010). Many hotel companies are trying to implement sustainable performance management systems in order to meet sustainability goals and enhance their performance. To avoid difficulties in the implementation process there is a need for standardized, systematic and unified guidelines that will guide the process (Asif et al., 2011).

2. Methodology

For the purpose of this research, extensive literature review in the field of Sustainability Balanced Scorecard and Integrated reporting was carried out. The papers date from 1997 to 2012. The literature search was conducted in electronic databases (EBSCOhost, Emerald, ProQuest, Sage Journals Online, Science Direct and Wiley Online Library), on the internet, as well as in the library. The aim of this search was to investigate to which extent the literature on Sustainability Balanced Scorecard and Integrated reporting has been explored. We identified 16 papers in the area of Sustainability Balanced Scorecard and 28 papers on Integrated reporting. From a total of 44 papers in these two fields, 23 were published in journals, 5 presented at conferences and 16 were found on web pages. The papers were systemized chronologically, the ones dealing with different approaches towards integrating sustainability into the Balanced Scorecard are presented in Table 1, and papers concerning Integrated reporting are presented in Table 2.

3. Sustainability Balanced Scorecard

Sustainability Balanced Scorecard (SBSC) is a strategic performance management tool that is based on the concept of Norton and Kaplan's (1997) Balanced Scorecard (BSC) and it integrates and combines sustainability with existing perspectives (financial, customer, internal business processes and learning and growth). One of the characteristics of the BSC is that it presents financial and nonfinancial measures in a single unified report. This is why the BSC is suitable as a framework for incorporating sustainability into company planning and management and as a foundation for aligning sustainability with business strategy. Although the concept of SBSC has emerged at the beginning of the 21st century, the literature on this topic is not abundant. The majority of the literature offers overviews, emphasizes benefits and different visions of SBSC. One of the benefits of SBSC is in making a systematic approach to strategic sustainability management and structuring the framework for sustainability management control (Schaltegger, 2011) in addition to improving corporate responsibility (Epstein & Wisner, 2001). There is some evidence that sustainability has a positive relation to financial performance (Crawford & Scaletta, 2005, Chalmers & Palomero, 2011).

There is no global consensus on how to incorporate sustainability in the BSC. Different authors propose different methods. The literature review has identified 9 approaches (Table 1).

Table 1

Different approaches of integrating sustainability into the Balanced Scorecard

Author	Approach
Zingales, O'Rourke & Orssatto (2000)	Environmental BSC, socio-related scorecard
Bieker, T. & Gminder, C. (2001)	Five different approaches according to different strategies employed by the respective companies.
Figge, F., Hahn, T., Schaltegger, S., & Wagner, M. (2002a)	Three approaches of integrating sustainability
Bieker, T., & Waxenberger, B. (2002)	Society perspective
White, G.B. (2005)	BSC upgraded with GRI indicators
Ahmad, A.R., Hamid, N.A.A., Yusoff, N.H. & Ramlan, R. (2007)	Incorporate CSR in learning and growth perspective.
Hubbard, G. (2009)	Social performance perspective; environmental performance perspective; organizational sustainable performance indicator
Soriano, R.L., Munoz-Torres, M. J., & Chalmeta-Rosalen, R. (2010),	New model based on Norton and Kaplan's BSC, Sustainability perspective
Chalmeta, R. & Palomero, S. (2011),	Upgraded perspectives, Social/Occupational perspective, Environmental perspective

Source: Author

Zingales, O'Rourke & Orssatto (2000) made a distinction between social and environmental responsibilities of a company and propose building two separate environmental and social scorecards. Bieker and Gminder (2001) identified five different possibilities of structuring a Sustainability Balanced Scorecard:

- 'Partial approach' - One or two sustainability indicators should be integrated into one of the classical perspectives (most likely perspectives of internal processes or customers).
- 'Additive SBSC' - A fifth perspective is added for environmental and social sustainability.
- 'Total SBSC' - Sustainability indicators are added into all of the four BSC perspectives.
- 'Transversal approach' - Sustainability is considered as a value driver of an organization and environmental and social aspects are leading indicators in all perspectives.
- 'Shared Services SBSC' - SBSC for only some parts of the organization, with the aim of promoting the idea of sustainability.

In 2002 these five approaches were summarized into three ways of integrating sustainability into the BSC. The first method was to integrate environmental and social indicators in the BSC, then to create a fifth perspective and the last method was to make a separate sustainability scorecard which takes into account environmental and social aspects (Figge, Hahn, Schaltegger, & Wagner). Bieker and Waxenberger (2002) propose a new society perspective which relates to external groups and all other sustainability-related issues are included in the four BSC perspectives. White (2005) has found an intersection between BSC and GRI's economic, environmental and social sustainability indicators and suggests a version of a Sustainability balanced scorecard that incorporates the Global Reporting Initiative's Sustainability Reporting Guidelines and its indicators into BSC perspectives. Ahmad, Hamid, Yusoff and Ramalan (2007) have proven that when integrating Corporate Social Responsibility into the Balanced Scorecard perspectives, the most effective way is to integrate it into the learning and growth perspective. Hubbard (2009) proposes two new perspectives related to social and environmental performance, the measures in all of the perspectives are indicated in rates (from 1 to 5) in addition to this he integrates Organizational Sustainability Performance Index that is an average of all perspectives rates. A new model was proposed based on Kaplan and Norton's BSC. This modified Balanced Scorecard, contrary to the classical one, has three perspectives - sustainability, stakeholders and structure that are connected with causal links (Soriano, Munoz-Torres, & Chalmeta-Rosalen, 2010). In 2011 (Chalmeta & Palomero) research was conducted on 16 companies with the aim of investigating the possibilities of implementing the concepts of sustainability within the strategy and day-to-day management. Authors upgraded all classical BSC perspectives with sustainability elements and added two new perspectives - the Social/Occupational perspective (social and labour criteria) and Environmental perspective (environmental aspects important for the organization's processes).

There are concerns that environmental and social activities will not be fully reflected in the Scorecard and that the integration will have minimal effects on sustainability practice and overall results (Butler, Henderson, & Raiborn 2011). Finge et al. (2002b) argue that social and environmental measures will 'crowd

out' economic measures and that it will communicate just a small part of the company's performance which is not sufficient.

Some examples of SBSC can be found in the literature, but none of them is from the hotel industry. Novartis implemented sustainability in a way that a new Environment, health and safety balanced scorecard was created in addition to the classical BSC (Zingales & Hockerts 2003). Novo Nordisk integrated environmental and social issues into Customer & Society, People & Organization and Internal processes perspectives (Zingales & Hockerts 2003). Royal Dutch Shell added a fifth perspective named Sustainable Development (Zingales & Hockerts 2003). Dias-Sardinha, Reijnders and Antunes (2007) tried to implement SBSC into three Portuguese companies, but there were difficulties because the companies were only concerned with the financial effect sustainability will have and despite the willingness for implementation that they had, they did not want to implement it in a short time. As it can be seen, these SBSC have each been made on by adopting a different approach and there is no common ground for comparison.

4. Integrated reporting

In August 2010 the International Federation of Accountants (IFAC), the Global Reporting Initiative (GRI), and The Prince's Accounting for Sustainability Project established The International Integrated Reporting Committee. The aim of the Committee is to build a globally applicable framework which combines financial, environmental, social and economic information into a comprehensive format. Since this is a new way of delivering company information, literature in this field is scarce. The majority of the examined papers provide only a general overview and theoretical guidelines and steps on how to implement it, most of the papers stress benefits of the implementation and only two papers accent current limitations and criticize it (Table 2).

Table 2

Overview of the Integrated reporting literature and what it addresses

Author	Integrated reporting
Eccles & Krzus (2010a)	General guidelines, benefits
Eccles & Krzus (2010b)	General guidelines, benefits
Armbruster & Clay (2011)	Overview
Deloitte (2011)	Overview, general guidelines
Eccles & Saltzman (2011)	Overview of history and current state, benefits
Obholzer, A. (2011)	Overview
Phillips, Watson, & Willis (2011)	Benefits, standardization
Roberts (2011)	Differences between local and international guidance
The International Integrated Reporting Committee (2011)	Overview, general guidelines
Verschoor (2011)	Overview, critique
Bouie Leuner (2012)	Overview, benefits, King III
Brown Gooding (2012)	Example of implementation, benefits
Davis & Lukomnik (2012)	Overview, preparation for integrated reporting
Eccles (2012)	Overview, current limitations
KPMG International Cooperative(2012)	Detailed overview and guidelines, King III
The International Integrated Reporting Committee (2012a)	Suggestions for improvement
The International Integrated Reporting Committee (2012b)	General overview, future directions
Sharman (2012)	Overview
Vaessen & Tant (2012)	Steps for implementing Integrated reporting

Source: Author

Eccles and Krzus were one of the first to address this matter. For them preparing an integrated report creates great benefits to companies in the cases of clarity about relationship and commitments, enhances decision making, deepens the engagement with the stakeholders and lowers reputational risks (Eccles & Krzus, 2010a). It also adds discipline that comes from external reporting to the discipline that stems from internal reporting (Eccles & Krzus, 2010b). In 2011 the International Integrated Reporting Committee published a discussion paper which explains the essence of Integrated reporting in a concise manner, how to build it and what its content and benefits are, what are the challenges to face and future directions to take, and it also invites all interested parties to get involved in the discussion. Obholzer (2011) gave another definition of Integrated reporting - it is an ongoing search for effective communication that represents a tool for

classifying data (Obholzer, 2011). This specially adapted framework should be made with a set of standards for measuring and reporting nonfinancial information and should not only integrate financial and non-financial performance, but also reflect mutual influences between these two (Eccles & Saltzman, 2011). Standardization is one of the benefits that the implementation of integrated reporting ought to bring to companies by obtaining incremental insights and process enhancements for shareholders and stakeholders (Phillips, Watson & Willis, 2011). There are demands that integrated reporting should become mandatory for all companies that list at stock exchanges (Armbruster & Clay, 2011). As there is currently no generally accepted framework, organizations implementing Integrated reporting could face doubt about relevance, scope, assurance and other issues (Deloitte, 2011). There is some criticism also that Integrated reporting is overwhelming and that it will not be accepted widely (Verschoor, 2011).

In 2012 the International Integrated Reporting Committee published a summary of the responses to the 2011 Discussion paper. There were more than 200 responses with reference to basic concepts and definition of Integrated reporting, its target audience, the values it can bring and the timing of the release of the framework (The International Integrated Reporting Committee, 2012a). The Committee is planning to issue a draft version of the framework in late 2013. This version is planned to be the basis for the preparation of an Integrated report and it will be made on a principles-based approach without any specific guidelines (The International Integrated Reporting Committee, 2012b). The purpose is to give directions on how to create Integrated reports that will be general enough for every industry, but that will at the same time enable comparability.

At the same time KPMG International (2012) published its vision of an integrated report that consists of an organizational overview and business model, operating context including risk and opportunities, strategic objectives, performance, future outlook and governance and remuneration. Vaessen and Tant (2012) made a three-block model of building integrated reporting which includes financial and nonfinancial information and relevant details in the short-, medium- and long-term. Davis and Lukomnik (2012) suggest the following steps for the implementation of Integrated reporting:

1. Companies need to understand the connection between sustainability and financial performance;
2. Integrated reporting should be a process of reporting not just the final product, with emphasis on the fact that Integrated reporting is much more than just a disclosure mechanism, but also an internal management tool;
3. The internet should be used to gather data about stakeholders;
4. Companies should be involved in the preparation of the methodology for Integrated reporting.

It is considered that Integrated reporting will induce changes in company structures. Furthermore companies that have already embedded sustainability in their business will consequently implement it easier and faster than the ones that did not (Bouie Leuner, 2012). Another benefit that is stated is the repositioning of a company ahead of competitors and the creation of integrity and ethical values (Brown Gooding, 2012). In the time to come, there are many challenges mentioned in the terms of time that will be necessary to prepare the guidelines, concerns about making the reports legitimate, universally applied and how to audit them (Eccles, 2012). And for integrated reporting to be complete, it should include reports from the stakeholders as well (Sharman, 2012).

Some of the pioneers in applying Integrated reporting are BASF, Dima, Novo Nordisk, Phillips and United technologies. These reports are made each based on a different methodology since the framework is general and does not provide sufficiently standardized guidelines. The reports are hard to compare in the terms of sustainability, although the sustainability issues are mostly prepared based on the GRI methodology. The sustainability issues do not reflect the financial performance to a satisfactory level. There are no companies in the hotel industry that prepare Integrated reports.

A good starting point for the preparation of Integrated reporting is the King III Code of Governance Principles for South Africa that requires that all of the companies that are listed on the Johannesburg Stock Exchange (JSE) to deliver integrated reports. The King III Code works on the principle "□□ apply or explain why not□□" which obligates companies to apply the Code in the way that sustainability impacts financial performance or to provide argumentation why they are not applying it (Institute of Directors Southern Africa, 2009). The differences between Integrated reporting and King III Code can be seen in stakeholder focus, structure of the report, terminology, principles, financial information, length of the report and assurance (Roberts, 2012). In the JSE there are three hotel companies that prepare integrated reports according to King III Code.

Cullinan Holdings LTD (2011) delivers only a descriptive explanation about sustainability, City Lodge Hotels Limited (2012) describe and provide sustainability metrics and Hospitality Property Fund Limited

(2011) describes and reports only two kinds of metrics. These three reports are incomparable with regard to sustainability issues and none of them measure the effect that sustainability has on financial performance.

Discussion and conclusion

From the literature review it can be seen that the research on SBSC and Integrated reporting has not reached a sufficient level. Research results reveal a lack of literature in the field of SBSC and Integrated reporting in all industries and especially in the hotel industry. From all of the examined literature there is no evidence that SBSC and Integrated reporting improve management, nor is it proven that there is interaction between sustainability issues and company strategy. Even though BSC is a widely known concept and a lot of research has been done in this field, SBSC which represents the new enhanced model, is neglected in the scholarly research. Most of the analysed papers have emphasized the benefits of these models, but there is little scientifically proven research that there are real benefits. There is a great need for standardization and harmonization of these two models at a global level. Current guidelines are not sufficient and need a specific, structured framework with details about the implementation process for each industry that will clarify the relationship between sustainability and financial performance. Another important issue is that the preparation and delivery of sustainability information becomes mandatory and that it is controlled and audited, especially while stakeholders have growing expectations. A great concern is that companies in the hotel industry are lagging behind other industries and are not involved in the process of the implementation of the Sustainability Balanced Scorecard and Integrated reporting.

This paper provides an extensive literature review of the Sustainability Balanced Scorecard and a systematic review of recent developments in the research field. From the practical point of view, the research emphasizes the importance of sustainable performance management and implementation of its models and the benefits that hotel managers could have in applying them in their business, and thus enhance their operational and strategic decision-making process. Sustainable performance management besides economic includes social responsibility and environmental performance and by using them it increases the economic potential of environmental and social activities. As a consequence it raises the quality of life not only for the hotel company but also for all stakeholders. Further research should be primarily based on directions and guidelines on how to implement SBSC and Integrated reporting in business. The guidelines should not merely be general, but also prepared for different industries, in order to simplify the implementation and preparation of the reports for the users. The relationship between sustainability and financial performance should be studied with particular emphasis on the fact that these methods confirm the benefits that implementation of sustainability can contribute to.

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A MODEL OF THE STRATEGIC PROJECT PORTFOLIO OPTIMIZATION FOR ITC-HOLDING COMPANIES

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Abstract

In this paper the strategic project portfolio management model for the information and communication technologies of the holding company was improved using the multicriteria evaluation model aimed at increasing the value of the holding structure. In the model project proposals of the holding strategic project portfolio there were specified portfolio risks and profitability in terms of availability of organisational resources, time, financial constraints and level of synergy. It developed an organizational support of strategic project management activity of the ITC holding companies.

Keywords: holding company, strategic project portfolio management, the information and communication technologies, project portfolio life cycle, portfolio optimising.

Introduction

In the current economic model the development of the concept of strategic management of the company moves from the formalised and disintegrating management units to a holistic, namely integrated in the context of the environment and at the same time detailed in the context of specified categories and concepts, paradigm. In the process of practical implementation of this paradigm a project approach is considered one of the key techniques ensuring a high level effectiveness of development and implementation of the company strategy in conditions of a constantly changing market environment, imbalances in the interests of the parties concerned and a low level of a business culture.

Solving the problems of achieving high level effectiveness of strategic management is becoming the one of particular significance for more complex structures of a business organisation such as holdings. This necessitates the development of project tools for management a holding project portfolio in order to minimise the risks of implementing strategic projects for both stand-alone business units and a company as a whole, maximising project profits of the company development, increasing the value of the strategic portfolio of projects, and therefore the value of the holding company as a whole.

In scientific works of such pleiad of eminent scientists and practicing consultants as R.D.Archibald (2003), D.Bolles, D.Hubbard (2007), S.Bonham (2005), E.Fish (2002), G.Kendall, S.Rollins (2003), H.Kerzner (2003, 2009), H.Levine (2005), E.Larson, C.Gray (2011), J.Westland (2006), M.Widemann (2004, 2007), there occupy a significant role the researches related to the integration of the project management methodology in the company management system. However, the possibility of using the project management tools (methods and techniques) to improve the effectiveness of strategic management of that sort of complex organisational systems, which holding companies are referred to, have been studied insufficiently.

These provisions have defined the purpose of the study, which is to specify the modern tools of holding structures management considering the basics of theoretical and practical principles of project management and to present the methodology of forming a strategic project portfolio, aimed at: maximising the value of the holding structure [Skytova, 2004], meeting the terms the holding development strategy and its balancing.

Research methodology

The study of the theory and practice of projects` development and implementation in companies have been enabled to determine that these days the main factors contributing to the evolution of project management tools are:

1) the rapid development of network technology, which, on the one hand, increases the requirements for the intensity of the company management system development, and on the other hand, it provides new powerful opportunities for improving the efficiency of the project management processes; for the development of integrated software tools for managing projects; for the use of new information technologies for managing geographically allocated projects and teams;

2) the growth of recognition of the resource constraints importance for the resource management (using the resource critical path (RCP), theory of constraints (TOC), the concept of critical chain (when developing and monitoring the projects);

3) the development of new methods of considering uncertainty in projects to reduce project risks through the use of advanced strategies which enables greater use of formalised methods for the analysis and monitoring risks at both the project concept creating phase and the phase of its implementation;

4) growing of importance of integration project analysis methodologies used at the early (pre-investment) phases of the project life cycle, and project management techniques at the design and implementation phases; taking into consideration the interests of different groups of the project stakeholders;

5) movement towards corporate management across the enterprise, which the company is considered in as a set of projects and portfolios and is managed in accordance with the recognition of the project being primary means of business strategy, which requires application of multi-project portfolio management and programs aimed to support the strategy of the company development realisation;

6) the increase of project management system maturity within the company, which preconditions the active reorganisation of the management system of the entire organisation, the allocation of projects responsibility centres (project management office, shifting the areas of powers and responsibilities of senior management for efficient management of company projects) and development of project management as a profession, which is accompanied by implementation of standards for project management, maturity models for project management and various approaches to professional certification of the specialists.

These days, various quantitative and qualitative methods are used for the selection of projects into the portfolio. Those include methods of: ranking projects in accordance with the strategic priorities, assessing the economic efficiency taking into consideration the uncertainty and inflationary trends, selecting projects based on a set of criteria for maximising the rate of return, the model of minimising risks and increasing costs and resources, decreasing profit and reducing portfolio costs by selecting the best combination of project options.

Selecting methods of formation and planning the portfolio supposes the appropriate decision making criteria to be design. We are of the opinion that these criteria should meet the following mandatory requirements:

- 1) outlining the significant and measurable characteristics of projects;
- 2) determining the extent of achievement of the strategic objectives of the holding based on forecasting and expert information;
- 3) considering the need to harmonization of targets of different groups of the holding stakeholders (including the heads of various strategic business units forming a holding association), whose perceptions of the relevance of certain strategic initiatives and certain projects respectively can vary widely.

Making decisions methods class about the relative importance of forming the portfolio criteria comprises the following features: continuity, separability and monotonicity for all variables, as well as meeting the condition of anonymity and independence of expert assessment.

To solve the problem of optimising the process of project portfolio formation the characteristics of the classification of projects and project category should be taken into account:

- a) *dependence of projects*: independent projects (which there are no certain technological restrictions on the sequence of their execution for, except resources) and dependent projects (dependence of which is given by the allowable sequence of project realisation in the portfolio via designing the project schedule grid);
- b) *strategic influence of projects*: strategic projects that form the strategy of the holding development, or supporting projects which are initiated by the holding strategy to support its implementation;
- c) *the type of objective function of project portfolio holding optimisation*.

In a generalised sense the problem of optimisation of the strategic portfolio of the holding structure may be described as follows: to find the greatest total value of projects $P_{optimum}$, where x_i – a number of projects in the portfolio, y_i - exterior value of i-type project, provided that interior costs of projects do not exceed the standards of internal profitability c_i projects in portfolio W (i – a number of projects in the portfolio from 1 to n):

$$P_{optimum} = \sum_{i=1}^n x_i v_i ; \quad \sum_{i=1}^n x_i c_i \leq W \quad (1)$$

Specificity of the holdings portfolio management is that the feasibility of certain projects is evaluated by the holding as a whole applying certain integral parameters. In addition, the costs in the project portfolio of the holding, unlike financial and investment portfolios, are described by not only financial figures and extent of risk, but also the costs of opportunities lost for synergistic effect. Lifecycle model for management portfolio of the holding is shown in Figure 1:

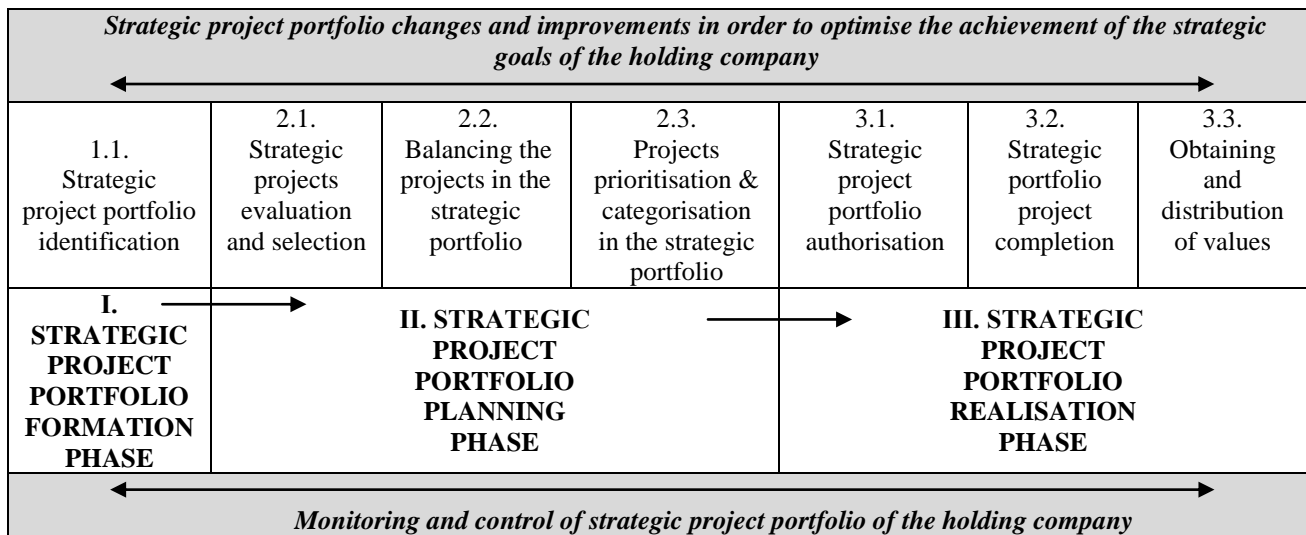


Figure 1. Lifecycle Model of the strategic project portfolio management of the holding company

At the stage of determining the procedures and processes of planning the portfolio there allocated the necessary parameters of its implementation. They are expected to ensure portfolio completion within the terms set and with its minimal intrinsic expenses within the regulatory resources spending and a certain level of quality. At the same time a number of factors are take into account, namely:

- the duration of each of the controlled portfolio elements;
- scope of the project need for different types of resources (labour, material and technical, financial, informational) which within the structures of different types of the project organisation can be specified as both in the budgets of each project and shared, unified pools;
- the degree of integration of the various members of the holding in the project activities on the supply of raw materials, components, manufacturing equipment, the extend of the involvement of subcontractors.

To solve the problems there was determined the sequence of the solution:

Stage 1. Under the conditions of the technological dependencies set among the projects, critical path portfolio to be built and limitations of positive portfolio budget set at any time of its implementation; construct the optimal schedule of cash flows for the project.

Stage 2. Given the technological dependencies set among projects and the optimal magnitude of costs calculated in Stage 1, the minimum portfolio duration should be found via the variation of the magnitude of the costs of projects, if the duration of the projects portfolio is a known as function of the costs of the implementation.

Stage 3. Given the technological dependencies set among projects, changing the magnitude of costs and the intrinsic value of the project, one should find the optimal portfolio return value of the holding to maximise its external value.

The sequence of carrying out these stages the optimisation of realisation of portfolio may vary at different stages of the lifecycle of the holding, in particular at the phase of the intensive growth the main criterion for optimising the holding portfolio can become the terms limitedness in project portfolio realisation. But in terms of sustainable development maintenance of the strategic development of the holding structure, in our view, the project portfolio optimisation is required to go through the balancing phase.

Analysis of research results or scientific problem

Thus, it was necessary to use generalised fuzzy variables and multicriterion case of finding the optimal portfolio by dynamic programming.

In multiobjective problem of finding interrelated variants of forming the strategic portfolio of the holding it is necessary to sort out the advanced options to of x_k projects that depend on strategic decisions $x_{k(rk)}$, according to indicators of efficiency:

$$W_1 = W_1(z_1, x_1(r_1), f_1, y_1, u_1), W_2 = W_2(z_2, x_2(r_2), f_2, y_2, u_2), \dots, W_k = W_k(Z_k, X_{k(rk)}, f_k, y_k, U_k) \quad (2)$$

with numerical data Z_k , U_k , fuzzy variables, random (preconditioned by the turbulence of the environment) values y_k , so that they meet the restriction $f_k = f_k(f_{zk}, f_{uk})$ with numerous f_{zk} and fuzzy f_{uk} data.

When solving the tasks models development, building the modelling algorithms in the study is carried out via employing the following principles. Interconnected strategic decisions and the alternatives of the project support are established in accordance with the principle of finding the extremum among extreme

values (E_{\max}^{\max}). First, for each strategic decision of the holding in the area of the feasible solutions there are variants of the project support under extreme E_{\max}, E_{\min} values of the efficiency rate, and then among established values there determined the extreme value at which the optimal solution is a prospective strategic portfolio. At the next stage there realized the algorithmic model of solving the multicriteria problem of the forming the portfolio of strategic projects while implementing strategic decisions in accordance with the principles of integrated management process in dynamics.

To fulfil stepwise examination for each type of restrictions for the strategic portfolio of the holding company we have examined the documents of the 14 projects, selected on the basis of "strategic importance", of the holding company «Softline» (consortium Integracy Group) and implemented throughout 2010 – 2011. "Softline" Ltd. is a leading company in Ukraine in the field of information technology, and which is up to 2011 was included in the list of 100 most efficient companies in Ukraine, and by the net income of the company was ranked first among Ukrainian companies that specialise in designing software products of high complexity, outsourcing and IT consulting.

Polling of 34 participants in the process of the strategic management of the projects portfolio of "Softline" company made it possible to determine the list of restrictions of the holding group kin terms of realisation of the strategic portfolio: organisational, financial, technological, concerning the amount of work or time. In order to rank the key parameters of the constraints in the organisation, three groups of factors were formed: length (x_1), financial resources (x_2), a number of members of the project team (x_3), the volume of projects (x_3) and technological requirements (x_3).

To ensure the integrity of the system there was defined the element that has the most effect on changes in the project based on the correlation analysis by the formula t-statistics as a ratio of the pairwise comparison of each analysis element with zero mathematical expectation and sample standard deviation of the value obtained as the square root of unbiased estimates variance:

$$\frac{\frac{1}{N-1} \sum_{j=1}^N (x_{ij} - \bar{x}_i)^2}{\frac{1}{N-1} \sum_{j=1}^N (x_{ij} - \bar{x}_i)^2 + \frac{1}{N-1} \sum_{j=1}^N (x_{ij} - \bar{x}_i)^2}, \quad (3)$$

where r_{ij} - correlation coefficient between the 1st and the 2nd item of the portfolio restrictions,
 x_{ij} - values of matrix elements, N-number of elements (N=5).

According to the results of correlation analysis based on t- criterion of the Student test it was defined the value of significance of the element of financial resources (x_2) with respect to other project criteria. This was determined by solving the problem of sorting out by descending and finding the permutations of elements of the set $\{x_1, x_2, x_3, x_4, x_5\}$ with the location of keys in the order of decreasing values:

. As a result of the application of the permutation there obtain the sorted array of values $\{x_2, x_3, x_4, x_1, x_5\}$, which defined the following order of stepwise elementwise examination: financial resources (x_2), technological requirements (x_3), length (x_1), the volume of projects (x_4), a number of members of the project team (x_5).

Thus, the main limitation of strategic projects completion was considered the shortage of funds, which consequently, turned out to be the limits for timely execution of the full scope of work, the application of the innovation and increase in a number of participants in project teams.

After identifying constraints it is necessary to evaluate the alternative options of portfolio formation of the strategic projects that are evaluated by the criteria of effectiveness based on specific performance indicators of the balanced map of the strategic indicators of the activity of the project-oriented holding company. These parameters were specified: the cost index, the time index, the index of profitability of the return on investments, return index, quality index, the index of market power, synergy index, which are assessed using a linguistic variable $S = \text{"Satisfactory"}$ in accordance with the target strategic settings of the company. To assess the relative importance of the criteria the linguistic variable is used $I(W) = \text{"Importance"}$. The problem of this type is solved out using the technique of decision making with fuzzy criteria. Visualising the results of categorization of the projects of "Softline", according to the selected criteria, was completed by the module PortfolioOptimizer software MS Project Server by building OLAP-cubes.

The next stage of the model realization is to optimize cash flow and the projects respectively by balancing the portfolio life-cycle. To solve this problem in the environment of MS Project Server.PortfolioOptimizer there is simulated parallel-serial portfolio projects completion using the methods of a network management and specifying of the space for maneuvering the funds. In the raw data for each element of the consolidated project (not lower than the 3rd level of WBS) the logical connections of 4 types

among the elements were set, the logic of their performance and defined the terms of use of time limits 5 levels was given. Next, of influence factors is determined on the occurrence of random stops in the process of strategy realisation. According to the lag stops, adjustment and renewal of equipment in the early period of the beginning and completion of the projects there have been modelled different versions of a strategic portfolio at the time course and determined the management reserves, which, on the one hand, provides the flexibility of strategic management of the holding company in a turbulent environment, and, on the other hand, provides manageability of the process of implementing the strategic decisions of the company.

Figure 2 presents the results of balancing the strategic portfolio of "Softline" company in 2012 according to the criteria of the term/cumulative costs and defined trendline according to polynomial equations of the form-factor

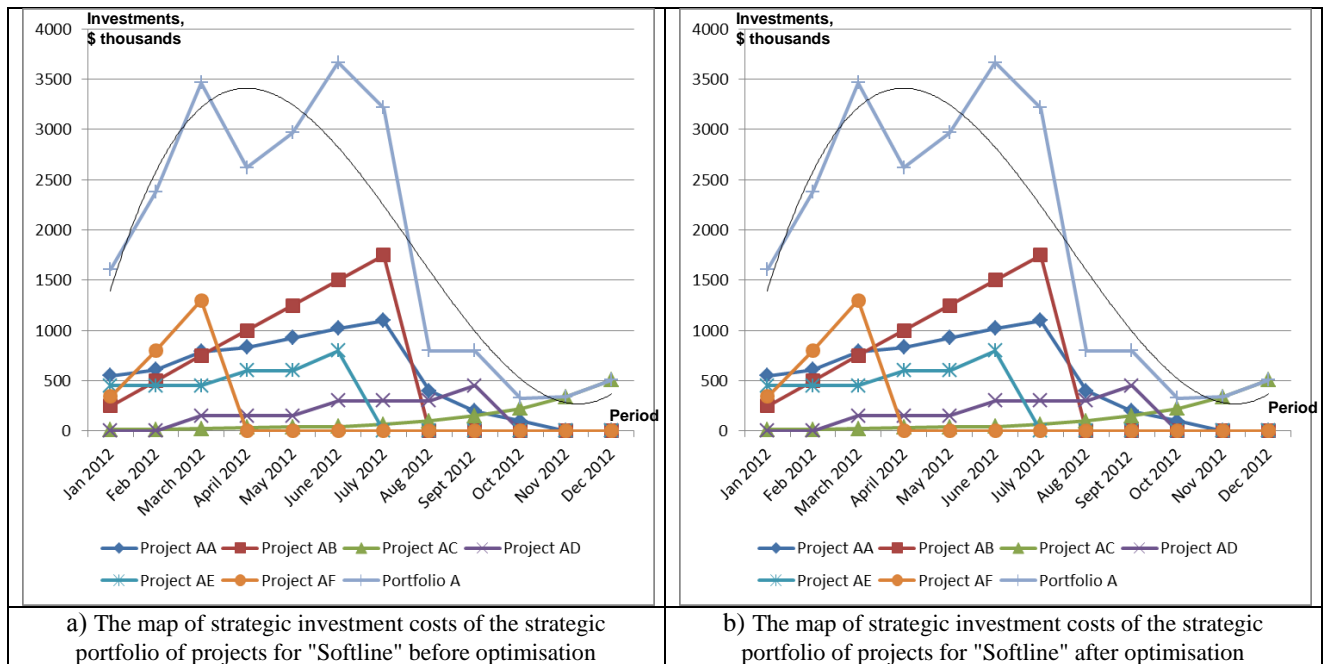


Figure 2. Results of balancing the projected strategic portfolio of "Softline" Ltd. for 2012

Thus, while modelling the portfolio having considered the existence of different types of constraints, the company can select for themselves the most effective portfolio of projects to implement strategy. To visualise the systems of monitoring and control the strategic portfolio at the stage of realization there applied the module PortfolioDashBoard from the software MS Office Project Portfolio Server, by which a digital panel indicator lights reflect planned, actual and adjusted data on the status of projects.

The effectiveness of the implementation of the strategy at the phase of completion the life cycle of a strategic portfolio of projects it is recommended to be determined by using the improved efficiency criterion, specified on the basis of specific performance indicators of the balanced map of the holding strategic indicators:

(4)

where – the index of investment costs, – time index, the index for the return on investment, return on investment index, quality index, the index of market power, synergy index.

The criterion for deciding on the effectiveness of the selected strategy is the indicator

Conclusions

Thus, the use of the proposed model allows justifying the decision of the strategic stakeholders of the project-oriented holding structure on balancing strategic portfolio of the company in accordance with the target goals of the company throughout all the phases of the strategic management. Accordingly, the implementation of such a model requires the appropriate organisational support in the company like: corporate standards, regulations and templates, information tools and organisational structures. With this approach, creating an integrated system of strategic management of the holding company with the use of the project-based approach is becoming a powerful tool for increasing business efficiency.

An important condition for the successful management of strategic project portfolio management is its operative management in every single point in time with the ability to analyse past trends and forecasting completion of certain phases (especially in cases of uneven project financing). It must be taken into account the current state of the project portfolio in terms of the strategic objectives of the holding.

In the future, the proposed model of forming the portfolio of the holding structure can be improved to increase the accuracy in identifying the minimum of economic lost and the maximum synergistic effect of incrementing value.

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THE CONTRIBUTION OF PERSONNEL MANAGEMENT IN BUSINESS DEVELOPMENT: A REGIONAL CONTEXT

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Abstract

The role of personnel management in Latvia as a whole, including business development, is not fully appreciated. The study aims: to assess the views of the personnel managers of different small and medium Latvian company from 2 regions – Zemgale and Vidzeme – on the importance of personnel management and general business development, to determine whether there are regional differences in this respect for the purpose of preparing proposals for the improvement of personnel management activities to promote business. The practices of personnel management and manager views on HR trends in several Latvian companies have been studied, as well as similar experiences and views of the different business scopes in companies of Zemgale and Vidzeme. Study results suggest that human resource management and its impact on business development in Latvian enterprises are generally evaluated differently, including – regionally.

Key words: Personnel management, human resource management, regional development.

Introduction

The role of personnel management in business development in Latvia is often underestimated; furthermore, the understanding of the nature of personnel management, its functions, etc. Substantive issues are different (this is confirmed by a feasibility study and discussions with managers and personnel specialists, etc.). However, according to the personnel management theory (Armstrong M., 2009; Dombrovska L. R., 2009), a successful business without the development of a modern developed and maintained personnel management is not possible.

Theoretical framework of the research

Hypothesis: Personnel management in Latvian enterprises located in Zemgale and Vidzeme regions is implemented differently and its impact on business development in general is not sufficiently evaluated.

The study aim: to assess the views of personnel managers of the major Latvian companies on the importance of personnel management and general business development, to determine whether there are regional differences in this respect for the purpose of preparing proposals for the improvement of personnel management activities to promote business.

The study objectives:

1. The identification of a necessary theoretical framework and analysis to achieve the study goal.
2. The feasibility of personnel management issues in small and medium Latvian enterprises and institutions, located in Zemgale and Vidzeme, by conducting the personnel manager survey.
3. Staff leadership and development perspective research in the most important companies of Zemgale and Vidzeme, by conducting the personnel manager survey.
4. The preparation of appropriate research proposals and conclusions.

Research methodology

The study methods used: analysis of relevant literature, interviews using questionnaires, graphical analysis, analysis of the research results. This type of research has not been carried out in Latvia. Although, the views expressed by employers, human resource management and business experts show a different understanding of personnel management and business development commitment and interaction. Latvian personnel management has evolved differently (in development levels, directions) from the traditional understanding of the framework of Soviet organisations (limited functions: personnel records, employment law issues, repressive functions) to the personnel management of more comprehensive and systemic understanding and awareness of the needs of human resource management. The literature used, summarising the relevant research results and the theoretical framework, as well as applied research survey results. The feasibility study identified the most distinctive personnel manager opinions of important Latvian companies (small and large businesses) and public sector authorities (national and local) on the study subject. This survey was conducted by two relatively comparable Latvian region personnel management specialists, respecting their desire to participate in the survey. It is necessary to arrive at conclusions in resulting discussions as to whether a different understanding of human resource management can contribute to business development (how to achieve it better?).

Analysis of research results

Several authors (Armstrong M., 2009; Gruman A. J., Saks M.A., 2011) stressed the need for understanding human resource management. It is based on a strategic approach, thoroughness and logic, abundance by mission and values, staffing and human understanding, competitiveness, the need for the executive management team to practically become the mentors of their own employees (e.g., Armstrong M., 2009; Devaro J., Brookshire D., 2007).

Personnel management and human resource management (human capital issues) are the focus of a number of articles (Han D., Han I., 2004; Mumdar K.S., 2008). In the feasibility study to determine the overall human resource management assessment of key issues, questions were asked as to whether the value of a personnel specialist working in Latvia in the nearest years will increase.

When assessing the similarities and differences between human resource management and personnel management, which is present in a wide range of studies analysed, it is concluded that there are many similarities (their strategies result from business strategy, department heads must take responsibility for subordinate personnel management. There is a similar understanding of values. One of the main goals – the choice of the appropriate staff positions, etc.), but the differences should also be noted – for example, personnel management is more focused on employees who are not managers; human resource management anticipates more complex operations of department managers, also a more prominent role in human resource management is in the creation of company culture, etc. (e.g. Armstrong M., 2009). It is emphasised that human resources are “the most difficult to manage” from the company's resources and that it is strategically important to link human capital management with business management (Dombrovskā L. R., 2009). By contrast, a number of sources state that the personnel manager must be a strategic business partner (Esenvalde I., s.a.). Similarly, it is stated that the challenge of human resource management is the realisation of potent human energy in the form of economic success (Voroncuka I., 2009). It should be noted, that an emphasis on the need to overcome the “old myths”, such as, for example, “anyone can do the HR manager's job”, personnel management is only a support function of the business, so it may not be taken too seriously, “personnel management is fashion thing”, “personnel management is a job for personnel managers”, etc. By contrast, attention is drawn to the people as a resource on the entity class to move the object categories as human resources management becomes more technocratic (Forands I., 2007). However, human resources objectives are emphasised: resource selection and development, assessment and relationship management (Armstrong M., 2009). Particular emphasis in the analysis is given to Latvian authors and Latvian literature, which could be used more frequently in the personnel management practices in companies.

It was asked to assess which of the competencies of the staff specialists in Latvia is lacking the most and which ones are the most developed. In November 2010 and March 2011 major Latvian companies, public administrations and local government personnel were interviewed to clarify the point of view of personnel management on their prospects. The most important partners were interviewed – employers in the business and public sector (big companies, such as Latvian Railways, Latvenergo, small businesses, such as, Ltd LEAX Baltix, Ltd Selvabuve, government departments, such as Ministry of Economics, the State Revenue Service, the State Regional Development Agency, local authorities in Riga municipal institutions, Jelgava City Council, etc.). In this way, a general idea of the role of personnel management and prospects for development as a foundation for further research was obtained.

Most respondents believe that the role of HR professionals working in Latvia in the next 5 years will increase, but no one believes that it will decline. It is believed that most human resource managers in Latvia lack strategic, conceptual and innovative knowledge, human resource management policy development experience, skills to handle crisis situations and to find innovations, ability to assess the required competencies for particular positions, and talent management competencies. Those surveyed want a personnel specialist with knowledge of psychology, financial and legal matters. The knowledge, skills and personnel management operational matters (record-keeping, employment law, document processing, etc.) were most highly evaluated. In perspective, judged as the most important are staff motivation, staff evaluation, salary administration, etc., but hereafter, basic issues of personnel management, labour and social rights, management skills are considered as the most significant.

The feasibility study led to a focus on the in-depth study of two regions of Latvia – Zemgale and Vidzeme.

In ten companies of Zemgale, those responsible for personnel management and record keeping have been interviewed and 10 companies of those responsible for record-keeping and personnel management in Vidzeme region. Companies operate in various fields; the number of the employees varies from 60 to 200 in Zemgale and 6 to 350 in Vidzeme. None of the companies has a personnel manager / specialist in the classic sense, who would work full time with the staff. In some companies, the responsibilities of the staff specialist are combined with the functions of an accountant or office manager / secretary.

4 out of 10 respondents in Zemgale considered the role of the personnel specialist in Latvia in the next 5 years will increase, 3 believed that nothing will change; two out of ten respondents in Vidzeme consider that the role of personnel specialists in Latvia in next 5 years will increase significantly, but two consider that the increase will be only partial (see fig. 1). It should be noted that none of the respondent companies has the staff manager or specialist load, but these functions are combined with one another, based on the duties of office managers or accountants.

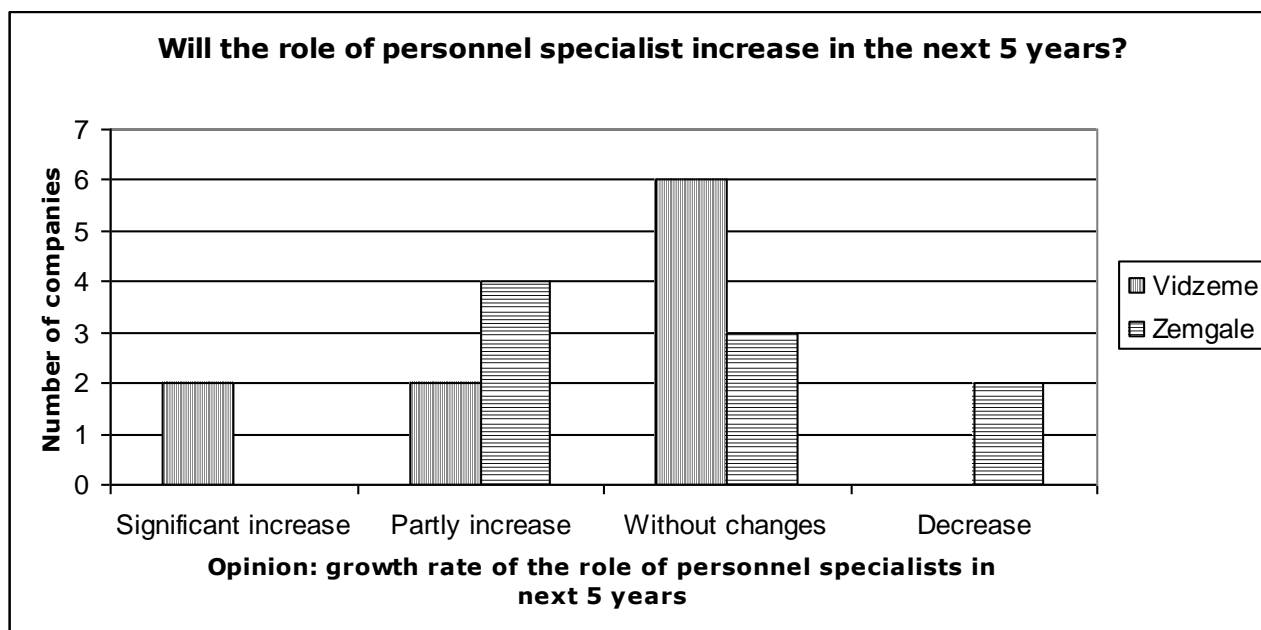


Figure 1. The importance of the role of personnel specialist in companies

Source: construction of the authors based on interviews of Zemgale and Vidzeme regions companies personnel managers, Nov. 2011

Taking into account the different understanding of personnel management in Latvian enterprises and institutions: the advanced frameworks with a limited range of functions, personnel management departments, which carry out different functions in a different range of quality, and modern and conceptually developed human resource management departments, indispensable for finding out how common the understanding of the role of desired personnel management is and prospects for the development of Latvian regions in major companies, as well as whether or not this understanding is consistent with a sophisticated theoretical framework, and what needs to be improved in this respect.

Thinking of personnel management as a business development evolving factors of regional specificity, the majority of respondents thought that the workforce of Zemgale region is sufficient and in the case of necessity – available. The majority (60 %) of respondents felt that the labour availability in region of Vidzeme is satisfactory (see fig. 2).

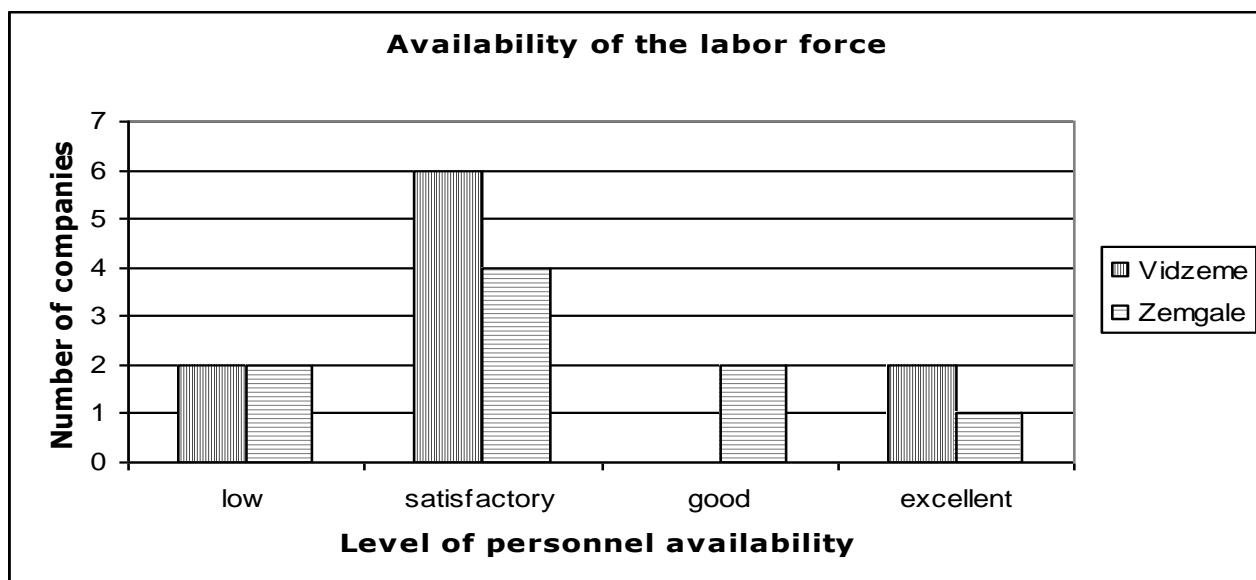


Figure2. Zemgale and Vidzeme regions personnel specialist views on the labour supply in region
Source: construction of the authors based on interviews of Zemgale and Vidzeme regions companies personnel managers, Nov. 2011

There are employee education opportunities in Zemgale and Vidzeme (see fig.3), however, less than half of the respondents considered there to be a good opportunity to additionally train company employees. Some respondents noted that the company does not bother with sending their employees to the trainings. However, there exists a daily job training procedure, without it the recruits could not begin their daily duties.

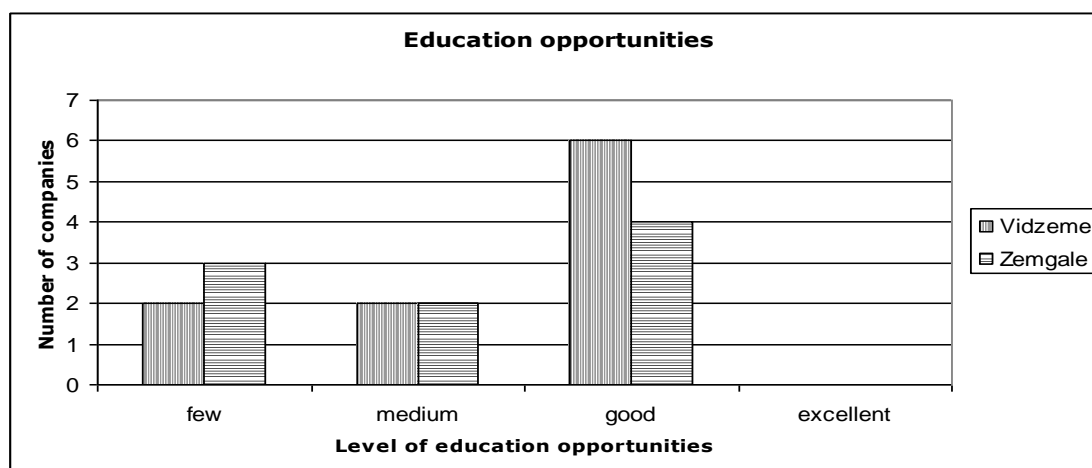


Figure 3. Employee training opportunities assessment
Source: construction of the authors based on interviews of Zemgale and Vidzeme regions companies personnel managers, Nov. 2011

Almost 80 % of respondents in Zemgale and 80 % of respondents in Vidzeme region believed that the skills of workers are good or satisfactory, particularly for the company's needs (see fig.4). Some respondents noted, that the higher the educational level of employees, the greater the interest in their own job and quality of execution. At the same time, respondents in Zemgale region mentioned a midway specialist with a lack of

professional skills, despite the availability of employees with highest education, but without the necessary business skills and capabilities. Some respondents mentioned the shortage of staff with narrow specialisation in certain Vidzeme areas. Such employees are trained by the company on the spot, without sending them outside the borders of company.

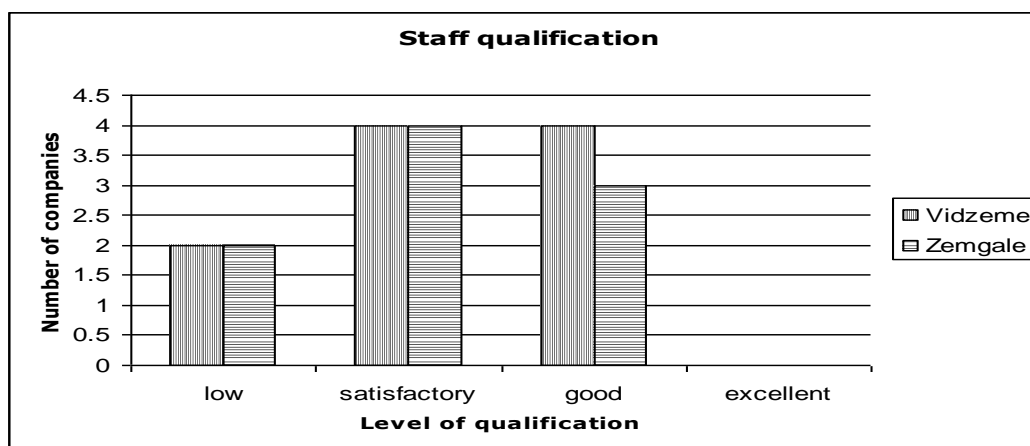


Figure 4. Assessment of staff qualification

Source: construction of the authors based on interviews of Zemgale and Vidzeme regions companies personnel managers, Nov. 2011

When assessing company's employee motivation levels in Zemgale, 22 % of respondents ranked it as good, accordingly in Vidzeme – 40%, though no one gave an evaluation of excellent (see fig. 5).

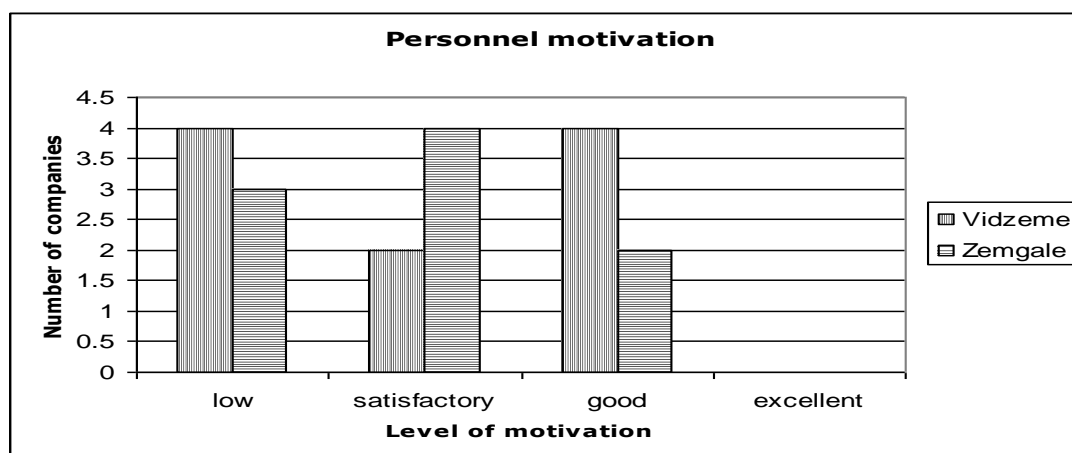


Figure 5. Assessment of employee motivation

Source: construction of the authors based on interviews of Zemgale region's companies personnel managers, Nov. 2011

Therefore, great potential is found for employers to search the possibility to raise the employees activity and interest in work, especially in the field where the level of motivation has been marked as low by respondents.

The qualification evaluation and motivation levels of the workforce show a correlation between each other – if the qualification is satisfactory, the motivation is also only satisfactory. Just as with the labour supply, in the consideration of the companies, the availability of specialists in the Zemgale and Vidzeme regions could be better.

When viewing the human resource management issues, respondents were asked which personnel management issues they think over time will become increasingly important. 15 % of respondents in Zemgale felt that the most important will be: staff training, staff recruitment, human health, while the smallest role will be given to personnel management policy, human adaptation, prediction and evaluation.¹⁴

% of respondents in Vidzeme felt that the most important will be staff training and motivation, followed by 7 % of respondents, who follow with the selection of personnel, personnel health, personnel recruitment and involvement, staff planning, personnel evaluation, salary administration and personnel forecasting. None of the respondents noted personnel record-keeping and conflict resolution. Personnel adaptation had the smallest role. The company's staff person, who is in charge, believed that most human resource managers have developed Latvian personnel record-keeping skills, as well as being able to understand and interpret in accordance with the Labour Law. This is followed by the ability to communicate with staff and computer literacy.

Given that respondents, in parallel with their work with personnel, carry out the work of office managers / secretaries or accountants, the lack of knowledge and skills in legal matters is understood. Since the respondents primarily take on the job of the personnel manager, it was mentioned that there is a lack of professional experience and real work with the staff. When asked about the knowledge and skills which could become more important to personnel experts, labour and social rights were mentioned as the most important, but the foreign and Latvian language skills and business issues, as less important knowledge. 90 % of respondents believe that human resource management can contribute to business development. At the base, exactly the personnel management, according to a few respondents opinions, drives the company forward, evaluates and attracts new employees, who, in turn, contribute to the company's objectives.

The more competent and satisfied the staff, the more he contributes to the company, with his quality work. The personnel specialist's contribution is to choose the most accordingly qualified workforce, thus providing a greater return to the company and, concurrently, a decreased percentage of defective finished products. According to the respondents, one of the company-development cornerstones is quality, reliable personnel and quality company production, which is dependent on the company's staff. As an important aspect, the need to motivate staff is mentioned, including various training activities, involving the processes of change and self-improvement. All this in place, according to respondent, will allow the company to work more successfully.

Respondents believed that most human resource managers in Latvia have developed personnel record-keeping skills, as well as communication skills.

But the majority of respondents who perform the duties of personnel experts are lacking the knowledge of legal matters and skills in law interpretation. Given that the majority of respondents in parallel with their duties with personnel perform the duties of office managers / secretaries, the mentioned lack of knowledge is understandable. Since the respondents fundamentally do a personnel manager's job, it has been mentioned that professional experience and real work with personnel is lacking.

When asked about the knowledge and skills which could become more important to personnel experts, psychology was mentioned as the most important, foreign and Latvian language skills and accounting and personnel records-keeping, as less important knowledge.

80 % of the respondents believed that human resource management can contribute to business development. At the base, personnel management is the one, which, in the opinions of a few respondents, evaluates and attracts a new, highly qualified workforce, which, in turn, contributes to the company's objectives. In case the company does not have any necessary professionals in the region, then the personnel specialist helps you find them in other regions or train them on the spot. When implementing new technologies, the company must educate its staff, and then the personnel specialist, according to some respondents, helps find the most appropriate people for the training, which will reduce spending.

Conclusions

1. The opinions are quite different on the role of the personnel management potential growth.
2. Personnel management functions are usually combined with other functions in regional companies; only in some cases is personnel management a full-time job.
3. Overall, minimum attention is being paid to personnel management, performing the requirements and operational functions, but it is impossible to judge personnel management as a strategic activity.
4. The accessibility of labour in regions is considered to be satisfactory.
5. The educational and learning opportunities in regions are generally considered satisfactory and improvable.
6. Employee qualification is generally considered good or satisfactory, but at the same time appropriate education can mean a lack of experience or skills.
7. The motivation is generally seen as insufficient, which can create obstacles to enterprise development.

8. Although the regional score is slightly different, as the most, human resource management issues in perspective are considered personnel education, motivating, recruitment and health.

9. The fact that the knowledge of business economy is considered less important, may indicate that the HR impact on business development in Latvia is generally undervalued and the personnel manager is not always aware of the need to become a strategic business partner of the chief.

10. Overall, however, it is believed that human resource management can contribute to business development.

The results of this particular study show some characteristic trends:

1. Promote a modern and systemic understanding of personnel management, using a variety of forms (workshops, publications, etc.), for example, about motivation and productivity.

2. Develop cooperation with public organisations such as the Latvian Employer's Confederation, in order to continue the implementation of modern personnel management guidelines.

3. To continue the research in a wider range and more reasonably with a correct, and most importantly, representative survey.

Recommendations:

1. To continue the research on human resource management issues and its development prospects.

2. To organise seminars, workshops and other educational activities of personnel management for development purposes.

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THE CHARACTERISTICS OF BUDGETS IN ORDER TO FORMULATE THE CULTURE OF MODERN ORGANIZATION

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Abstract

The budgets are one of the most important management methods in most companies in the world that is the reason why the benefit of practice of this method formation and application is not questionable. Consequently an intense scientific discussion is in the progress about budgets in practice, which are not adjusted to the modern realms, but also do not encourages business and cause negative consequences to the organizations that are utilizing them. In respect to the aforementioned, the following main four varieties of organization types and budget models characteristics were formed.

Keywords: budgets, budgets models, modern organization, management accounting.

Introduction

The most important theoretical problem of the budgets analysis is that they generalized in theoretical level of abstracts - as separate system, which is independent from management accounting and processes that are running in social, technological, economical and other frameworks and independent from types of organizations, where budgets are created.

Nevertheless, the formation and application of budget models in conditions of limited modern resources is not analyzable. The concept of the modern organization is approached as strategic development of organization and related to three different qualities of activities: strategic management, entrepreneurial activity, the social quality of the organization system (R. Jucevicius, 1998), and two types of organizations: strategically-managed and entrepreneurial. Consequently, when budget models are created and adjusted in different types of organizations it is important to evaluate the importance and impact of strategic development. Inasmuch the issues of budget model formation and application is related to the transformations of business environment, the principles of formation and application of budget models should change as well in order to comply with realms of business environment.

Traditional and modern budgets models are widely examined by these authors: CH. T. Horngren, G. Foster (1991), T. Lucey (1993), K. Prochaska-Cue (1993), J. K. Shim, J. G. Siegel (1994), C. Drury (1996, 2001), J. Hope and R. Fraser (1999, 2003), J. H. Daum (2002, 2005), C. R. Emmanuel, D. T. Otley and K. A. Merchant (2001), A. Neely, M. Bourne and Ch. Adams (2001), T. Libby and R. M. Lindsay (2003, 2007), S. Player, (2003), a report on the better budgeting forum from CIMA and ICAEW (2004), S. Rajan S. (2004), L. G. Eldelburg and S. K. Wolcott (2005), R. C. Rickards (2006), P. Atrill and E. McLaney (2007), R. Barrett (2007), K. Shastri, E. D. Stout (2008), Bogsnes (2009), Score (2009), A. Taylor (2009), B. Banerjee (2010), J. J. Weygandt, P. D. Kimmel and D. E. Kieso (2010), Beyond Budgeting Round Table organization (1998-2012). So the **scientific problem**, analyzed in this study, is formulated in accordance with this question: what are the characteristics of budget model creation in order to *formulate* culture of modern organizations.

The object of the research is the budget models characteristics of the modern organization.

The aim of the research is to create balance system to budget models and different types of organization.

The methods employed in the research are the following: literature analysis based on the results and conclusions of researchers works, systematic analysis, comparison, assessment, generalization. Economical, management, accounting, and other fields of science literature were analysed.

The relation between organization types and budget models application

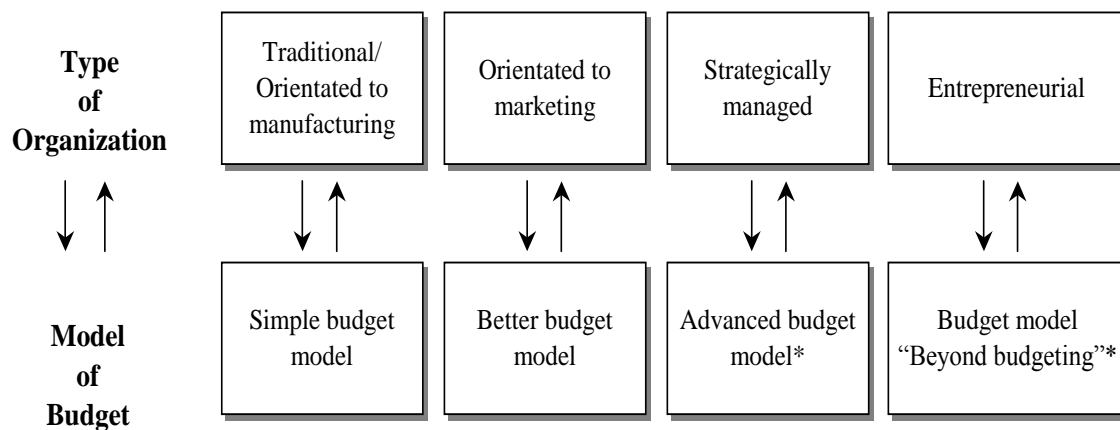
In order to avoid any influence on the culture of organization, identified drawbacks must be eliminated, because the main information users, when apply the budget model, make management decisions, actualize strategic development of the organization and increase its competitive potential.

When treated as strategic development of organization, the concept of the *modern organization* is related to three different qualities of activity: strategic management, entrepreneurial activity and the social quality of organization system. It is of importance to determine the types of organizations, which could be defined as the concentrators of these three qualities of activity in terms of budget models formation and use. There are

five types of organization: traditional, orientated to manufacturing, orientated to marketing, strategically managed and entrepreneurial.

With the reference to the author, *modern budget models* can be applied only in two types of organizations: *strategically managed* or *entrepreneurial* (1 fig.). They are the concentrators of culture of the modern society under the conditions of forming and applying budget models.

When transformations of strategic development are in the progress under conditions of common increase of competitive potential, the budget model obtained an entire other meaning. Budgets models became tools that impacted the development of the culture of modern organizations and if the budget models applied in the organization were inadequate with its internal and external environment realms, it might determine the languish of the culture of a modern organization.



*Budget models utilized in modern organizations.

Figure 1. The relation between organization types and budget models application

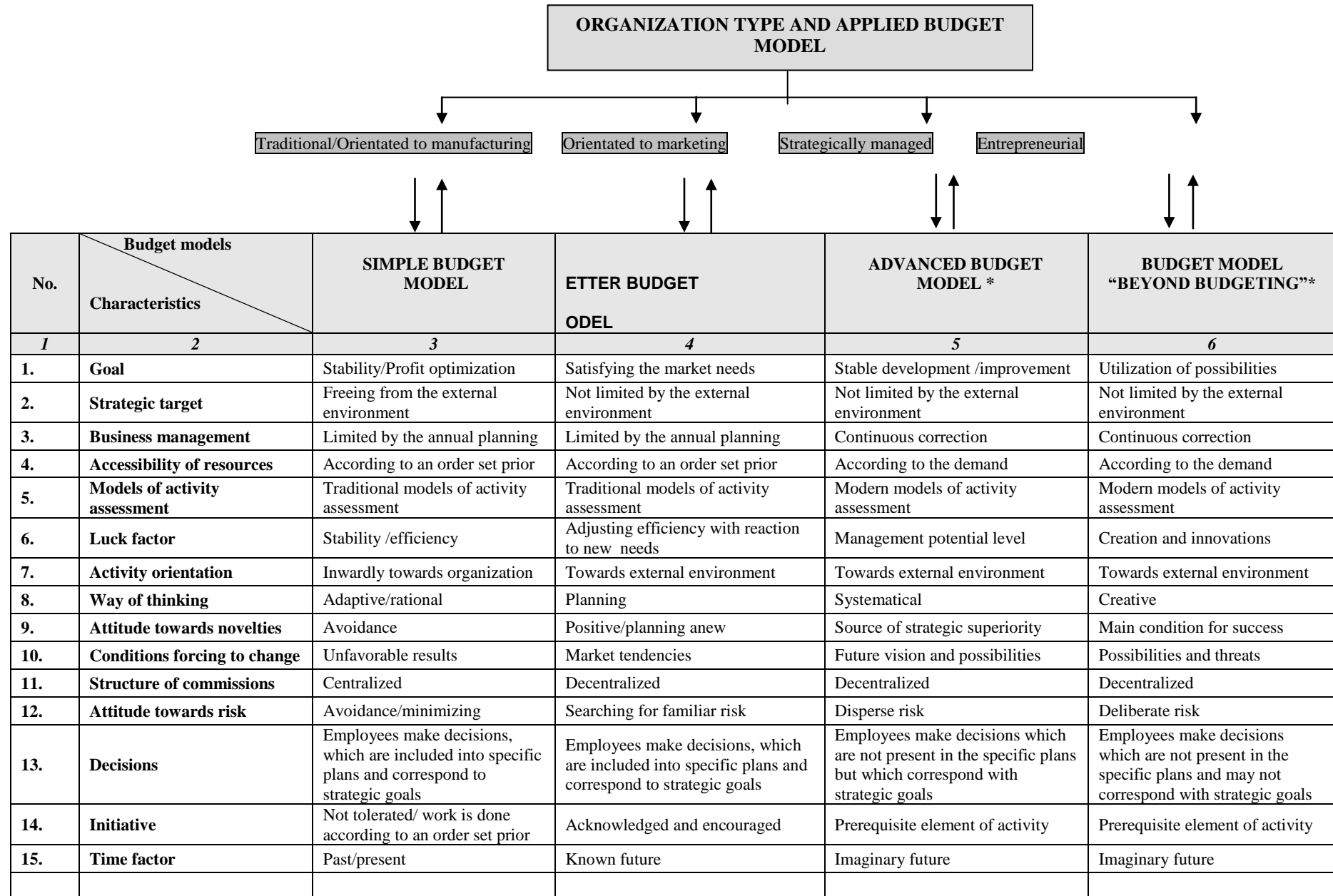
Source: prepared by the author

When organization types are developing, budget models must change as well. Budgets become indicators of management in organization, which allow forming and preserving the culture of modern organization. In other words, when traditional budget models are applied in activity of organization management, it is a significant obstacle to form the culture of modern organization.

The characteristics of different budget models

Organizations which seek to form and preserve the culture and its properties of modern organization, must employ advanced budget models or “Beyond budgeting” models, because other budget models will downgrade the culture of modern organization or might even diminish it (2 fig.).

The problems of the formation and application of budget models when looking through the prism of modern organization are not analyzed, this is the reason why the models presented in Fig. 2 are evaluated critically with reference to specialist of strategic development and application of budget models: P. F. Drucker (1974), H. I. Ansoff (1984), H. Mintzberg (1987), D. F. Abell (1990), R. Jucevičius (1998), J. Hope, R. Fraser (2003), B. Bogsnes (2009), G. Kalčinskis (2010), BBRT organization (1998-2012), recommendations. The results show that the selection of budget models effects on organization type and its culture.



16.	Management structure	Hierarchical/stable	Functional	Network	Network /flexible
17.	Autonomy of employees	Restricted freedom	Restricted freedom	Unrestricted freedom	Unrestricted freedom
18.	Responsibility	High level of responsibility culture only on one highest level	High level of responsibility culture only on the highest levels	High level of responsibility culture on each of the management levels	High level of responsibility culture on each of the management levels
19.	Attitude towards management	Detailed rules	Clear goals	Clear values	Clear values
20.	Activity coordination	According to cycles scheduled once per year	According to scheduled cycles	Dynamic	Dynamic
21.	Planning	Recorded in long-term targets	Recorded in long-term targets	Short and medium term targets	Short and medium term targets
22.	Communication	Accessibility of information is limited hierarchically	Accessibility of information is limited hierarchically	Encouraging accessibility of information for purposes of self regulation	Encouraging accessibility of information for purposes of self regulation
23.	<i>Salaries</i>	For implementing goals set forth prior	For implementing goals set forth prior	For results received in sharing the success of the organization	For results received in sharing the success of the organization
24.	Relation between information and business environment	Static	Static	Flexible	Flexible
25.	Relation to previous time periods	Very significant	Significant	Not necessary	Not necessary
26.	Attainability of goals	Strained	Strained	Adjustable	Adjustable
27.	Organization of goal preparation	“From top to bottom”	Mixed	Mixed	Mixed /individual
28.	Main object	Company	Company	Projects	Projects
29.	Ratios used in activities	Financial	Financial	Financial and non-financial	Financial and non-financial
30.	Attitude towards expenses and consumption	Decrease of expenses and consumption	Decrease of expenses and consumption	Decrease of expenses and increase of consumption	Decrease of expenses and increase of consumption

* Budget models utilized in modern organizations.

Figure 2. The characteristics of different budget models

Source: prepared by the author based on P. F. Drucker (1974), H. I. Ansoff (1984), H. Mintzberg (1987), D. F. Abell (1990), R. Jucevicius (1998), J. Hope, R. Fraser (2003), B. Bogsnes (2009), G. Kalčinskis (2010), BBRT organization (1998-2012)

In respect to the aforementioned, the following main four varieties of organization types and budget models were formed: 1) traditional and orientated to manufacturing organizations apply simple budget models; 2) organizations orientated to marketing apply better budget models; 3) strategically managed organizations apply advanced budget models; 4) entrepreneurial organizations apply budget models referred to as “beyond budgeting”.

Those companies that are bent on shaping and preserving the culture of modern organizations or at least its main features must apply advanced budget models or models “beyond budgeting” in their activities. It was determined that the budget models or modern organizations must raise the requirement to increase consumption and decrease the expenses. Then the budget models will correspond to the contemporary business environment; encourage the company employees to work for the good of the organization and nurture strategic management, entrepreneurship and higher quality of the social system.

Practical use and recommendations for companies

In order, to integrate the modern budget model into the companies management activity, it is very important to know all the steps of this system integration. For this purpose the structure scheme of the budget model was created (Fig. 3).

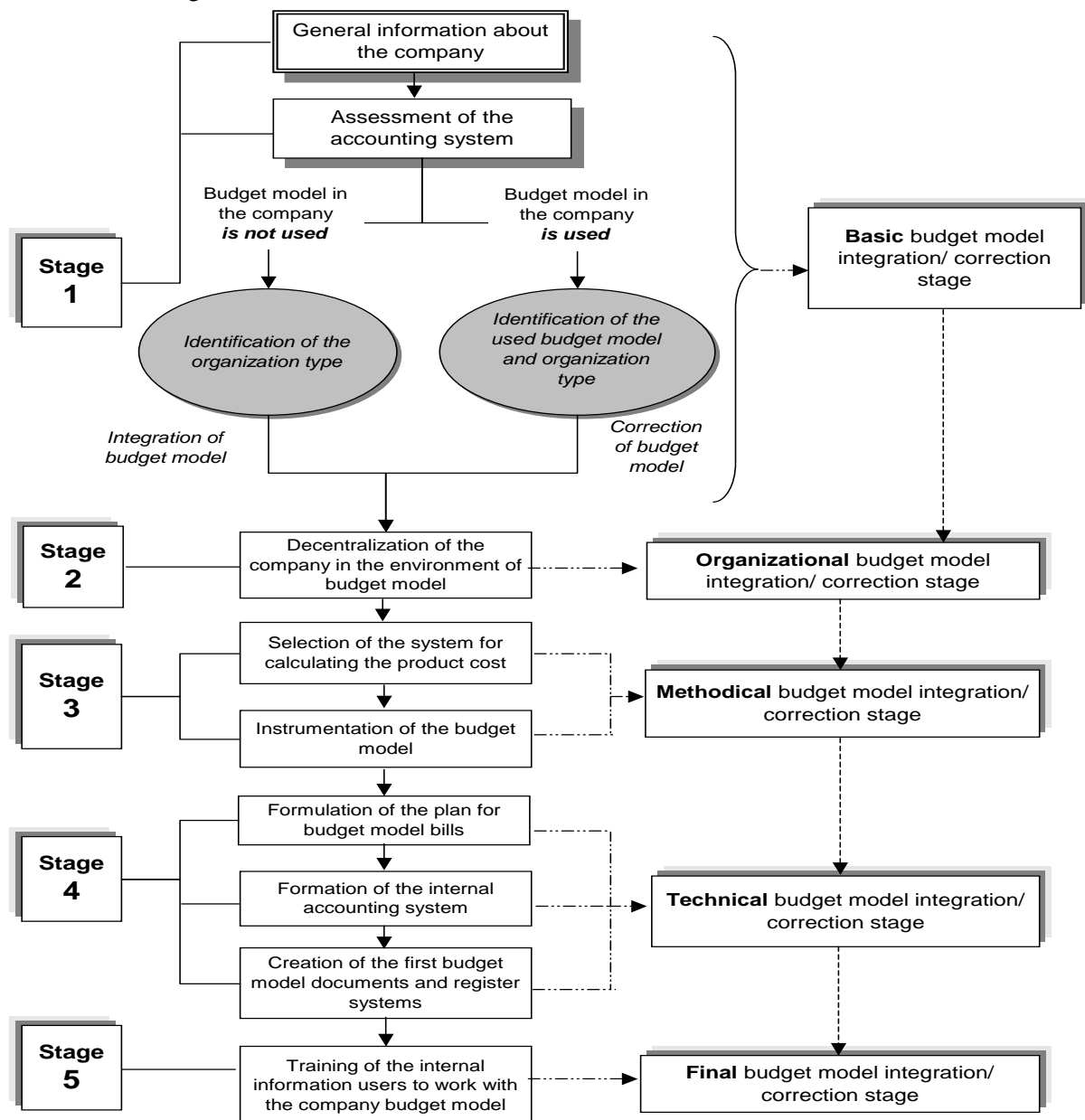
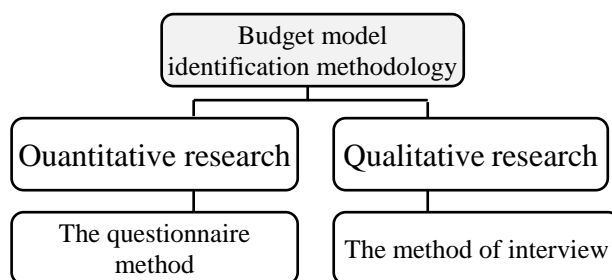


Figure 3. Structure scheme of budget model

Source: created by the author

The structure scheme of the budget model is divided into five main parts, which separate the essential stages of budget formation model. The connections between the stages are represented by arrows. The following five fundamental stages of budget model integration (correction) are distinguished: basic, organizational, methodical, technical and final.

The first stage introduces the general activities conducted by the company, the current accounting status and the analysis of the organization type and budget model connections. In order, to realize this stage the characteristics of modern budget model should be known. All these characteristics were identified in figure 2. To find out what characteristics in company are dominating the quantitative and qualitative researches have to be done in company. The questionnaire seeks to identify the prevalent types of budgets in the enterprise and to find out the opinion of the staff regarding the need to change the current budgeting model. In order to perform a more profound analysis of the budgeting model in the enterprise and to obtain reliable data on the areas of the budgeting model that are bound to be changed, another research method, the method of interview, needs to be applied.



Picture 4. Identification of used budget model and organization type

Source: created by the author

The second stage presents an assessment of the management structure and, if necessary, its modification plan is prepared. These works must be carried out in order for the company's budget model to contain all scopes of the company activities and in case the budgets turn out to be non-continuous, it will ensure that no important information is missed. In all cases the budget model is adjusted to the management structure appropriate for the company.

The budget model is formulated in the *third stage* and this model ensures the timely shaping of information relevant to management. During this stage the responsible employees of company's administration and accounting departments must come to a decision regarding the formation of the budget model.

The fourth stage is dedicated to information, which is necessary to solve and accumulate issues of technical nature. The bill plan of management accounting is formed as well as the system for primary documentation of the required data, its later processing and report generation.

The data are summarized and the entire model is presented during the *fifth stage*, which allocates most of the attention to the training of the company employees so that they could use the installed budget model independently.

All companies should know that the integration of the budget model into management activity is a long process (it takes for about 2 - 3 years). But first of all if the company is going to change the budget model, the main attention should be paid to the employees and their satisfaction with budget model, as they will be the prime indicators what is wrong with budget models.

Conclusions

1. Up till now in the scientific literature the budget model formation and application problems were not researched in terms of modern organizations (strategically managed and entrepreneurial). It was determined that the selection of budget model has an essential influence on the organization type and its culture; therefore, for the first time the *attributes of simple, better, advanced and "beyond budgeting" models characteristics were formed* and *the list of attributes of traditional, orientated towards manufacturing, orientated towards marketing and entrepreneurial organization types was supplemented*.

2. After an analysis of the two constituents (modern organizations and budget models) it was determined that they hold direct influence over the development of the organization cultures and can go as far as conditioning their decline if the budget model employed in the activities does not correspond with the

contemporary conditions of business environment. A modern organization in the paper is considered as a possibility for strategic development of a certain structure and is related to the following three most important quality parameters: strategic management, entrepreneurial activities and the quality of the organization's social system.

3. The budget model characteristics are heavily influenced by the following most significant requirements of the contemporary business environment conditions: 1) strategy correction within the shortest time period possible; 2) accessibility of resources according to the demand; 3) attention directed to the added value created by business rather than its accounting; 4) contemporary activity assessment models; 5) decentralization of activities; 6) employees valued as the main assets of the organization; 7) refusal of hierarchical relations.

4. It was revealed that a direct dependency existed between the organization types, their cultures and the formation and application of budget models. This attitude allowed proving that budget model formation and application had a direct influence over the culture of company management. Therefore, as the organization types improve, the budget models are bound to change as well and on the contrary, when the budget models experience certain changes, conditions for the development of organizations are created. In other words, the budget models become the indicators of organization's management activities and allow shaping and preserving the modern culture of contemporary organization.

5. The shortages of budgets that came to be due to the organization transformations and increase of competitive potential caused cardinal transformations of budget models, due to which certain scientific sources provided distinct and often different notions of organization's budget as well as their different functions, budget types and their formation stages.

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HOW CREDIT DEFAULT SWAPS AFFECT SOVEREIGN DEBT

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Abstract

The main aim of this research is to investigate the parameters affecting the Credit Default Swap (CDS) issued against sovereign debt within the Euro zone from the inception of the monetary union until today. CDS is a [financial swap](#) agreement that compensates the buyer in the event of a loan [default](#) or any other [credit event](#). The buyer of the CDS makes a series of payments (the CDS "fee" or "spread") to the seller and, in exchange, receives a payoff if the loan defaults. CDS is considered insurance against non-payment in which the buyer is transferring the risk that a debt security will default or in some cases the buyer might be speculating on the same event. CDS might be considered as an indicator, which imprints a country's economy in one single figure.

In an equilibrium state, sovereign bonds are priced to compensate the lenders for country risk which includes the risk of a country's default and the risk of its debt restructuring. Interest rates increase with the level of debt, leading to higher default probability and to lower debt recovery rate. This is actually the most significant and one of the latest factors that actually affect the price of the CDS.

Apart from interest rates the present study will examine other factors which influence the CDS, as it is presented in the relevant literature, and also the influence of the rating changes and whether the downgrades and the upgrades by the rating agencies affect a country's CDS proportionally and if this rating change could be considered as a leading or a lagging indicator for a country's CDS.

Keywords: Government Bonds, CDS, Bond Interest Rates, Sovereign Debt JEL Classification: G10, G12

Introduction

A credit default swap, or "CDS," is a derivative security. The buyer of protection pays an annual fee to the seller of protection, referencing a particular borrower such as any country and an amount of the borrower's debt. For example, if the agreed CDS rate is 5% and the amount of referenced debt is USD 100 million, then the annual protection fee is USD 5 million. In the event that the named borrower says any country, defaults on its debt, the seller of protection then gives the buyer of protection the difference between the referenced amount of debt and the market value of the defaulted debt. For example, if the referenced USD 100 million in debt defaults and as a result has a market value of only USD 30 million, then the buyer of protection would collect USD 70 million from the seller of protection. Credit default swaps are traded in the over-the-counter market. An investor who buys protection without owning a commensurate amount of debt instruments of the referenced borrower is said to have a "naked CDS." If an investor who has bought protection on USD 100 million of a country's sovereign bonds decides to reduce its position to USD 30 million, it would enter a new offsetting credit default swap, to sell protection on USD 70 million of the country's sovereign bonds. The net position of the investor is then USD 30 million as it is stated by Duffie (2010).

To buy a CDS a premium needs to be paid as it is explained above. The premium reflects both the probability of default and the loss given default and "equates the present value of premium payments to the

present value of expected losses” (Morgan Stanley). The price of the credit default swap, also called the spread, is quoted in basis points, as the percentage of the notional value that is to be paid annually. A credit default swap is similar to an insurance contract compensating the buyer for losses arising from default. The premium or spread isolates credit risk and is, in itself, a measure of risk. Wider spreads indicate that the market perceives higher credit risk associated with the underlying reference entity. In order for a CDS to be paid there should be a credit event. A credit event includes bankruptcy, failure to make a payment on a debt obligation, restructuring, obligation acceleration or default, repudiation, and moratorium.

Literature Review

As it is stated in the literature besides interest rates, other factors with the most significant influence in the CDS are the following:

1. Per Capita Income, an increase of the per capita income implies a larger potential tax base and a greater ability of a country to repay debt.
2. GDP growth, an increasing rate of the economic growth tends to decrease the relative debt burden. Moreover, it may contribute to avoid insolvency problems.
3. Inflation rate, a low inflation rate reveals sustainable monetary and exchange rate policies. It can be also seen as a proxy of the quality of economic management.
4. Economic development, developed countries are integrated with the world economy and are less incited to default on their foreign debts so as to avoid sanctions from the lenders.
5. Current account, a large current account deficit implies the dependence of a country on foreign creditors.
6. Foreign debt/GDP, this ratio is negatively related to default risk.
7. Real exchange rate, the real exchange rate assesses the trade competitiveness of the economy.
8. Ratio debt/GDP, the higher the ratio is, the greater the occurrence of a liquidity crisis.
9. Ratio reserves/imports, the higher the ratio is, the more reserves are available to service foreign debt.
10. Corruption Index, this index is a measure of political risk and can reduce a country's willingness to pay.
11. Aggregate Governance Indicators, this composite index allows evaluating the governance of a country and affects a country's willingness to pay.
12. Default history, past sovereign defaults may indicate a great acceptance of reducing the outstanding debt burden via a default. The effect is modeled by a dummy variable indicating the past occurrence of a default and by a variable measuring the number of years since the last default. This variable measures the recovery of credibility after a default and can be expected to influence positively the rating score.

Abid and Naifar (2006) explain empirically the determinants of CDS in corporate bonds using a linear regression. They document that the majority of variables, detected from the credit risk pricing theories, explain more than 60% of the total level of credit default swap. These theoretical variables are credit rating, maturity, risk less interest rate, slope of the yield curve and volatility of equities. The estimated coefficients for the majority of these variables are consistent with theory and they are significant both statistically and economically. They conclude that credit rating is the most important determinant of credit default swap rates.

Greatrex (2006) explores the ability of variables suggested by structural models to explain variation in CDS spread changes in corporate bonds. Using monthly changes in CDS spreads for 333 firms from January, 2001 – March, 2006, finds that these variables are able to explain thirty percent of the variation in CDS spread changes. A rating-based CDS index that accounts for both credit risk and overall market conditions is the single best predictor of CDS spread changes. Leverage and volatility, however, are also key determinants, as these two variables can explain almost half of the explained variation in monthly CDS spread changes. As suggested by Blanco et al. (2005), equity returns and leverage are comparable proxies for a firm's health when using high frequency data over a relatively short time horizon. Furthermore, interest rate variables do not perform as well as equity market variables as they seem to contribute little to the predictive power of the regression model.

Aunon-Nerin et al., (2002) have investigated the influence of various factors on Credit Default Swap rates and therefore on credit risk as reflected in a recent credit derivative market. Credit Default Swap rates can arguably be considered the best pricing information having on credit risk, at least when transaction rates are considered (as quotes may vary from actual transactions, especially in an exotic market). They do not

suffer from the well-documented limitations of bond spreads as a measure of credit risk. Starting from theoretical models, they have identified some factors that should influence the CDS rates. They have compared econometrically the influence of those factors on various subgroups in our sample. They find that all of the theoretical factors have a significant influence and that taken together these factors drive much of the variation in the pricing of Credit Default Swaps, up to 82%.

The rating is the most important single source of information on credit risk overall even if the sensitivity of the level of credit default swap rates to ratings is different for high rated debt and for low rated debt. Also they prove that the interest rates influence the CDS as well as the yield curve. Considering the slope of the yield curve as an indicator of future economic activity this points to the fact that default is linked to the performance of the local economy, as would be expected.

Zhu (2004), confirms through empirical findings that bond spreads and CDS spreads move together in the long run. Nevertheless, in the short run this relationship does not always hold. The deviation is largely due to different responses of the two markets to changes in credit conditions. By looking into the dynamic linkages between the two spreads, she finds that the CDS market often moves ahead of the bond market in price adjustment, particularly for US entities. Liquidity also matters for their role in price discovery. Surprisingly, the terms of CDS contracts and the short-sale restriction in the cash market only have a very small impact.

Tang and Yan (2008), examine the market conditions on credit spreads. Using credit default swap (CDS) spreads, as a time series data, average credit spreads are decreasing in GDP growth rate, but increasing in GDP growth volatility. They document that credit spreads are lower when investor sentiment is high and when the systematic jump risk is low. In the cross section, they confirm that firm-level cash flow volatility raises credit spreads. More importantly, they demonstrate that the impact of market conditions on credit spreads is substantially affected by firm heterogeneity.

Li (2004), concludes that US treasury is a better approximation of the implied default-free rate in sovereign CDS market than LIBOR. CDS rate at speculation grade are generally beyond yield spread. At the same time increasing market demand for CDS on sovereigns at lower rating drives CDS up leading liquidity in price convergence while rating events causes diverging behavior on CDS and bond markets at speculation grade.

Cossin and Jung (2005), study the CDS market around major financial crises and they lead to the following results. Markets' consideration of ratings around the world changes dramatically after major financial crises, even for those countries that are not in crisis. While ratings seem suddenly to matter more, pricing uncertainty increases as well. Thus large financial crises appear to create strong information uncertainty, rather than resolve previous uncertainty. After a major crisis event, there is significant 'flight-to-quality' that is accompanied by a strong relative rise of demand for sovereign credit protection. They also document the extra-significance of transaction data compared to quote data in an OTC market. Overall, sovereign ratings appear to be the pricing tool of last resort when crises disturb markets.

Coudert and Gex (2011), show that the CDS market has a lead over the bond market. The decomposition of the sample shows that this result is valid for corporate and for high yield emerging sovereign bonds. On the contrary, the bond market still drives the CDS market for the sovereigns in the core of the euro area; indeed there is little speculation on the default of these States and their bond market largely outsizes the CDS market. Second, they check for non-linearities in the adjustment process during the global financial crisis. Results show that the CDS markets lead has been amplified by the crisis over the whole sample. This is statistically significant for firms but not for sovereigns.

Liquidity effects can also explain the differences between CDS and bond spreads. Generally speaking, CDS are much less affected by liquidity effects than bonds, Longstaff et al., (2011). For sovereigns, the size of the CDS market (\$2.1 trillion) is relatively much smaller, as the bond market has long been fuelled by regular issuances, reaching \$36 trillion. However, the size of underlying notional do not necessarily reflects all liquidity factors. Generally speaking, several factors underpin a greater liquidity of the CDS market. First, when an investor wants to liquidate a CDS position, he does not have to sell it back on the market, he can write another contract in the opposite direction, which is of course not possible for bonds. Second, CDS contracts are not in limited supply like bonds, so they can be sold in arbitrarily large amounts. Third, the CDS market on a given borrower is not fragmented as the bond market which is made up of all its successive issuances bearing different rates. Fourth, a number of investors, such as insurance companies or pension funds, purchase bonds as part of a "buy and hold" strategy, whereas CDS sellers are more active on the market. Several empirical studies have evidenced that CDS spreads incorporate a lower liquidity premium than bonds, ie Longstaff et al. (2004); Cossin and Lu (2005); Crouch and Marsh (2005); Zhu (2006). This is

especially true for fixed maturity CDS, in particular 5-year CDS, and to a lesser extent, 3, 7 and 10-year CDS. The CDS premium could therefore be lower than the bond spread.

JP Morgan (2006) stated that the market of CDS had grown 302% from 2004 to 2006 in terms of notional outstanding estimated at \$20.2 trillion, a figure that was larger than the total amount of debt outstanding.

Afonso et al., (2007), find that GDP per capita, real GDP growth, government debt, government effectiveness, external debt and external reserves, sovereign default indicator as well as being a member of European Union, are the most important determinants of the sovereign debt ratings.

Additional related studies as above were conducted from the rating agencies, S&P, Fitch and Moody's and they are shown in the following table.

Reference	Data	Explanatory Variables	Agencies	Methodology
Cantor & Parker (1996)	Cross section 1995, 45 countries	Per capita GDP, GDP growth, inflation, current account surplus, government budget surplus, debt-to-exports, economic development, default history	S&P, Moody's	Linear transformation of the data, OLS estimation
Monfort & Mudler (2000)	Panel, 1995-1999 (half yearly), 20 em markets	Debt-to-GDP, debt-to-exports, debt reschedule, reserves, current account surplus, real effective exchange rate, export growth, short term debt share, terms of trade, inflation, growth of domestic credit, GDP growth, government budget surplus, investment-to-GDP ratio, per capita GDP, US T bill rate, spread over T bonds, regional dummies	S&P, Moody's	Linear transformation of the data. Two specifications: static (OLS estimation of the pooled data) and dynamic (error correction specification including as regressor the previous rating and several variables in first differences)
Eliasson (2002)	Panel, 1990-1999, 38 em markets	Per capita GDP, GDP growth, inflation, debt-to-exports ratio, government budget surplus, short-term to foreign S&P reserves ratio, export growth, interest rate spread	S&P	Linear transformation of the data. Static specification and both fixed and random effects estimation. Dynamic specification
Hu, Kiesel & Perraudin (2002)	Unbalanced panel, 1981-1998, 12 to 92 countries	Debt service to exports ratio, debt to GNP ratio, reserves to debt, reserves to imports, GNP growth, inflation, default history, default in previous year, regional dummies, non industrial countries dummy	S&P	Ordered probit on pooled data. Two scales: 1-8 and 1-14
Afonso (2003)	Cross section, 2001, 81 countries	Per capita income, GDP growth, inflation, current account surplus, government budget surplus, debt to exports ratio, economic development, default history	S&P, Moody's	Linear, logistic and exponential transformation of the data, OLS estimation
Alexe et al (2003)	Cross section 1998, 68 countries	Per capita GDP, inflation, trade balance, export growth, reserves, govt budget surplus, trade to GDP, debt to GDP ratio, exchange rate, domestic credit to GDP ratio, government effectiveness, corruption index, political stability	S&P	Linear transformation and OLS estimation
Canuto, Santos & Porto (2004)	Panel 1998-2002, 66 countries	Per capita GDP, GDP growth, inflation govt debt to receipts, government budget surplus, trade to GDP, debt to exports ratio, economic development, default history	S&P, Moody's, Fitch	Linear transformation, OLS, fixed effects and first differences estimation
Borio & Packer (2004)	Panel 1996-2003, 52 countries	Per capita GDP, GDP growth, inflation, corruption perception index, political risk index, years since default, frequency of high inflation periods, government debt to GDP ratio, debt to exports ratio, others	S&P, Moody's	Linear transformation of data. OLS regression of average credit rating including year dummies as regressors
Bissoondoyal-Bheenick, Brooks & Yip (2005)	Cross section 2001, 60 countries	GDP, ionflation, foreign direct investment to GDP, current account to GDP, trade to GDP, real interest rate, mobile phones	S&P, Moody's, Fitch	Estimate an ordered probit with 9 categories

Reference	Data	Explanatory Variables	Agencies	Methodology
Bissoondoyal-Bheenick (2005)	Panel 1995-1999, 95 countries	Per capita GDP, inflation, govt financial balance to GDP, govt debt to GDP ratio, real effective exchange rate, export to GDP, reserves, unemployment rate, unit labour cost, current account to GDP, debt to GDP ratio	S&P, Moody's	Estimate an ordered probit using two scales 1-21 and 1-9 for each year individually
Butler & Fauver (2006)	Cross section 2004, 93 countries	Per capita income, debt to GDP ratio, inflation, underdevelopment index, legal environment index, legal origin dummies	Institutional Investor	OLS estimation

Arghyrou and Kontonikas (2011), do not find evidence in favor of the hypothesis that speculation in the CDS market is a major force driving the euro zone debt crisis. This does not imply that CDS speculation is not taking place or it does not drive EMU spreads at higher data frequencies. What it implies is that in the longer-term perspective captured by monthly data frequency, EMU spreads are mainly driven by accumulated intra-EMU macroeconomic imbalances and international risk conditions. Although the latter may improve as global economic activity gradually picks-up, the former is unlikely to do so without significant intra-EMU economic/institutional reforms.

Data Set & Methodology

So far we have collected data for six major economic variables for a number of European countries for the period starting from January 2008 until August 2012. The variables are the following, 10yrs CDS, 10yrs Yields, Credit Ratings, Current Accounts, Debt-to-GDP and CPI. All series are monthly, apart from Debt-to-GDP which is annual and Current Account which is quarterly. In order to formalize the data set we have used a frequency data conversion methodology, which interpolates prices based on a quadratic model.

Before we test the co integration among the variables, we have to determine the integration rank of the series. To test whether there is any unit root in the variables, we are using the Augmented Dickey-Fuller equation (ADF)(1979),

$$\Delta X_t = \delta_0 + \delta_1 t + \delta_2 X_{t-1} + \sum_{i=1}^k a_i \Delta X_{t-i} + u_t$$

The coefficients δ_0 , δ_1 , δ_2 and a_i are being estimated under the hypothesis that $H_0 : \delta_2 = 0$ and the alternative $H_1 : \delta_2 < 0$ with the results shown in the following table.

DF/ADF unit root tests								
	Spain	Greece	Portugal	Italy	Germany	France	Austria	Ireland
10 years CDS	I(1)	I(1)	I(1)	I(0)	I(1)	I(1)	I(1)	I(1)
10years Yield	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)
CPI	I(0)	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)
Current								
Account	I(2)	I(2)	I(1)	I(2)	I(2)	I(2)	I(2)	I(1)
Debt/GDP ratio	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)	I(1)	I(0)

*in parenthesis the rank of integration

The results suggest that most of the series are of the same level of integration at 1% level of significance. For the test we have used the logarithmic form of the variables, except in some cases where we had negative prices and we avoided to transform the series in order not to lose any prolific characteristics. The next step is to combine those series.

If two series are of the same level of integration there must be a linear combination that is stationary. In this research, we use the two step method proposed by Engle and Granger (1987). The model is a simple ordinary least square methodology, whereas the residual produced must be stationary. The next step is to

regress the difference of the variables and the estimated residuals, in order to produce an error correction model, which describes the long term and the short term co integration of the variables.

Previously, we have noted that the series in order to be tested for co integration should be of the same level of integration. Our results differ, since we have stationary series in their levels $I(0)$ as well as second level integration series $I(2)$. Since our intention is to capture all the forces that lead the CDS, we insert those variables in the model.

Some preliminary results for selected eurozone countries are shown below.

Italy

CDS are co integrated with all other variables at 5% significance level. In the long run only 10 year's yield and current account divergence ratio, in the short, are significant. Specifically, in the long run if there is a rise of 1% in the 10 year yields, the CDS will rise by 1,4%, if the current account rise by 1%, the CDS will fall by 0,29%. Finally, the decline of CDS from the long term equilibrium is being adjusted annually by 2,04% (or -0,204).

Portugal

Also, there is a co integration relation at 5% significance level. From all the variables, only the 10 year's yield is significant at 5% level, and with the rise of 1% it has an effect on 10 year CDS of 1,05%. The divergence ratio is 1,96% (or -0,19) and it is significant at 5% level, which means that every year CDS adjust by 1,96%, so as to sustain the long term equilibrium.

Greece

Results suggest that a co integration relation exist at a 5% significance level. However, no variable is significant in the long term. Only, the divergence ratio is significant at 5% level, denoting the adjustment of CDS prices by 2,52% (or -0,2527) annually .

Spain

The results are the same as in the case of Italy. There is a co integration equation at 5% significance level and in the long term. The 10 year yields and current account are significant. If 10 year yield rise by 1%, CDS will increase by 1,4% and if current account rise by 1%, CDS will decrease by 0,29%. The divergence ratio is 2,04% (or -0,204).

France

The co integration equation that exists at 5% significance level, has no variables significant in the long run. On the other hand the divergence ratio is significant and produce an adjustment in CDS of 2,5% (or -0,253) annually.

Germany

Germany's results are similar to France, with one co integration equation at 1% significance level and only the divergence ratio significant. The adjustment of CDS from the long term equilibrium is 0,3% (or -0,344).

Ireland

Results suggest that there is one co integration relation at 5% significance level. Only the 10 year yield variable is significant at 5% level. If 10 year yield rise by 1%, CDS increase by 0,8%. The divergence ratio is significant and adjusts CDS by 2,3% (or -0,23) annually.

In general, CDS levels are used as a barometer of the expectancy of country to credit default. Trading in over the counter markets, CDS are usually linked with speculative policies from investors. Furthermore, the rating of a country has a significant impact on CDS valuation. If CDS were trading in an efficient market we would expect that the real indexes of the economy such as Debt-to-GDP, would have strong impact on CDS evaluation. However, the results suggest the opposite. None of the seven countries' co integration relation equations have Debt-to-GDP variable significant.

Similarly, government bond yields, which are mainly evaluated based on the current or expected rating of the country, are significant in most of the co integration relations, except in the case of Greece, France and Germany.

Both variables , government bond yields and expected ratings are driven by a speculative force, which is derived by the rating companies. The divergence ratio suggests that CDS adjust in the long term but not from the expected factors of the real economy.

Preliminary Results

Some preliminary results are given below, for the case of Austria. Rating is not included in the final model as an explanatory variable since it is a column of 1. Austria has never been downgraded during the sample period.

Ordinary Least Squares Estimation

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*****
Dependent variable is LCDS
49 observations used for estimation from      8 to      56
*****
Regressor          Coefficient      Standard Error      T-Ratio[Prob]
C                  .75763          .24782              3.0572[.004]
DD(-1)            .45931          .15392              2.9841[.005]
CA(-4)            .058125         .027993             2.0764[.044]
LCDS(-1)          .82269          .055208            14.9016[.000]
*****
R-Squared          .84821          R-Bar-Squared       .83809
S.E. of Regression .20822          F-stat.      F( 3, 45) 83.8192[.000]
Mean of Dependent Variable 4.6359      S.D. of Dependent Variable .51746
Residual Sum of Squares 1.9510      Equation Log-likelihood 9.4478
Akaike Info. Criterion 5.4478      Schwarz Bayesian Criterion 1.6642
DW-statistic 1.8696      Durbin's h-statistic .49483[.621]
*****

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In the above “Ordinary Least Squares Estimation Model” we manage to forecast the LCDS from a constant which is also a proxy for the credit rating (C), the difference of Debt-to-GDP (DD) lagged one period, the current account (CA) lagged 4 periods and the explanatory variable (LCDS) lagged 1 period. All the results are statistically significant with a R-Bar-Squared of 0.83809.

Conclusion

As it is shown above all the series used in this preliminary study are of the same level of integration at 1% level of significance. The logarithmic form of the variables, except in some cases with negative prices, were used to test integration.

CDS levels are used as a barometer of the expectancy of country to credit default. Trading in over the counter markets, CDS are usually linked with speculative policies from investors. Furthermore, the rating of a country has a significant impact on CDS valuation. If CDS were trading in an efficient market a different result should be expected, as for example the impact of Debt-to-GDP on CDSs’ evaluation. However, the results suggest the opposite. None of the seven countries’ co integration relation equations have Debt-to-GDP variable significant.

Government bond yields are significant in most of the co integration relations, except in the case of Greece, France and Germany. They are driven by a speculative force, which is derived by the rating companies. The divergence ratio suggests that CDS adjust in the long term but not from the expected factors of the real economy.

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“Business Development Financial Support Systems – Policy options to enhance innovation”

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Abstract

Financing of innovation plays an important role for all dynamic economies that have chosen to follow the knowledge economy path to growth and competitiveness. The general trends suggest as a good policy to set up long-term objectives and to follow a steady and incrementally increasing investments into the innovation systems. The European Union target of reaching 3% Research & Development (R&D) investments of the Gross Domestic Product (GDP) is one rough, but concrete example of such.

Increasingly the driver of innovation is within the private sector and in global business, but also national and regional government policies play instrumentally important roles both directly in supporting R&D and innovation, but also indirectly through fiscal incentives and through contextual issues (i.e. innovation system development), as well as through many catalytic activities, such as awareness and setting up collaboration platforms.

Ukrainian development over the last two decades has followed more of the transition of the post-Soviet countries than that of the EU and its Member States. The overall development of European countries' investment into Science Technology Innovation (STI) has been more steadily, with slight increases in the long term.

The overall level of R&D financing in Ukraine, as a proportion of GDP has declined over the last years and has reached its lowest ever record since the country gained its independence. For a number of years, the foreign R&D funding played a relatively significant role, while is now settled to around 16%. Furthermore, a great majority of government expenditure in R&D is institutional funding (i.e. more than 90% of state financing to R&D is institutional funding), which only indirectly contributes to innovation. Institutional funding represents less than 25% of the total R&D funding at the business enterprise sector.

Keywords: Innovation policy, innovation financing, innovation indicators, research and development

Research methodology

The author bases her analysis on a two year study on innovation policy issues in Ukraine in the framework of the EU project “Enhance Innovation Strategies, Policies and Regulation in Ukraine”.²⁰ The author stipulates that the situation analysed in Ukraine is similar to the ones prevalent in many countries, especially in Newly Independent States (NIS).

The study's effort was concentrated in identifying the main barriers and drivers to innovation in order to propose sets of actions that could be useful for the policy makers to consider leading Ukraine to a knowledge-based competitive economy. Among the proposed actions one proposed action crystallised to be of major importance: How to enhance innovation in enterprises, and how to develop the financial support systems.

Over the last decade, the European Commission has systematically collected and analysed all innovation support measures and approaches within its member states. This experience and particularly applicable examples of successful measures should be taken stock of when further developing the Ukraine innovation financing measures. The key questions/challenges regarding the financing of innovation fall basically into the following major categories:

1) *Is there a political commitment to long-term growth and investment into innovation and can this be delivered into action?* This includes two main messages: 1) sustaining and increasing the overall level of state STI financing in the long-term, and 2) gearing the financing more towards SMEs and innovation. As institutional financing plays a major role in Ukraine, triggering a shift in the focus of state R&D and innovation financing seems necessary, but may be politically hard to accomplish.

²⁰ Rumpf G., Strogilopoulos G., Kyiv 2011. Innovation Policy: European Benchmarking for Ukraine Volume 3. “Innovation in Ukraine- Policy Options for Action”

2) *Are the national set-up and structures that form the operational context for innovation financing, including regulatory, fiscal and in particular the institutional structures of the national innovation system in place?* Without deeper structural analysis of the Ukrainian innovation system financing instruments, it seems important to develop a range of government innovation funding instruments, apparently most urgently those that are targeted at SMEs, such as grant schemes, R&D and innovation loans and targeted programmes. State involvement in the development of venture capital markets seems also important (e.g. specific VC funds, funds of funds and provision of seed capital for start ups).

3) *What is the practical functionality and effectiveness of innovation support instruments in Ukraine?* The various parts and instruments of the Ukrainian national innovation system should smoothly and effectively work together. Providing innovation financing more on a competitive and collaborative basis is likely to dynamise the innovation system and to improve its performance. A performance and impact assessment of the Ukrainian innovation financing system could be beneficial.

4) *Is there enough experience and competence for the effective implementation of the innovation support instruments?* Developing innovation financing instruments and increasing investment levels is not enough, if not coupled expertise. Scientific competence within the financing organisations will need to be complemented with business and innovation experience. What is the awareness and competence of the research and business sector to make efficient use of the available instruments?

The direct statistical comparison between Ukraine and Europe is difficult. Not all innovation financing related data is available from Ukraine, or it is sometimes not fully comparable with those of EU Member States & OECD. Innovation performance comparisons have been made a few years ago (e.g. European Innovation Scoreboard 2006), which reveals a number of issues that are likely to be still reasonably relevant.

The credit crisis and its effects on innovation activity in Ukraine

Innovation financing in Ukraine is strongly focused on strong state institutions and their strategic programmes. It is therefore not surprising that innovation in the business sector is mainly financed from companies' own funds, which tends to reflect to the lack of availability of other sources of innovation funding. This is a structural challenge particularly to the small and medium-sized companies.²¹

It is also necessary to note that the negative structural changes stemmed from the low level of innovation activities amongst the majority of Ukrainian enterprises. The values for indicators concerning basic innovation activities (e.g. number of new technologies, the number of inventions, etc.) went down 5-15 times between the 1990s and 2000s, although the country still has more than 120 thousand specialists, involved in R&D (in full time equivalent), and it spends almost one billion Euros per year on R&D²². The situation has changed in early 2000s, when the economic growth has started. It has led to the positive changes in innovation financing and to stabilization of some key R&D indicators, although the crisis of 2008-2009 had serious negative impact on R&D and innovation activities.²³

The volume of financing of innovative activity during 1998 – 2008 has grown in fixed prices 10.2 times but if re-calculated into fixed prices of 1995 the increase would be just 2 times. The historical maximum of spending has been reached in 2007 (4857 million USD in purchasing power parity (PPP) of national currency). It is important to note that the actual reduction of spending volume after eight years of a stable increase has already started in 2008 (despite of annual formal growth by 10.8% in 2008 in current prices). Therefore, the crisis development in 2009 has only emphasized the negative trends of the previous year. As a result, the level of innovation financing shrunk in current prices by 26.5% in 2009 in comparison with 2007, it has also shrunk by 48.8% in fixed prices, recalculated into PPP (in USD) by 47.4%. With regard to the correlation of the volumes of innovative spending in industry and GDP, the historical maximum of 1.5 % was established also in 2007 and the minimum of 0.87% in 2009, having approximated the level of financing of scientific and technical activity, which hasn't been observed during 2002 – 2008. Hence, the level of support of innovative activities in Ukraine has turned out to be more sensitive towards economic hardships of the recent years than towards scientific and technical difficulties.ⁱ

²¹ Rumpf G., Strogilopoulos G., Yegorov I. – Kyiv 2011. Innovation Policy: European Benchmarking for Ukraine Volume 1 “Key features of innovation policy as a basis for designing innovation enhancing measures leading Ukraine to a knowledge based competitive economy – Comparison EU and Ukraine”

²² according to official exchange rate.

²³ Rumpf G., Yegorov I. INNO-Policy TrendChart- Innovation Policy Progress Report Ukraine', 8th August 2011

During the last decade, the main sources of financing of innovation activities were and, still remain, the **companies' own funds**. The historical maximum of the self-financing share was marked in 2001 (83.90%) and a minimum in 2008 (60.56%). When analyzing absolute spending of enterprises in fixed prices, it is worth to mention their sustainable growth in 2002-2007. After the start of the crisis, the expenditures have shrunk by 29.3% and 56.5% in 2008 and 2009 respectively against the 2007 level.

In addition, at the end of 2000s, the **banking loans** have become an important source of financing. If in early 2000s their share has reached 6.26% of the total volume of innovation financing, in 2008 it exceeded a third of the total volume. The fact that from 2006 to 2008 the share of bank loans in the structure of financing has stepped up from 8.48% to 33.72% demonstrates the intensity of the credit boom. It is important to note that the hardships related to the global financial crisis and banking sector reforms in 2009, have led to a very sharp reduction of the indicator's value - by 79.5% in fixed prices. The intensity of the lending of innovative activity is directly connected with the rates of general economic development as the biggest structural shares of the banking loans were observed during 2003-2004 and 2007-2008.

Similar tendencies were observed in a budgetary financing of innovative activities. The share of the state was the second most important among all other sources (10%) at the beginning of the last decade. Afterwards, the share of budgetary spending has exceeded the level of 3% only once - in 2003. Similarly to the share of national investors, this share dropped down to insignificant 1.69% in 2009.

The logic of government intervention

Governments are motivated to ensure the availability of finance for young innovative companies given their important role for the growth and renewal of modern economies. In particular, it is the small number of the nation's most growth-oriented companies that have a disproportionately high impact on employment growth. These growth oriented young companies often require substantial amounts of external finance. This high risk finance is often not forthcoming from traditional bank sources and venture capitalists or business angels assume an important role. A functioning venture capital market has been shown to be a very important element of the economic infrastructure. Active, informed and experienced risk capitalists promote innovation and thereby assist the growth of employment and economic activity.

The key role of the government in growth-oriented entrepreneurship is unquestionably to provide a framework and environment conducive for informed and profitable risk taking by private investors. Growth oriented entrepreneurship simply cannot develop as a government driven and managed activity. Supportive government involvement should best be seen as an interim and temporary activity to allow the evolution of an informed and experienced private market.

The primary role of the government's entrepreneurial focus should be to ensure that the tax and legal frameworks do not inhibit well-functioning markets. In this role the government supports improvements in the tax and legal environments, entrepreneurial culture, stock exchanges for growth companies, and other framework conditions that influence the supply and demand for both formal and informal venture capital. Of particular importance is the effective functioning of a range of exit markets available to investors. Without a means of liquidating both good and poor investments, early stage activity is highly unattractive to professional investors.

Secondarily, in the absence of sufficient private finance being forthcoming from commercial capital markets, the government can also intervene in markets by supplying risk capital. The state can invest directly in individual portfolio companies. Alternatively, the state can invest indirectly by contributing finance as a limited partner to one or more professional, venture capital funds. The clear consensus is that indirect intervention is preferred to direct intervention by the state. For example, rather than civil servants selecting enterprises to be funded with tax payers' money, governments should create the necessary conditions and incentives for professional investors to emerge and fill the gap.

Whatever the public intervention, the main lesson to be learnt from international experiences is that governments should take a long-term perspective. It is crucial to understand the simultaneity problem: both supply and demand should be addressed simultaneously with the understanding of proper intermediation mechanisms. Government must be mindful to not distort the functioning of the extant capital market and substitute for (i.e. 'crowd out') private actors. Government should listen to commercial investors and the market's participants very carefully in order to best correct identified market failures. Furthermore, prior to any intervention, government should have a plan as to how their involvement will be phased out the clearly specified goal has been reached. Accordingly, government venture capital programs should be evaluated periodically. An important criterion for measuring program success is the extent to which venture capital

funds or small firms are created which can operate on a commercial basis independent of any direct state involvement, i.e. generate an attractive, risk adjusted, rate of return.

Overall, it can be clearly observed that countries have learned both from their own experience and other nations how to design (and not design) policies that catalyse the growth of efficient capital markets. In Austria the Economic Recovery Programme (ERP) fund for innovative companies, the Austria Wirtschaftsservice (AWS) Venture capital facility, the AWS guarantees for innovative companies, or the AWS guarantees for private equities have proven to be highly successful public financial instruments. Considering government sponsored venture capital programs, Israel learned from its unsuccessful Inbal program and designed a completely different Yozma program with a clear focus on creating a competitive venture capital industry in Israel. Critically, it designed simple and attractive incentives for private investors and directly invited experienced foreign investors to Israel in order to achieve its developmental goals. The new design was successful. In many countries such as New Zealand, newer programs have adopted a similar design. Overall, it appears that experience has resulted in many countries coming to rely more on private actors (both funds and angel investors). Such countries have designed policies that more effectively harness private resources instead of creating investment activities operated by governments.

Recent trends in R&D and innovation financing

EU and its member states' policies are fast adapting to the new economy, globalisation and increased competition in the field of innovation. Several countries have been facing remarkable structural changes of their R&D national system, many as a result of major evaluation exercises. Within 2009, many of the EU Member States have set up new priorities and strategies for their state research and innovation policy.²⁴ As a consequence, many new programmes and instruments are designed and more are expected in the near future.

On the European level, the research and innovation policies are also under change. Further to the new Commission starting in 2009, the research and innovation Directorates General will be reorganised. President Barroso has proposed a new EU 2020 strategy, which essentially builds upon innovation and will be followed with a specific new innovation plan for the Europe in fall 2010. More importantly, the planning for the next EU framework programme for research and innovation (FP8) has started, and it is expected to bring closer together the Member States' national research and innovation programmes at the EU level.

At the same time, EU Member States are deeply struggling in the turmoil of the global financial crisis and ever increasing competition from new emerging markets. As further investments are requested for research and innovation, less funding is available both in government budgets and in businesses. This raises a major challenge for policy makers and planners, and a heavy pressure to ensure all investments are well targeted and effective to stimulate economic growth.

Types of support mechanisms

Government support for R&D and innovation takes many forms and mechanisms for support are included also in many other policies and instruments than those that are directly related to R&D and innovation. When looking at the set of policies, the following mechanisms can be identified²⁵:

- **Direct, financial investment measures** relate to the direct transfer of public support to innovation performers. These can be distinguished between:
 - *Thematic (or vertical) policies*, which focus on specific themes such as Biotechnology, ICT, Sustainable Development, Security Research and others, and
 - *Generic (or horizontal) policies*, which have no thematic priorities but cover issues such as scientific quality of academic research (grants from science funds), Public Private Partnerships and other forms of collaboration.
- **Fiscal, indirect policy measures** provide incentives for higher private sector R&D and innovation investments as the public sector is forsaking tax income in exchange for R&D investments.
- **Catalytic financial policy measures** seek to provide better access to private sector sources of finance. Typical catalytic innovation measures are:

²⁴ E.g. Czech reform of the system of R&D, the Estonian RDI strategy for the years 2007-2013, the Finnish national innovation strategy, the German High Tech Strategy, the Greek 2007-2013 operational programs, the Hungarian mid-term sciences technology and innovation policy strategy, the Luxemburg eight futures priorities for public research, the Portuguese National strategic reference framework, the Slovakian Long-term objective of the State S&T Policy up to 2015, or the UK new DIUS science and innovation strategy

²⁵ Adapted from: Reinhold Hofer and Michael Dinges: Thematic report: R&D – R&D Policy Interactions. Monitoring and analysis of policies and public financing instruments conducive to higher levels of R&D investments: The “Policy Mix” project. May 2008. A study funded by the European Commission – DG Research

- Risk Capital Measures, i.e. measures taken by the public sector which catalyse the flow and use of risk capital for both R&D and innovation-related activities likely to increase R&D investment levels in the future;
- Loan and Equity Guarantee Measures, i.e. measures whereby the public sector tries to encourage additional investment in innovation by offering to share part of the risk involved in the provision of support for R&D and innovation-related activities.
- **Structural R&D policy measures** focus on the provision of research infrastructure and knowledge pools which include university research funding, public sector research institutes, centres of excellence, and human resources funding and policies.
 - In addition, **R&D and Innovation Linkage policies** have to be mentioned. R&D linkage policies aim at increasing knowledge transfer between R&D performers in both public and private domain and hence spurring innovation.

Public procurement in support of innovation

Innovation and competitiveness of companies have been traditionally supported by supporting the research and development work at companies, research institutions and universities in the forms of grants and loans. These are so called technology push instruments for innovation policy. During the past years, more and more emphasis has been put to the development and utilisation of various kinds of demand-based policy instruments in parallel to the more traditional push –measures. The most common demand-based innovation policy instruments are public procurement, influence on the development and use of norms and standards, as well as other market development measures (such as living lab user platforms, etc).

The particular interest to use public procurement to support innovation is largely related to its significant volume. The volume of public procurement accounts for some 16-19 percent of GDP in most EU countries, being roughly ten times bigger than the respective volume of public and private R&D investments.

Public procurement has been used to support technical advancement for long time in some countries²⁶, while its use to support innovation is more recent trend. Although there are significant differences between in the public sector structures in these countries, there is a wealth of experience to take stock of.

In EU, public procurement has emerged as a powerful instrument to drive research and innovation by providing 'lead markets' for new technologies. Firms are given the incentive to spend money on research in the knowledge that an informed customer is waiting for the resulting innovations and thus the risk of investing in R&D is reduced. Competition is shifted from a sole focus on price to the provision of solutions, which offer the greatest advantage to users over the whole life use of the purchase. At the same time this opens up opportunities to improve the quality and productivity of public services through the deployment of innovative goods and services. Technologies launched in this way may then move on to further deployment in private sector markets. Other policy objectives such as sustainability may also be achieved by procurement of innovative solutions.²⁷

Public procurement is a powerful policy instrument, which is worth taking proper stock of for the development and dissemination of innovation. Normally, the most significant barriers to using public procurement for innovation are not in the legal procurement laws and guidelines, but rather in the competence, resources and willingness of the procurers to look for innovative solutions.

The European Commission guidelines for public authorities in using public procurement for innovation emphasise the following points:²⁸

- Act as an 'intelligent' customer
- Consult the market before tendering
- Involve key stakeholders throughout the process
- Let the market propose creative solutions
- Seek value for money, not just the lowest price
- Take advantage of electronic means
- Decide how to manage risks
- Use contractual arrangements to encourage innovation

²⁶ Particularly at UK and USA, but also to some extent in Germany, Sweden, Norway, Italy and the Netherlands

²⁷ Public Procurement for Research and Innovation. European Commission Expert Group, 2006

²⁸ Guidelines on dealing with innovative solutions in public procurement. European Commission Staff Working Document. DG Enterprise and Industry, SEC (2007) 280

- Develop an implementation plan
- Learn for the future.

Venture financing

Venture capital can be very valuable and help ambitious companies to grow and internationalize. However, it is not a suitable financing solution for all companies.

Venture capital is mostly targeted at companies with clear technological innovations, preferably protected with international patents. This makes their intellectual properties and intangible assets easier to trade internationally, but it also makes the venture assessment easier. In comparison, for service-intensive new ventures, access to risk capital may often be an important challenge when seeking to grow rapidly and expand operations internationally.

In order to access and benefit from venture capital, it is important to understand venture capital as a form of finance and whether or not it is relevant and attractive choice in a particular situation, and if yes, become investment ready. This *investment readiness* refers to understanding of venture capital and the process of raising it and working with VCs, willingness to seek and accept external equity finance and related commitments, and investability of the business i.e. ensure the venture fulfils the requirements of external investors as an investment opportunity.²⁹

Entrepreneurs can often do a lot to improve their chances of attracting venture capital investments both by grooming the company to be investment ready and running the VC fundraising process smartly. Improving the opportunities of client companies to access venture capital to facilitate growth can increase the impact of public funding. Government innovation support institutions can help their client companies by improving the visibility and quality of information concerning investment opportunities among its clients, by strengthening the certification role of funding, and networking and further developing the collaboration with VCs.

Business angels

Business Angels are private individuals who invest equity in new or existing companies. These are typically wealthy individuals with a long experience from some specific business areas, and who can and are interested to utilise their wealth and experience in other businesses. Typical business angels are former entrepreneurs who have sold their companies, or retired executives from successful companies. The investments of Business Angels are often a combination of money, business and substance experience and contact networks.

Due to the private nature of Business Angels (categorised as informal venture funding or invisible), there are only estimations of its volume and importance in different countries. Some studies suggest that the funding volume of Business Angels can be several times larger than the formal venture capital (i.e. by registered Venture capital companies).

It is certain that the role of Business Angels has increased in the capital markets. According to the information collected in UK for 2008-2009, there were 25 networks of Business Angels in Britain. Their activity included the following:³⁰

- 8685 business plans were evaluated
- 824 ventures were further analysed
- 233 investments were made, with average investment of 70 000 €

Lately there has been a rapid increase of online systems aimed at Business Angels and other private investors. These systems provide electronic platforms, through which investors can see many available companies and companies get visibility over many potential investors. However, the business logic and motives of many online investment systems differ from traditional venture financing. Online systems typically charge a small sum (100-800€) from companies to publish their business plans, without much evaluation and due diligence processes. They do often offer speed dating / match making facilities between financiers and companies. Examples of such new online portals are Angels Den, Angelsoft, Angel Investment, See my Pitch, Nature Vents ja Venture Giant.

²⁹ Adapted from: Professor Markku Maula, VC Report to Tekes, 2009.

³⁰ Colin Mason, University of Strathclyde, BBAA Winter Workshop, January 2010

It is estimated that the majority of Business Angel investments (by number of investments) in UK is already channelled through these online portals.

The Business Angel market is growing fast and organising itself. There are new instruments being developed. Also international collaboration and syndication of funds is increasing.

Mechanisms ensuring competitive selection and dynamism

The culture for providing research and innovation funding on the basis of competition varies in Europe. All EU countries have both **competitive funding** (i.e. funding given on the basis of open competition) and **institutional funding** (i.e. funding directly allocated to state institutions and universities) for conducting research and innovation activities. Some countries have been using competitive funding for years while others have introduced or developed this funding scheme in the past years. The trends in EU to this end are that there are

- Countries, for which competitive funding is very important: Denmark, Estonia, Finland, Germany, Greece, Hungary, Luxembourg, Poland, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.
- Countries for which institutional funding represents the lion's share but that have increasing the share of the competitive funding in the past years: Czech Republic, France, Lithuania, Malta, the Netherlands and Portugal.
- Countries for which institutional funding is central, competitive funding exists but is limited in terms of volume distributed: Austria, Bulgaria, Czech Republic, Ireland, Italy and Latvia.

Overall, the **share of competitive research and innovation funding in the state budgets is increasing**, mainly due to its shown impact on improved focus, relevance and quality of research, as well as positive effects on the competitiveness and growth of economies. A recent study³¹ covering nine European countries indicates that around one third of total national public funding of research is project funding, and that European research funding would account for between 20-30 % of the total competitive funding available per researcher in Europe.

Other financial instruments

Most governments have put in place specific, more targeted measures to encourage innovation, including tax relief for R&D, grants and public-private partnerships. Recent developments in this area aim at applying more market-friendly approaches that encourage competitive selection of investments that are likely to have the highest social return. This has been accompanied by a move away from unspecific, single-firm, project-based grants, to more sophisticated designs, in parallel with a rise in R&D tax incentives. Several governments are streamlining public support schemes with a view to increasing focus, delivery and impact. Public-private partnerships (PPPs) are one example of market-friendly focusing devices that can offer a framework for the public and the private sectors to join forces in areas in which they have complementary interests but cannot act as efficiently alone.

In addition to setting broad framework policies that are conducive to innovation, governments may also wish to push innovation more directly through various forms of support to firms. The business sector is the engine of innovation in most national innovations systems, being the major source of financing of domestic R&D in the OECD and also the major performer of R&D. Governments are increasingly attempting to harness the innovative capabilities of firms to help solve challenging problems, including those environmental and social externalities to which firms themselves contribute.

Over time, the use of direct grants to institutions and individual firms has become less important in most economies, with greater emphasis being given to tax measures and the targeting of public funds towards specific projects that are put out to tender.³² Studies show there is little consensus as to the effectiveness of subsidies and research programmes. One study of 21 OECD countries found that subsidies had a significant positive effect on business R&D expenditure only when past R&D intensity is not taken account of. Subsidies have a greater impact on small firms' R&D expenditures than those of large firms – perhaps suggesting the funding is used by small firms to support activities that would not otherwise be financed. The OECD's Working Party of National Experts on Science and Technology Indicators (the NESTI group) has

³¹ Lepori B., van den Besselaar P., Dinges M., van der Meulen B., Poti B., Reale E., Slipersaeter S., Theves J., (2007), Comparing the Evolution of National Research Policies: what Patterns of Change?, Science and Public Policy Vol. 34, No. 6, pp. 372-388.

³² Jaumotte & Pain, 2005

proposed a research project that aims to assist governments to better assess the effectiveness of support to R&D and to explore the impact of changes in the policy mix on the effectiveness of support (OECD 2008h). Preliminary estimates of direct government assistance to R&D (in research funded by the Canadian Department of Finance) suggest that the value of contracts awarded to firms may be more important in many countries than direct grants and contributions through government programmes.

Government subsidies to the business sector and tax incentives appear to be substitutes. Analysis suggests tax policies can induce higher private R&D expenditure, with estimates of the elasticity of R&D to its price varying from 1 to 1.5-1.8 (Jaumotte & Pain 2005a). However, they do not show that the social gains necessarily outweigh the associated compliance and administrative costs (spillovers from higher R&D to productivity would raise the chances). There is a higher probability of research duplication with tax relief, and research may be less likely to occur in areas of high social returns. In addition, small firms with little taxable income may not benefit. The bigger question is whether the foregone tax revenue could have been better spent elsewhere. There is also a question as to the impact on firm location decisions, and the potential disadvantages for countries that do not offer tax incentives.

Ensuring competition and balance in the financing market

According to the Finnish experience, the stimulating role of competitive STI funding can be instrumental with regard to a) encouraging the initiation and growth of new research areas, b) facilitating collaboration between different stakeholders of the STI system and c) increasing the relevance, quality and effectiveness of research, development and innovation projects. There are several studies and evaluations that support this view.

The design of a modern, well-balanced and strategically oriented set of innovation funding instruments is a complex and continuous development work. As a basic assumption, different parts of the 'innovation life cycle' need their own instruments. Furthermore, a balance should be struck between open applications, bottom-up funding instruments and strategic, top-down instruments (typically national targeted programmes and clusters). The appropriate funding levels, forms of funding, planning processes and governance mechanisms are typical funding organisation –related development aspects. Fortunately, several benchmarks are well-documented and available, often with evaluated evidence. The most critical part of the STI funding system development is the expertise within funding organisations – administrative, financial and legal competence, project coordination experience, research project and business prospect assessment experience and substance –related professional experience. Much of this experience is transferable from other funding organisations, through for example twinning projects or professional coaching.

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Monitoring and evaluation of innovation financing

Today, progress monitoring and particularly impact assessment is an instrumental part of good governance of public funding of STI system, and in particular it is seen as a means for improving the effectiveness and result orientation of support measures. As a basic principle, the impact of all public interventions should be measured or at least be roughly estimated. A modern STI system impact assessment often includes different kinds of evaluation elements and viewpoints, of which government officials should have a good general overview and understanding for their own purposes.

It is important to start the monitoring of the *efficient and effective use of grants, loans and programmes* along with the ex ante evaluation work, early on in the process when options for project and programme formulation are still open. In many cases the monitoring can be carried out in parallel with or as a part of the programme design, feeding results into the preparation of the proposal. However, when new data needs to be collected, an early start is important.

As elements of the programme are likely to change in the course of its development, it may be useful to leave the detailed specification of output indicators to a stage when the content of the programme has been fixed.

The performance and impact of *equity funding* is surprisingly seldom systematically evaluated, besides the normal investment returns (return on investments, etc). There are a few reasons for that. Equity investments are known to include risks and are considered on case-by-case basis. There are often also other

than public investors included and the details of investment decisions are not always public information, nor are private investors always keen to assess their investment performance in the same manner as public investors do. The time span of investments is very long and impact is linked to several decision /funding rounds as well as active management decisions during the life of investment. And so on.

There are a number of generally known target indicators depending on the type of investments (e.g. estimation of deal flow, acceptance rate, management per company, average investment per company, IPO rate, exit times, etc). For some of the public equity investors, there are also annual performance indicators that can be benchmarked. For example, the Finnish Industrial Investment (Teollisuussijoitus Oy) – a government fund of funds, is setting up an annual performance indicator system.

Furthermore, it is normal to government innovation agencies to report their performance with a set of qualitative and quantitative indicators annually, often also semi-annually. The annual performance reporting is typically linked to the government budget negotiations, in which performance indicators function as justifications for further investments.

At the institutional level, the rationale and operations of public R&D funding agencies are typically judged against the added value they are able to generate to the national innovation system. The additionality would normally be defined along three main elements; a) the *input additionality* i.e. its ability to attract and direct more resources to R&D and innovation, b) the *output additionality*, i.e ability to generate more innovations, spin offs etc due to the support it has given, and c) the *behavioural additionality*, as to which extent the funding is able to act as a change agent among the innovation system players and generate collaborative effects.

Policies and instruments are always assessed against the set of objectives specifically defined for them. In usual cases the policy objectives are numerous and often closely interlinked. It is therefore typical to formulate the policy objectives in a logic model, which then can be used as the general framework for performance and impact assessments.

Concluding remarks

The structural analysis of the innovation financing appear to support the statistical findings, however, a more precise analysis of the effectiveness of various funding instruments is still needed. Ukraine faces several challenges related to innovation financing, namely:

- Increasing the overall volume of investment into innovation, both from the public and private sources
- Improving the governance of the innovation system, with consequences to innovation financing
- Filling in the 'gaps' in the innovation financing, such as development of effective innovation support instruments for the business sector, particularly for SMEs and encouragement of seed and venture capital
- Driving the overall balance of R&D and innovation financing from state institutional financing more towards competitive and transparent, project-based funding with clear innovation objectives.

SOCIAL RESPONSIBILITY: THE EVALUATION CRITERIA OF PUBLIC FINANCIAL INSTITUTIONS

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Abstract:

Purpose

European Association of Public Banks states that public financial institutions play a significant role in European financial sector by having more than 20% assets of total financial sector. Recent papers are focused more on ownership structures of financial institutions showing their efficiency using the same parameters as for commercial banks. One of the public institution objectives is to provide social benefits in the country not forgetting about efficiency of financial recourses used. The aim of this paper is show that public financial institution efficiency has to be calculated not only by using commercial bank efficiency criteria that mainly focuses on profitability and efficiency of financial recourses but also social responsibilities and the benefits institutions give have to be evaluated.

Design/methodology/approach

In this paper recent literature, scientific researches, annual reports of the public financial institutions as well as websites of public institutions are analyzed. Paper includes analysis of financial institutions in Europe that have at least 5% public influence of voting rights.

Findings

Paper finds that public financial institutions play significant role in social responsibility in each country they are located and they can not be evaluated by only using commercial bank efficiency criteria. Every public institution in different regions has their own missions that are determined according government development targets.

Research limitations/Implications

Further researches have to be done to show how public financial institutions put in effect their missions and targets. Data of social projects accomplished has to be analyzed to see efficiency and social benefits that projects provide.

Keywords: Public financial institutions, social responsibility, evaluation.

Introduction

Public financial institutions are playing significant role in financial market in Europe by having more than 20% assets of total financial sector (Schmit, Gheeraert, Denuit and Warny, 2011) Despite this fact a lot of authors still argue whether public institutions are efficient and stimulates development of national economy and there are still hard discussions whether government should be involved in financial institutions or not. Some says that higher government ownership of banks leads to significantly lower levels of firm innovation (Xiao, Zhao, 2011). On the other hand some argue that government owned banks have, if anything, been associated with faster long run growth – “development view” (Andrianova, Demetriades, Shortland, 2010). To understand public financial institution efficiency there has to be evaluation criteria determined. Recently there are no standard criteria made how to evaluate public financial institutions therefore authors evaluate from different point of views. Authors that analyzes financial ratios states that public financial institutions are less effective that private financial institutions (La Porta, Lopez-De-Silanes, Shleifer, 2002). La Porta et al. (2002) also states that there are two broad views of the government’s participation in financial markets – “development” view and “political” view.

Authors that supports one or another view argues regarding quality on managing public institutions by comparing mainly financial ratios and correlations with economical developments and growths. There are only few researches found that analyses public institution results as a social benefit provider (e.g. Hackenes, Schnabel, 2006, Andrianova, 2006, Levy-Yeyati, Micco, Panizza, 2004). The main reason of that is difficulty to evaluate social benefit as a value. Authors that are calculating public institution efficiency using financial ratios are not taking into account main objectives and missions of public financial institutions.

The purpose of this paper is to provide literature of public institution efficiency evaluation and to show that public financial institution efficiency has to be calculated not only by using commercial bank efficiency criteria that mainly focuses on profitability and efficiency of financial recourses. Paper hypothesizes that social responsibility is main evaluation criteria of public financial institutions. Therefore monographic method will be used to analyze empirical researches of public financial institutions as well as existing reports, missions and recent literature of public financial institutions to approve or deny hypothesis.

Research methodology

There are 25 different public institutions from 14 different countries in Europe analysed within this paper. According to the report of Public Financial Institutions of Europe published by European Association of Public Banks public financial institutions are institutions in that have at least 5% public influence of voting rights. In each country legal form of public financial institution differs therefore both public banks and financial agencies are included in this research. Paper analyses missions of public institutions to understand what are their goals, objectives and long term achievements. By analyzing missions of public financial institution it can be understood why they are, what they do, how they do. By answering those questions another look can be determined how to evaluate public financial institution. This paper also includes literature analyses of recent researches of public financial institution evaluation criteria from two views – “development and social” and “political” view. Research includes data from public financial institution homepages, annual reports of European Association of Public Banks and scientific literature.

Development and social view

Authors Schmit et al. (2011) in the report of Public Financial Institutions of Europe states, that according to this view, public banks are needed to support local and regional activities. Empirical evidence shows that government owned banks has played significant role during the years. Until the outbreak of World War I German banks were focused on supporting heavy industry such as coal mining, iron and steelmaking, electrical, general engineering and heavy chemical output. (Gerschenkron, 1962). Each country has their own development objectives and targets therefore public institution missions vary in each country adapting to country development plan. Still there are authors that deny importance of public institution participation in economical development and growth.

Some authors defend models that are supporting regional development. Public banks are better able to mobilize deposits from the non-entrepreneur part of population to whom the membership in a cooperative is of no value and may help to prevent a capital drain from poor to rich regions (Hakenes, Schnabel 2006). Hakenes (2007) also has found that public banks are also cheaper mechanism than subsidization. However, public banks must not be allowed to fully compete with private banks by wasting tax money and losing efficiency advantage (Hakenes, Hainz 2007).

There are also authors that argue that financial ratios can not be argument how to evaluate public financial institutions stating that low profitability might stem from state owned banks' activity on projects characterized by low private sector investment and high social return – “social view”. (Levy-Yeyati, Micco, Panizza, 2004).

Political view

La Porta et al. (2002) emphasizes political objectives rather than social objectives within this view. Authors that support this view also highlights lack of competence in public banks. A greater presence of foreign-owned institutions and a lesser presence of state-owned institutions are likely to be associated with significantly higher SME credit availability in developing nations because foreign-owned institutions appear to have advantages in some of the lending technologies, and state-owned institutions appear to be generally disadvantaged (Berger, Udell, 2005). Political view defenders argue that government owned banks are tended to use politician status to finance project that are beneficial for them not for society by stating that political motivations influence the actions taken by government owned banks. (Dinc, 2002). According to political view government owned banks are financing projects that are politically not socially beneficial therefore making competition to private banks.

James Hanson (Senior Advisor, Financial Sector, The World Bank) tries to answer why state owned banks perform so poorly like mentioned in political view. One of the reasons is difference of credit allocation between private and government owned banks. Loans granted by government owned banks are less profitable meaning that money is not used productively with low bank efficiency. A low efficiency result in bank losses that has to be covered by taxes. Hanson states that public owned banks are facing problems by

serving sectors where private banks are not willing to act. Public banks have more objectives like job creation, infrastructure development, education and other objectives that are connected with existing state development but private banks have only one objective – balancing return and risk. According to many objectives public banks have to increase staff therefore owners loses control of organization. Another problem is lack of information that is been hidden in the bank to hide projects with politically beneficial. Political influence gives the result that public banks are financing the same projects that private bank sector is willing to do therefore creating competition in financial sector. Due to high competition government owned banks are setting lower interest rates than risk evaluation require by saying that social groups can not be financed with high rates. Public sector banks' poor performance typically led to bankruptcies followed by attempts at "reform" (Hanson, 2004).

Some of political view supporters say that public financial institutions are more active and increase their financing in election years. Serdar Dinc (2002) provides empirical evidence about political influence in government owned banks in major emerging countries in the 1990s. His research shows that government owned banks increase their lending in election years relative to private banks while private banks decrease theirs in the same year (Dinc, 2002).

Social responsibility

The World Bank (2004) in their working definition says that corporate social responsibility is the commitment of business to contribute to sustainable economic development—working with employees, their families, the local community and society at large to improve the quality of life, in ways that are both good for business and good for development. Literature review shows that both, development and political view, highlights the importance of public institution social responsibility. Authors Schmit et al. (2011) in the report of Public Financial Institutions of Europe provides new outlook on evaluation of public financial institutions. They first answer questions – who public institutions are, what, why and how they do. Only answering those questions it possible to evaluate public institution and determine if they are acting efficiently or not.

Schmit et al. (2011) in the report of Public Financial Institutions of Europe has analyzed public institution missions and divided public financial institutions by missions – promotional missions, general interest missions and geographically-focused missions.

Promotional missions are tended to support economical development and job creation by financing projects that private sector in not willing to support. Mainly those are SMEs that are supported by the financial institutions that use promotional missions with the purpose of supporting innovation in the company. Such investments have high risks therefore private banks are not willing to support such projects. Financial institutions are not only supporting SMEs by financing but also providing them with international market channels and business contacts therefore developing companies growth, job creation and common economical growth in country.

Authors Schmit et al. (2011) have included support of agriculture, promoting of tourism and education as well as infrastructure under the general-interest missions. Public institutions that have such missions support socially important sectors that private banks are not willing to finance due to the high risks and low profit possibilities. This mission is very close to country development plans. Each country has their developments plans were they have accented their main objectives, targets and sectors they want to develop in nearest future. Public institutions are government toils to achieve determined targets in their developments plans, therefore general-interest missions mostly detected in public institution action plans.

Geographically focused public institutions are bridges between financially passive regions to business markets. Their main aim is to give chance for everyone to be financially active. This is one of the supports that private banks are not willing to finance. Countries have regions that are less developed and investors don't see perspective of investing their funds therefore money flows to richer regions that are more developed in doing business. According to this fact poorer regions are left alone in even worse situations. Public banks therefore support such regions to improve competitiveness in the market and to develop forgotten regions by financing project that creates new jobs and develops infrastructure.

Table 1

Missions of public financial institution in Europe

Bank	Country	Mission/Strategy
Agricultural Bank of Greece	Greece	Human factor/Create working environment
Bank Gospodarki Zymnosciowej	Poland	Young people education/health/environment
Bank Gospodarstwa Krajowego	Poland	Support government economic and regional

		program/Support public sector financing
Black Sea Trade and Development Bank	Black sea region	Support SMEs and trade financing/regional focus in 11 countries
Caisse des Depots et Consignations	France	Housing/Universities/SMEs
Cassa Depositi e Prestiti	Italy	Economical growth/investments of public entities/infrastructure/local economy and national enterprise
Czech-Moravian Guarantee and Development Bank	Czech Republic	SMEs support/ bank guaranties for projects/ technical infrastructure/housing reconstruction
DNB	Norway	Climate and environment/innovation
ECIO	Greece	Export guaranties
Eximbank Hungary	Hungary	Export/ Job creation/ National economy growth
Finnvera	Finland	SMEs support/ Export and internationalization of ent
GIEK	Norway	Export guaranties/ investment abroad
Husbanken	Norway	Start up financing for housing
Investitionsbank Schleswig-Holstein	Germany	Regional financing
Kommunalbanken Norge	Norway	Low cost providing for local municipalities
Kommunalkredit	Austria	Social infrastructure/energy/environment and transport
Kommuninvest	Sweden	Low cost providing for local municipalities
Kreditanstalt für Wiederaufbau	Germany	Domestic promotion – municipal and social infrastructure/ SMEs/ export/ development – social progress
Mortgage and Land Bank	Latvia	National economy growth / SMEs support/ social and infrastructure support
Nova Ljubljanska Banka	Slovakia	Social development
Österreichische Hotel und Tourismusbank	Austria	Tourism
OSEO	France	Innovation and growth of SMEs – start-up, innovation financing
Société Régionale d'Investissement de Wallonie	Belgium	Regional support/ industrial projects/ job creation
Thüringer Aufbaubank	Germany	Regional business and rural development and promotion of housing construction
Ziraat Bankasi	Turkey	Agriculture

Source: Compiled by author

Public financial institutions have very wide range of missions by supporting specific economical needs in each country. Such economical need includes activities in sectors that are not supported by private banks but are very important for countries economical growth and development.

To confirm the public financial institution policies this paper analyses different public institutions over the European Union by analyzing their missions and strategies via their homepages.

Table 1 shows missions and strategies of public financial institutions in different countries. Missions are determined to support country development plans by stressing priority on government main goals. In some countries that have more than one public institution missions are determined to support regional development or stressing on one specific governments' priority at the same time they do not compete with other public financial institution in the same country.

Analyses of public institution missions highlights main strategies and objectives of public financial institutions. According to The World Bank definition public institution missions are tended to act as social benefit providers. It can be seen that missions of public banks are created to support government development objectives therefore focusing on social issues such as job creation, infrastructure development, education, health, environment, housing, tourism. They focus on society wealth increasing by financing regions, projects that are not preferred by private banks due the low profitability. Public financial institutions are also leveling regions by supporting poorer ones deflecting financing from richer regions to create positive competitiveness over the whole country. Mainly all missions are connected with government and society improvement well-being and it is one of the main tools for government to achieve economical and development goals. According to this it can be understandable that public financial institution effectiveness can not be evaluated by using only financial and accounting ratios. By assuming social responsibility as one

of the public financial institution criteria it can be determined if institution is effective or not but also not forgetting financial ratios that remains importance in evaluation.

Conclusion

This paper provides literature preview of recent researches that are aimed to evaluate efficiency of public financial institutions. Paper demonstrates major differences between two different outlooks on public financial institution activities. By analyzing recent literature of public banks highlights two main positions – “development and social view” and “political view”. Both views agrees that public financial institutions are providing social benefits to society but no criteria of evaluations is set within those researches. Authors in the recent researches more speak about public financial institution evaluation same as private bank efficiency by comparing financial ratios.

The results approve hypothesis and shows importance of social responsibility as one of the main evaluation criteria of public financial institutions. Results show that missions of public financial institutions in the Europe are aimed to support society and are tended to support government development and economical growth plans. Missions include important social issue as job creation, infrastructure development, education, health, environment, housing, tourism.

As social benefit is main issue for public financial institutions this value has to taken into account when evaluating public financial institutions. Social benefit that provides public financial institutions are hard to evaluate therefore further researches are needed to analyze value of such benefits. It is easier to found value in job creation, education, health but harder to analyze value in infrastructure development or environment.

More studies have to be analyzed to understand and evaluate linkage between social responsibility and financial performance to understand and determine correct evaluation criteria for public financial institutions.

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CRISIS OF THE BELARUS BANKING SYSTEM 2011: CHALLENGES AND PROBLEMS OF EXIT

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Abstract

In the paper the features of monetary crisis 2011 in Belarus are concerned. The reasons of the belarusian banking system's crisis and the main crisis accents which affected the Belarus economy are opened by author. The main problems expecting the belarusian banking sector after the crisis period are showed as well. Ways of an exit from crisis and policy recommendations are considered, too. An extensive digital material on the belarusian banking sector in time of crisis 2011 is given. The paper is logically divided into two parts. In the first part of paper the reasons of banking crisis and main of its aspects are taken up. In the second part of paper the problems which expect the belarusian banking system after crisis period will be showed.

Key words: balance of payment, exchange rate, international reserve assets, National bank, commercial banks, refinancing rate.

1. Introduction

Rather recently many experts and practitioners argued that global financial problems will avoid Belarus. In process of global financial crisis's evolution, however, such opinions became more careful and not such optimistic. Meanwhile weakening of crisis phenomena in belarusian economy and finance have been restrained by means of the currency interventions of monetary authorities and building of an external debt made by the Central government. Clearly, these measures had a certain boundary outside of which crisis of banking system became inevitable. What the negative and positive were contributed by crisis 2011 to the belarusian banking system from the position of theory and practice and what lessons can be submitted for the post-soviet countries oriented to the integration processes?

The main purpose of paper is to show the deep reasons and features of the Belarus banking crisis, anti-recessionary technique and methods of banking management, crisis lessons and the most important to show that it is necessary to do not to allow similar crisis in other transitional countries.

The methodology used includes the research of set key banking indicators, data of budgetary indicators, dynamics of inflation indicators, deposition market aggregates, bank assets indicators, balance of payments components, and export indicators. Statistical data for analysis obtained from official sources, such as the State Statistics Committee, National bank, Ministries of Finance, Association of Belarusian banks and on-line databases of analytical centers working in this field. Analytical toolkits, such as comparison method, method of coefficients, index tools, and variations are used and some theoretical assumptions are made.

2. General characteristic of monetary crisis 2011

In 2011 the banking system of Belarus has endured serious crisis which almost passed to system one. The first blow on the banking sector was struck by May devaluation. In result the Belarus ruble fall on 56 per cent ¹ and it seriously shocked the Belarus national currency system.

The second devaluation blow on national currency took place in the September 2011 in which collapse made 36 per cent. As a result for a year the national currency fell more than in 2.4 times, and the inflationary splash expressed in galloping prices made 108.7 per cent. Crisis manifestation in the Belarus banking system is characterized by a comparative assessment of a number of the monetary and macroeconomic indicators illustrated in table 1.

Table 1

Some Belarus banking system indicators, 2010 -2011 (in comparison)

Indicators	In fact as at 31.12. 2010	Forecast as at 31.12. 2011	In fact as at 31.12. 2011
Change of the currency basket value Belarusian ruble against currency basket, in per cent to rate as at December 31 of previous year *)	-0,22	plus 12 – minus 12	-171,7
Refinancing rate (Discount rate) of the National bank of the Republic of Belarus at the end of the period (in per cent)	10,5	8-10	45,0
Growth of the international reserves of Republic of Belarus in accordance with the IMF' SDDS Methodology, USD bn.	0,6	no less than 1,2	2,9
Growth of the ruble monetary base, in per cent)	+69,4	24-26	+66,2
Growth of the regulatory capital banks, in per cent	13,6	15-21	23,4
Growth of claims on the economy from banks, in per cent	39,9	24-25	69,5
Share of bad bank assets in all assets subject to credit risk, in per cent	4,19	no more than 8	4,35
Growth of GDP, in per cent (B %)	107,7		105,3
Balance of payment, USD mil	-808,5		-520,5
Trade balance, USD mil	-9600,9		-4792,0
Investment position USD mil	-25825,7		-28723,6
External debt USD mil	28401,4		34028,4
Deficit (-), Surplus (+) of consolidated budget, in per cent to GDP	-2,6		3,4

*) (+) *The Belarusian ruble strengthening;*

(-) *The Belarusian ruble weakening.*

Source: Author's own design on a base of the statistical reports of the National bank of the Republic of Belarus (The National bank..., 2012 a, 2012 b)

On a surface of phenomena the deterioration of indicators of banking sector of Belarus was a failure consequence in the budgetary sphere: falling of revenue rates of the consolidated budget and tax shortages in it. The main shortage of the tax revenues in 2009-2010 was result of sharp falling of the foreign economic activity revenues directed to the Central budget, namely the customs duties from trade of oil products. A tax revenues falling in the consolidated budget were mainly from article of foreign economic activity (fig.1).

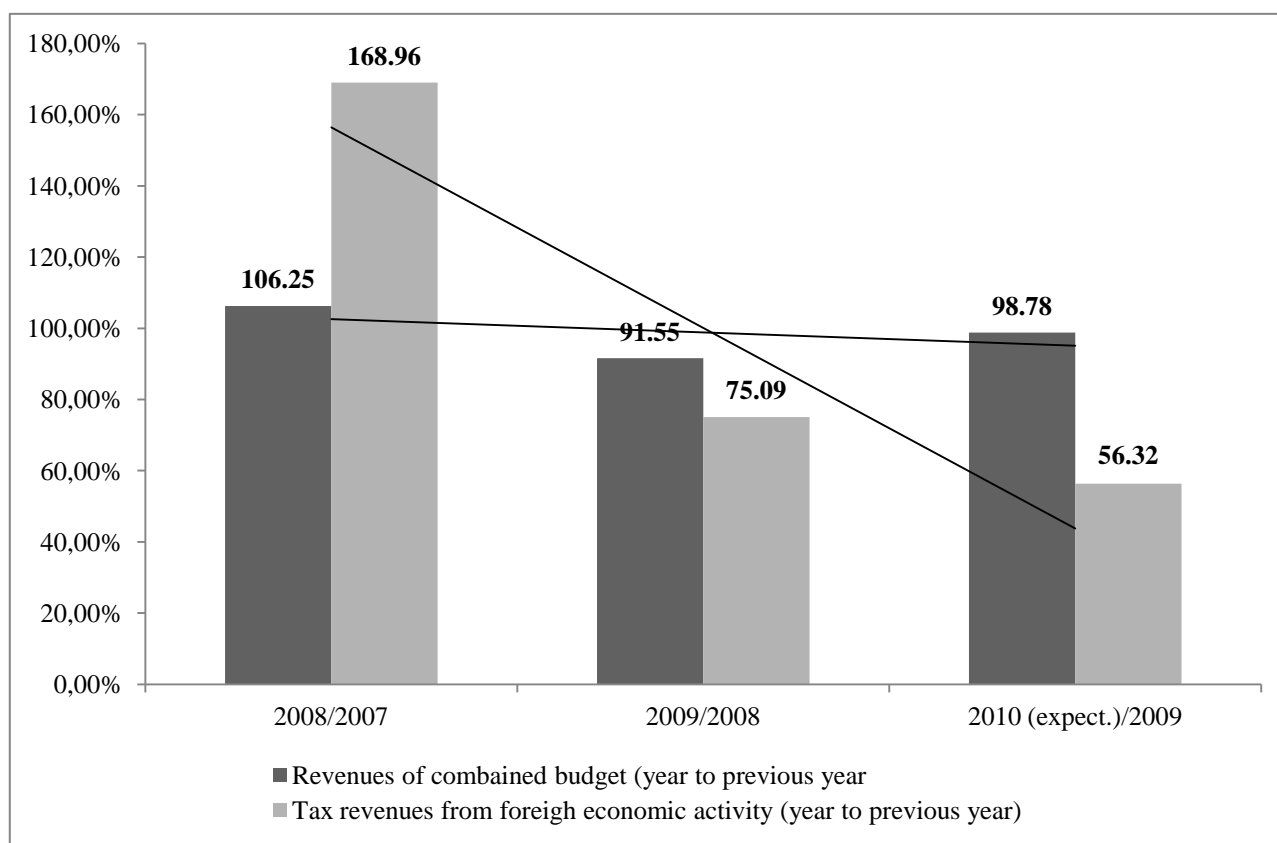


Fig.1 Parity of revenue growth rates of the consolidated budget and tax revenues from foreign trade activities (year to previous year, percentages)

Source: Author's own calculations on the base of reports of the Ministry of Finance of the Republic of Belarus

However, the deep reason of serious shocking blows on a banking system should be searched in lack of structural economic reforms, indecision of the Belarus authority in economy modernisation according to market rules, aspiration in every way to keep the model of expensive economy which is based on a cheapest oil import and export of oil products from it. Really, it was negatively reflected on macroeconomic situation of the belarusian economy, deterioration of balance of payments, falling investments into national economy, chronic shortage of foreign currency for import deliveries' payment, decrease of national currency stability.

3. Accents of monetary crisis

Crisis manifestation in the Belarus banking system has touched a lot of monetary market segments. First of all, there was a plurality of exchange rates: an official exchange rate of National bank of Republic of Belarus², exchange rates of commercial banks in the off-exchange currency market, an exchange rate of "black exchange market". And the last two represented itself as courses by which companies, firms, organisations, enterprises and the populations were guided. The dollar exchange rate in "black market" constantly went up and the enterprises which did not have access to the currency exchange were also compelled to buy currency at the rate which seriously differed from the official one.

"Running away" from national currency was caused by reaction of population to change of exchange rates. The population began to remove deposits in national currency and make purchases of main consumer durables. Since the beginning of March, 2011 the outflow of ruble deposits from bank accounts was outlined. As at May 22, 2011 time deposits of 6.75 trn. Belarusian rubles of deposits "on call" of the natural persons [fizicheskikh lits] remained. Thus, the total deposits of natural person before the first devaluation made 10.5 trn. Belarusian rubles. After the first devaluation this sum of deposits in USD evaluation was reduced by 1.35 bn. (from 3.48 to 2.13 bn. USD). It was the first devaluation "price" for the Belarusian investors.

As a result of the second devaluation, the ruble deposits of natural person in USD evaluation were automatically reduced on 776 mil. USD (from 2.05 bn. at an official rate to 1.28 bn. USD at the rate of an

additional exchange session)³. So, the ruble deposits of natural person in USD evaluation, decreased more than on 2 bn. USD by means of two devaluations (Anniversary of the belarusian crisis..., 2012).

Other accent of monetary crisis manifestation was the negative interest rate on the monetary market. Increase of the refinancing rate of National bank of Republic of Belarus 4 with 10.5 to 45.0 per cent became reaction of the monetary authorities to blows of devaluations and inflationary splash. However, to "suppress" an inflation in 108.7 per cent by means of establishing by the monetary authorities an adequate refinancing rate haven't been real due to impossibility of Belarus economic sectors be funded on quite high interest rates. So, the negative rate, as a result took place. At the same time the National bank's refinancing rate, nevertheless, affected the depositary market, in particular the time deposits of natural persons. By increasing of interest rates on time deposits in national currency the monetary authorities constrained transformation of belarusian rubles into foreign currency. Thus, banks had paid for it quite high "price" that is visually illustrated in tab. 2.

Table 2

Dynamics of time deposits of natural person and sum of accrued interest rates in 2011 by the months, bn. belarusian rubles

Months of 2011	Pure inflow(+), outflow (-) of time deposits (bn. belarusian rubles)	Accrued interest rates (bn. belarusian rubles)
January	+186.4	88.4
February	+211.8	92.5
March	-600.2	98.9
April	-208.8	97.0
May	-428.9	102.5
June	-52.7	119.7
July	+151.7	139.9
August	+86.6	155.9
September	+727.4	197.3
October	+146.4	252.5
November	+60.8	301.4
December	+274.1	355.2

Source: Author's own working out on the base of data of the National Bank of the Republic of Belarus (National Bank: The real rate..., 2012).

As table 2 shown, during separate periods 2011 there were an opposite situation: from March to June the deposition outflow took place, while from July to December the deposition inflow observed under the influence of interest rates increasing on deposits of natural persons. In 2011 the share of accrued interest rate in comparison to collected deposits made 84 per cent, as a whole.

Devaluation processes is essentially affected increase in cost of banking assets in the belarusian commercial banks. If at the beginning of 2011 bank assets made 172509.1 bn. belarusian rubles, that by December, 2011 they increased for 46.2 per cent and reached 252159.8 bn. belarusian rubles. In separate commercial banks a quite appreciable growth of assets under the influence of devaluation had: "Onerbank" – 230.8 per cent; "Alfa-Bank" – 227.8 per cent; "Belvneshekonombank" – 197.1 per cent; "Belrosbank" – 193.0 per cent; Bank "Moscow -Minsk" – 193.1 per cent; "Zepter – bank" – 190.1 per cent (see tab. 3). Quite high share of a foreign currency component of assets in structure of balances of these banks which in the majority were "carriers" of foreign investments into the country became the reason of so essential growth of assets. Table 3

Increasing of bank assets under inflation of national currency's devaluation, bn. belarusian rubles

No	Commercial banks	by balance as at 1 January 2012	by exchange rate as at 1 January 2012	Change	
				bn. Belarusian rubles	per cent
1	Belarusbank	95659.9	71154.2	24505.6	134.4
2	Belagroprombank	49977.2	38111.5	11865.7	131.1
3	BPS - Sberbank	24363.2	15139.0	9224.2	160.9
4	Belinvesbank	14180.0	9912.2	4267.7	143.1

No	Commercial banks	by balance as at 1 January 2012	by exchange rate as at 1 January 1012	Change	
5	Prior bank	13797.0	8268.0	5529.0	166.9
6	Belvnesheconombank	12351.1	6265.4	6085.7	197.1
7	Belgazprombank	7600.2	4764.1	2836.2	159.5
8	Bank VTB (Belarus)	6326.8	3450.6	2876.1	183.4
9	Belrosbank	4300.7	2228.1	2072.6	193.0
10	Bank "Moscow – Minsk"	4115.9	2131.8	1984.1	193.1
11	Alfa - Bank	3744.8	1643.7	2101.1	227.8
12	TKBank	3335.0	1811.7	1523.2	184.1
13	MTBank	1645.8	941.3	704.5	174.8
14	Paritetbank	1121.8	706.8	415.1	158.7
15	HKBank	953.7	665.7	288.1	143.3
16	RRB-Bank	942.1	697.1	245.0	135.1
17	Tehnobank	939.0	530.9	408.1	176.9
18	Delta - bank	937.5	673.0	264.5	139.3
19	Trustbank	858.4	484.3	374.1	177.2
20	Sombelbank	700.4	500.5	199.9	139.9
21	BTA-Bank	655.4	356.2	299.2	184.0
22	Fransabank	640.3	381.4	258.8	167.9
23	BNB-Bank	628.6	352.0	276.5	178.5
24	Belswissbank	621.9	354.6	267.3	175.4
25	BBMB	463.2	281.8	181.4	164.4
26	Zepter – bank	410.1	215.8	194.4	190.1
27	Credexbank	386.6	172.9	213.8	223.7
28	Onerbank	208.3	90.2	118.0	230.8
29	Absolutbank	198.1	145.8	52.3	135.9
30	Eurobank	60.7	49.6	11.1	122.4
31	International reserve bank	36.2	28.9	7.4	125.6
	Total:	252159.8	172509.1	79650.8	146.2

Source: Author's own calculation on base of data of the Association of Belarus banks.

Meanwhile spasmodic growth of bank assets didn't lead to activation of lending process, having considerably narrowed thus the credit market. In 2008 the share of bank assets in GDP hardly reached 39.2 per cent, but in 2011 its share exceeded 70 per cent (fig. 2).

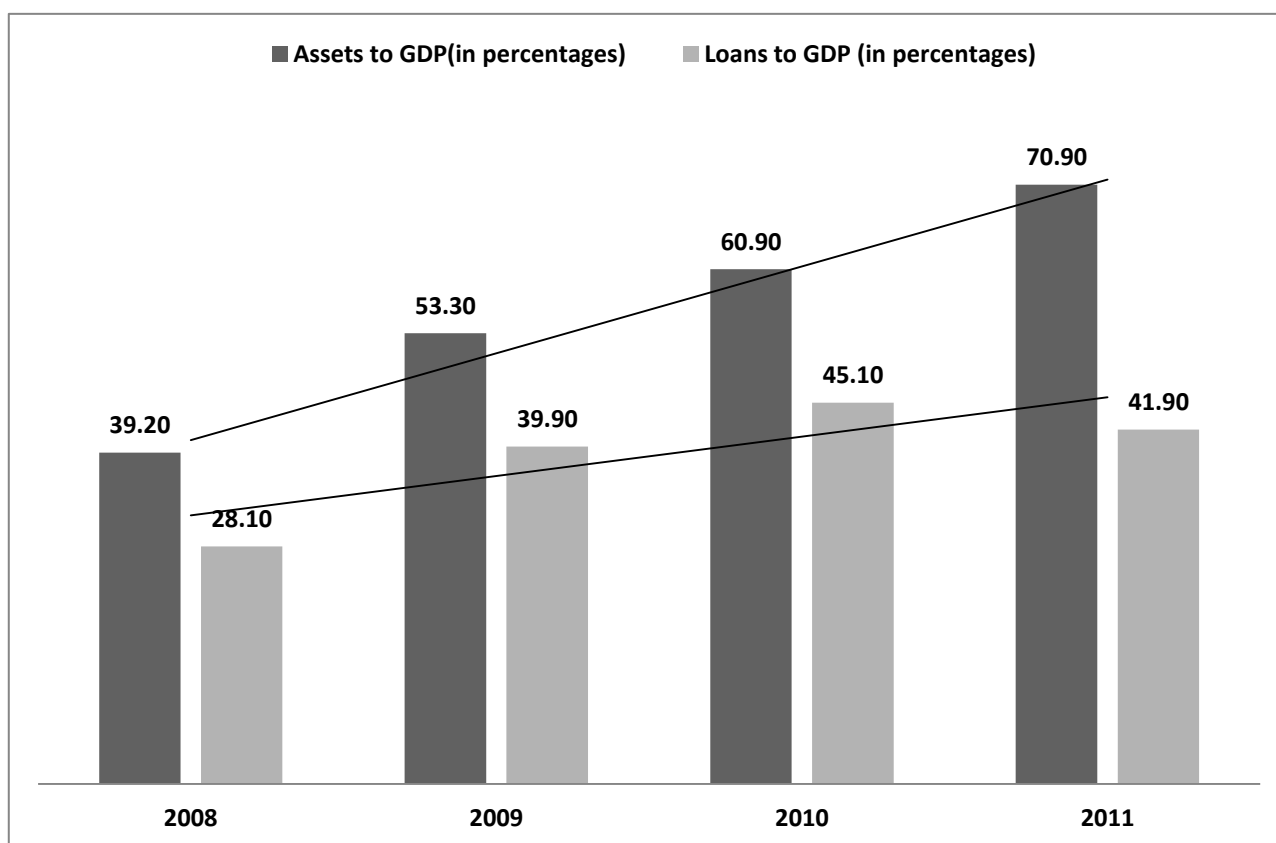


Fig.2 Dynamics of average sizes of bank assets and bank loans to GDP during 2008-2012, in percentages.
Source: Author's own design based on the data of the National bank of the Republic of Belarus.

During 2008-2010, in parallel with bank assets growth the loans to the Belarus economy also increased. However, in 2011 the situation is changed to sharp increase a gap between bank assets and bank loans: growth of bank assets proceeded by higher rates, and the loan debts started to decrease. This situation is easily explained by circumstance that banks in crisis conditions became more conservative to loan issuing in view of accruing credit risks, devaluation expectations and inflationary ones. A strong conservatism were that banks raised requirements to a financial state of borrowers, to quality of loan collateral, narrowed a range of categories of creditors and crediting directions; toughened price conditions of granting loans (interest rates and additional commissions) and non-price loan conditions (maximum volumes limitation and terms of loans). The inspection of credit market has been carried out by the National bank (Monitoring..., 2012, p.11) showed that change of credit conditions was defined by the following factors:

- adverse conditions of attraction by banks of deposits both on internal market and in foreign ones;
- an essential toughening of conditions for transactions on liquidity regulation tools made by the National (Central) bank;
- an unstable situation in non-financial sector of the economy expressed by delay of physical production growth and increase of receivables;
- transition to more pragmatic policy of assets and liabilities management by banks.

Some mitigation of credit conditions, except consumer crediting of natural persons was promoted by competition strengthening between banks on the credit market (Monitoring..., 2012, p.11). High interest rates owing to growth of the Central bank's refinancing rate and losses of the real banks incomes caused by devaluations of belarusian ruble have influenced to narrow the credit market. The average full interest rate on the new loans issued by banks in national currency in December 2011 reached 51.1 per cent yearly, having increased in comparison with December 2010 on 37.4 percentage points. Thus, full interest rate on new loans for legal entities for December 2011 in comparison with December 2010 increased on 39.2 percentage points and there were at level 52.2 per cent yearly. The full interest rate on the new loans issued for natural persons (individuals) made 42.5 per cent yearly and increased in 2011 in comparison with December 2010 on 24.9 percentage points. An average full interest rate on new loans issued for legal entities in foreign currency in

December 2011 in comparison with December 2010 increased on 1.7 percentage points and made 10.2 per cent yearly.

At the same time, on the credit market there was quite inconsistent situation. On the one hand, growth of credit rates tore away borrowers from getting of new loans, on another hand, potential borrowers lacked funds for current activity. By the poll of respondents of economy's real sector made by National bank in the IV quarter 2011 a lack of own sources for current activity reached 76.9 per cent at the construction organizations, 69.3 per cent at the transport ones and 78,3 per cent at the industry ones (The National bank..., 2012c, p.68).

Devaluations and the followed crisis of a banking system have made a serious impact on change of the external economic proportions. Strangely enough, in 2011 in the sphere of foreign economic activity the best results than in previous year were reached: an extent of negative balance decreased to 5.3 bn. USD against 7.5 bn.USD in 2010. Thus growth of export goods on 16.7 percentage points advanced the corresponding rates of import ones in relation to the similar period of previous year (see fig. 3).

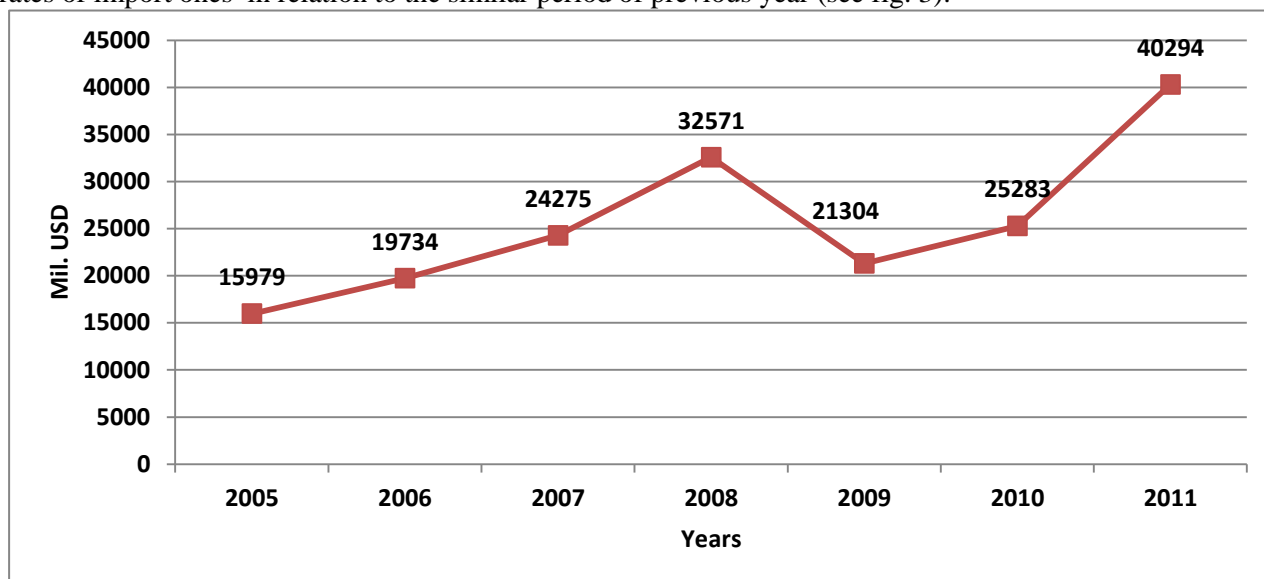


Fig.3 Dynamics of export's goods and services in 2005-2011, mil. USD

Source: Author's own design based on source (The National statistical committee..., 2012.)

As a result, in 2011 the Republic of Belarus reached record for all sovereign history of export – 40.3 bn. USD and increased this indicator in comparison with 2010 almost by 60 per cent. At the heart of an explanation of so considerable achievements in the field of export the simple reason lies - weakening of national currency in devaluation conditions has stimulated exporters to advance of their goods and services to the foreign markets. Not an exception it became and for the national producers who changed proportions of a domestic market and foreign one in favor of export and "rushed" to earn foreign currency for a sake of bigger stability in crisis conditions.

A sharp deterioration of international reserve assets [*zolotovalunnyh rezervov*] of the Republic of Belarus by the National methodology have become one of problems in crisis 2011. A ratio of reserves and import or "Reddi's" criterion in the majority of year's periods corresponded to the three month import, and to some periods of year reached the two month, and at times, up to one month. Quite serious fluctuations of international reserve assets took place as a whole: from 5103.4 bn. USD in May 2011r. to 9387.2 bn. USD

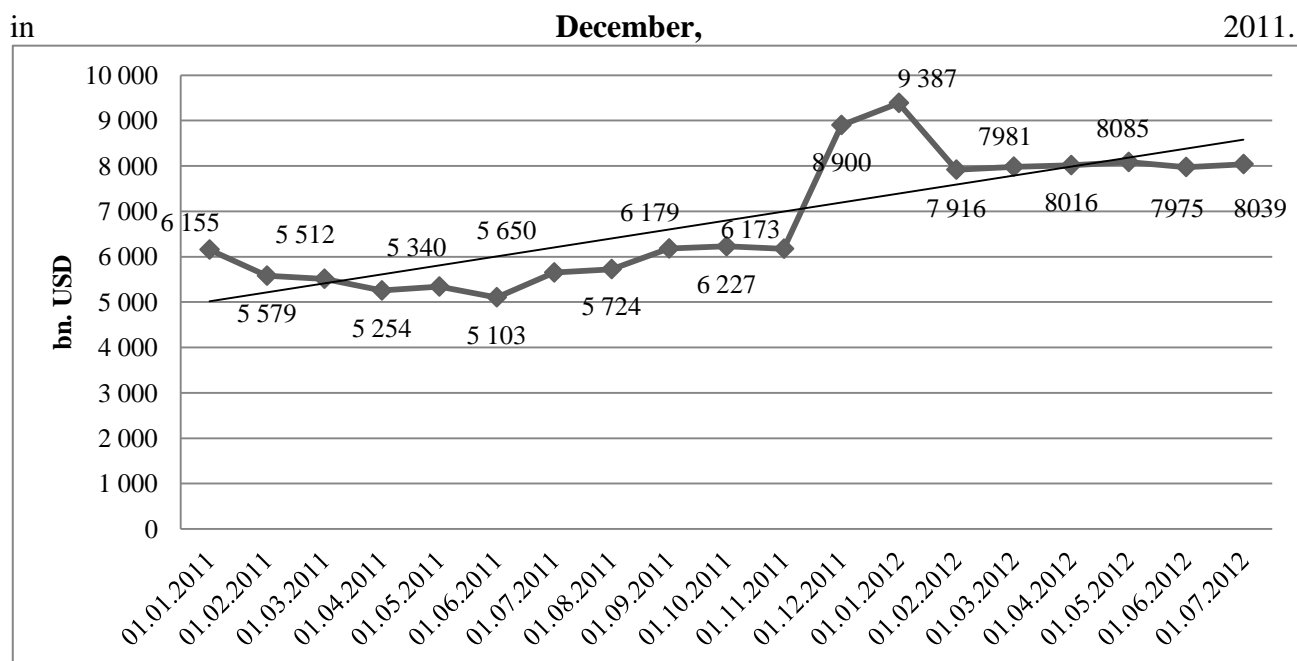


Fig.4 Dynamics of international reserve assets of the Republic of Belarus by the National methodology, bn. USD

Source: Author's own design on base of National bank of the Republic of Belarus reports

However, despite of some successes reached by the monetary authorities on international reserve assets at the end of 2011, the situation in 2012 remains very intensive and difficult.

4. Discussions on the problems which expect the Belarusian banking sector

In current 2012 and the next year before the Belarusian banking system the complex challenges arise. The most important working principle of any bank is stability of it functioning. Thus it is necessary for each bank to provide demanded level of the capital sufficiency standard, liquidity, to create the corresponding reserves on bank's problem assets. In conditions of credit emission limitation made by the National bank, decrease of inflation rates and the corresponding decrease of interest rates on loans and deposits of the banks can create a lack of liquidity that will create threat of steady functioning for a number of other banks.

In 2011 belarusian banks have got profit over 3 trn. rubles. However, up to 50 per cent of this profit is received from the account of reassessment of a long foreign exchange position of banks. And as a result of the carried-out devaluation of belarusian ruble the banks have lost a considerable part of the standard capital in euro estimated in an equivalent. Therefore before those banks whose standard capital decreased less than 25 mil. Euros, there is a difficult problem of its restoration up to former level. Thus already now there are serious problems between bank's shareholders and the monetary authorities concerning reassessment of standard capital. The National bank demands that bank's shareholders took care of their capital if they intend to continue to work in the Republic of Belarus. Shareholders declare that capital sufficiency standards were already executed before crisis, and to make contributions again in million Euros due to devaluation allowed by the Belarus authorities they don't intend.

There is one more problem connected with relationship between The National bank and commercial ones. In order to support the necessary level of the International Reserve Assets the National bank borrowed foreign currency at commercial banks in 2010. As a result the National Bank debt at the beginning of 2012 in 4.54 bn. USD has been estimated. However, despite of debt decrease in the first half 2012, the size of commercial banks' claims to the National bank made 3.3 bn.USD and this debt for commercial banks remains very considerable that even more strengthens a problem of financial sources' search for the National bank by means of additional loans from the International financial institutions and carrying out privatization of State ownership.

Very considerable external debt for service of which in the next years it is necessary to spend considerable volume of foreign currency have recently accumulated by the Belarus. By a preliminary estimate, for debt repayment and debt service of the current portfolio of an external national debt in 2012 is

required for Belarus not less than 1.8 bn. USD. In 2013 for these purposes 3.1 bn. USD, in 2014 – 3.2 bn. USD and in 2015 – not less than 2.7 bn. USD is required for the country and reduction of a foreign currency component in the International reserve assets will be caused by this situation. Thus, these expenditures can't be compensated yet neither by the increased foreign currency revenues in comparison of last year nor liberalization of an exchange rate formation mechanism [*kursoobrazovaniye*] and the currency market liberalization. Sales of belarusian companies and organizations' assets in the form of privatization and the next tranches of the loan from Anti-recessionary fund of EurAsEC become the most probable sources to keep the international reserve assets.

A serious concern of the monetary authorities is caused by the developed contradiction between abilities to increase a bank's depositary base and wishes of banks to fund the real sector of economy. In this regard in the monetary market of Belarus a paradoxical situation exists. On the one hand, in banking system an excess of ruble liquidity has arisen. Excessive liquidity forced the National bank to perform a series of bond auctions for reduction of money supply from banking system in February-March, 2012. Only from 19 to 21 of March, 2012 the National bank managed to withdraw of 4.09 trn. Belarusian rubles at interest rate 30 per cent yearly (The banking sector in captivity..., 2012). On the other hand, despite of superfluous ruble liquidity, lending in national currency didn't actively renew yet. At normal functioning market in which the inflow of deposits is observed today, it should lead to decrease of interest rates at the monetary market and to accelerate lending processes. However, high inflationary expectations get the high among the managers of belarusian banks, in which else «syndrome" of the next devaluation and possibility of losses of their assets are exist.

Preservation of high inflationary expectations and external risks in a banking system of the Republic of Belarus requires continuations of tough interest rate policy and monetary one which will be directed on an achievement of positive level of real interest rates in economy. Its providing will demand the suspension, maintaining of stability in real sector of economy, taking into account of interests of all monetary market's participants.

Since January 1, 2012 certain problems application on International Accounting Standard 29 (IAS 29) «Financial statements in the conditions of a hyperinflation» have been created. It led to an essential recalculations and updating of non-monetary articles of bank financial statement as of December 31, 2011. An article «A loss on a pure monetary position» in profit and loss report provides that banks should reflect in reporting on International Standards Financial Statement losses which will essentially be exceeded, is subject to adjustment or completely should be excluded the income received from operating activities following the results of 2011. Results of adjustments have vividly shown that from all 31 commercial banks of only one bank – “Prior bank” Joint Stock Company finished year in profit 75.5 bn. belarusian rubles. All other banks by the IAS-29 standard have got losses.

Deteriorations of financial performance of banks which will apply the International Standards of Financial Statement in 2012 and the next years, can toughen conditions on lending of belarusian banks by foreign partners, with simultaneous revision of available volumes of loan and insurance limits in foreign loan markets for the Belarusian financial institutions in the near-term and medium-term prospects (Analytics: The banking system remains..., 2012).

For ensuring profitable activity in the conditions of decrease of interest rates and restriction of refinancing possibilities from Central bank the work to perform a liquidity search in the foreign financial markets and also the work on rationalization of operating expenses will be required.

In this regard before the Belarusian banking system in current and next years there are problems are to be solved in difficult economic conditions. They are connected with search of the new economic model based not on re-export of oil from Russia, and on world integration processes.

Conclusions

1. Hereinafter, lack of a reference to the source means that the figures given in the text are received and calculated by author on the basis of reports and data of the National bank of the Republic of Belarus, the Ministry of Finance of the Republic of Belarus and Association of the belarusian banks.

2. The National bank of the Republic of Belarus is the Central bank of the Belarus.

3. In the second devaluation period the foreign currency was on sale mainly for the enterprises of the private sector and the public enterprises at additional session of the interbank currency exchange by the rate of “supply and demand”. At this session the real exchange rate [*kursoobrazovaniye*] in the country was defined. The foreign currency for the main State enterprises defined by the substantive session of interbank

currency exchange by Central Bank rate which for this period has been fixed and underestimated and didn't reflect "supply and demand" on foreign currency.

4. Refinancing rate of National bank of Republic of Belarus looks like a discount rate which using in developed Central banking systems.

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BALANCED SCORECARD CONCEPT IMPACT ON MARKET VALUE OF PRIVATE HEALTH CARE COMPANIES

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Abstract

Purpose - Changes within the circumstances of health care industry influence health care company's processes and they should think about continuous improvements. The purpose, based on the competitiveness and balanced scorecard theoretical study and the Latvian health care industry's analysis, is to develop balanced scorecard concept aiming to increase value of Latvian private health care companies.

Design/methodology/approach - Generally accepted quantitative and qualitative methods of research in management science were used. The indicators influencing competitiveness of private health care company managers' and patients' perspective were used. In order to achieve the purpose, the comparison of theoretical aspect, Latvian health care industry and opinions of experts are researched, applied expert method; Latvian private health care company's market value is calculated.

Findings - Latvian private health care companies are not using in evaluation all of the main indicators influencing the company's competitiveness and they do not group them into four perspectives of balanced scorecard. By analyzing healthcare experts' and companies' management evaluation, as well as by evaluating the factors which are significant for patients in choosing the healthcare company, it is important to show their impact on market value calculation.

Originality/value - the factors influencing competitiveness in private health care companies from company's management and patient's perspective are determined, the balanced scorecard concept for private health care company has been developed.

Keywords: Balanced Scorecard, Health Care Companies' Competitiveness, Market Value, Cost Approach, Income Approach.

Introduction

Health care is an industry that influences all the other industries and all the society groups, and it takes a more important role especially because of the ageing of society. Solving the social problems is an actual theme. One of the government responsibilities is to provide its inhabitants with available health care services, but the financial fund for health care services per one inhabitant in Latvia is one of the smallest in European Union and this does not stimulate the development of the health care industry and its further perspectives in Latvia. So the health care system in Latvia does not work effectively and is not patient centric. One part of patients have no choice as to pay for health care services by themselves. According to this, private health care sector has a significant role in health care industry and makes impact on national social development level. Globally it has been acknowledged that competition in private sector has always had a powerful impact in driving the improvements.

During recent years, the demand for private health care services in Latvia has not been growing because of the decreased population and low solvency. The number of health care companies has increased in the result of hospital restructuring and changes in system so that the patients have been redistributed among the companies. Private health care companies work in the environment of increasing competition that has been influenced materially by the inside and outside environment conditions. These conditions require companies to manage their businesses effectively, by thinking about long-term development and investing additional financial resources in company's development.

A global trend indicates that there is a change needed in health care systems by refocusing the emphasis on value for patients. In this situation, it is important to provide the best quality services for patients, but it is very difficult for the patient to evaluate which health care company is a better provider of it. Private health care companies in Latvia do not have united standards with criteria indicating how to recognize the best service provider or how to compare them. This is a very significant disadvantage not only on the national level, but on global level as well, this influences the patient flow from the foreign countries to Latvia as well.

The private health care companies are dealing with difficulties because of too dynamic changes in environment when they are not able to balance their capabilities with change in insufficient demand. This all increases the competition for private health care companies and they need to tailor to this changing environment and should think strategically smarter to compete in a longer run. The tailored strategic management system can allow to measure company's success in achieving long-term sustainability in shareholder value growth and improvements in competitiveness. Globally recognized is the balanced scorecard concept that can allow companies to understand their competitive position. However, the question is how the balanced scorecard can be developed for private health care company in Latvia.

Topical is to do research on how the existing conditions and changes have influenced Latvian health care industry, and how the balanced scorecard concept can be developed for Latvian private health care company in increasing the competitiveness and market value of the company.

The objective of research is to determine factors and indicators that increase Latvian private health care company's competitiveness and market value.

The aim of the paper is, by doing the research of competitiveness and balanced scorecard theoretical aspect, to develop balanced scorecard concept aiming to increase of competitiveness and value of Latvian private health care company.

In order to realize the aim of the research, the data gathering and analyzing are based on qualitative and quantitative research methodology.

As qualitative methods there are used theoretical comparison analyses, interviews with experts, personal observations, expert method in making assumptions and evaluating certain aspects. As quantitative research methods the statistical data analysis, financial analysis, forecasting and other financial calculations are used.

In order to analyze the competitiveness, market value, balanced scorecard, intangible assets, from the theoretical aspect well known global and Latvian author M. E. Porter (1998, 2006), R. S. Kaplan, D. P. Norton (2004), C. K. Prahalad (1994, 2008), G. Hamel (1994), A. Glen (2008), J. Caune, A. Dzedons (2009) and other authors' works and specific regulations, conference materials, different world institution information and acknowledgeable specialist opinions have been researched.

The period of research for the practical example of the analysis is from the year 2006 to 2011. The research base is composed of acknowledged institution data, company annual reports.

All the research is based on private health care companies that provide ambulatory care and medical services, excluding hospitals, pharmaceutical and social care organizations.

The significance of the issue will continue being relevant in the future, because the health care influences all the society groups and industries, therefore, it will be the topic number one in Latvia and will be of importance globally.

Company's Competitiveness and Factors It's Influencing

Traditionally advantages of competition that usually are marked out for customers are associated with lower price level, higher quality and wider choice, while from the company's perspective the benefit is increased efficiency and this is also the force that drives the company's development. The efficient use of resources and expense optimization can increase the company's competitiveness.

The concept of *competitiveness* has multiple interpretations. Competitiveness depends on different variables, but by summarizing all the definitions by well-known authors, the authors came to conclusion that competitiveness is a strategic management comparison tool that shows the existing performance of the company and further ability to compete in a certain market. Competition is about how to gain a greater market share. Competitiveness is company's flexibility and ability to maintain or to improve the position within the changing environment in the particular market. It shows the company's position in the market, because it is possible to evaluate company's overall performance and compare it with other players in the local and global market. By competing, the companies use their capabilities, for instance, effective resource management. Usually, (Hamel, Prahalad, 1994), the effective use of resources is based on company's employees, for example, on their knowledge. In addition, the knowledge is very significant in contributing to company's intangible assets. In addition, the intangible assets are very important in the perspective of private health care company's competitiveness. The study (Hamel, Prahalad, 1994) reveals that in order to gain higher competitiveness, a company should be capable of fundamentally reconceiving itself, of regenerating its core strategies, and of reinventing its industry; in other words, company should be capable of getting different.

Competition promotes new solutions, values. Every private health care company is involved in competition environment, some are more, some less, but the approaches that companies use to strive for

better results in the market and be more competitive are different. The success base of this is a tailored company strategy and the balance between the available resources. However, for excellent results companies ought to evaluate also their competitive advantage that increases the company's possibility to compete in the particular market segment (Porter, 1998a). Thus it is also possible to increase the market value of the company.

Creating *competitive advantage* (Swayne, Duncan, Ginter, 2006) "is often a matter of selecting an appropriate basis on which to compete, it is the means by which the organization seeks to develop cost advantage or to differentiate itself from other organizations". According to this definition, it might be focused on image, higher quality services, as well as excellent and widely recognized personnel.

Not only strategic manager researchers (Porter, 1998b), (Barney, 2007), but as well Latvian authors of strategic management research (Caune, Dziedons, 2009) point out that *competitive advantage* is not only a question of internal environment analysis, it needs to be analyzed also in the context of external environment; it is also necessary to find out the impact of industry on company's competitive advantage.

The well known authors' (Prahalad, Krishnan, 2008) opinion is that competitive advantage core drivers are connectivity, convergence, digitization and social networks, and talent and IT matter in building the new capabilities and social and technical architecture of the company as well. According to these authors the product centric point of view is replaced with the co-creation of value.

Prahalad, Ramaswamy and Venkatram (2004) point out that as consumers and technologies advance, the traditional, preventive medicine and the improvements in the quality of life are rapidly merging into a "wellness space", assuming a more centric role. It is also focused that in the past health care was generally doctor-centric, but now the health care process is more complex, because if a consumer feels ill, it is possible to learn about the experience of other patients and opinions of health care professionals, thus the patient can determine the "value bundle" that is more appropriate for him. Now is important, how the patient can actively participate in health care process; how the patient's interactions with the doctor can affect the quality of the patient's overall experience; what is the value for patient; what is the role of the network in this value creation and how much the intangible aspects of a patient's context influence the experience Prahalad et.al. (2004). The main question that arises is how health care companies can develop such environment where companies can co-create the value with patients. So according to Prahalad et. al. (2004) there should be distinguished the "company think" and the "consumer think in the 21st century. In health care patients think about the continuity of well being, so this it is also an aspect which should be taken into account when thinking about how to be more competitive in the health care industry.

Authors (Kim, Mauborgne, 2005) use the term "ocean" in order to describe the company's market space in which company has chosen to operate. Red ocean represents the known market space, because the competitive rules are already determined due to rivalry of a greater market share of existing demand, but the blue ocean is the unknown market space, in contrast, and is defined by new market space, demand creation and the opportunity for highly profitable growth.

The idea of Jackson, Hitt and De Nisi (2003) is that "integrated resources and the difficulty of imitating them are the ultimate source of *competitive advantage*. Any organization that seeks a competitive advantage through human resources thus must both acquire the "right" resources and take the steps required to leverage them." This opinion shows that human resources have a significant role in intangible asset contribution and competitive advantage creation and development.

Next view (Swayne, Duncan, Ginter, 2006) shows that "a strong and enduring relationship with a customer has become the foundation for *competitive advantage*". According to this view it is possible to understand that customers' choice regarding the company from which they purchase the product or service can be an important contribution to company's competitive advantage.

In conclusion, the authors of the paper summarize understanding of *competitive advantage*. It can be pointed out that all the reflected views contain aspects that create and develop competitive advantage so by combining all the aspects it is possible to have company's own competitive advantage.

The company's resources (Caune, Dziedons, 2009) that should be analyzed in a quantitative and qualitative way can be divided into four groups such as financial, physical, human and intangible, but the company's skills can be divided into management skills, skills outside company, skills related with subsystem management. The opinion of the authors` of the paper is, in order to create base for competitive advantage, company can use the concept developed by Jay Barney (1991), who is considered as the father of modern resource based view. The four empirical indicators of the potential of company resources to generate sustained competitive advantage are following (Barney, 1991):

V = Valuable, R = Rare, I = Imperfectly Imitable, N = Non Substitutability

According to previously mentioned concept, a company should analyze what are those different skills, the theory is based on view that sustainable earnings will be generated if the company's resources are valuable (improving efficiency), rare (competitors do not have), imperfectly imitable (in combination with other aspects that cannot be divided), and there is non-substitutability. *Competitive advantage* is a vital instrument for any company to become more successful in the market.

Competitive advantage influences the customer value and the profitability of the company, this can be achieved by a cost leadership, differentiation or a focus strategy (Nilsson, Tolis, Nellborn, 1999).

The author Phadtare (2011), for instance, believes that companies are able to compete on the three primary elements: quality, price, availability. According to this theory, the focus is on how suitable the characteristics of the product or service are, how affordable the price is in relation to products or service quality and is the product or service available in a reasonable and competing time.

The Lead economist director at the World Economic Forum Jennifer Blanke reveals by pointing out the key findings (Global Competitiveness Report, 2011-2012) that the most competitive economies in the world are Switzerland, Singapore and Sweden. One of the 12 pillars of competitiveness that drives productivity and competitiveness is Health and primary education. Therefore, it is possible to conclude that health has important role in driving the competitiveness level of a country. In this meaning, the health care companies are a base that can provide the humans with good health. A healthy workforce is vital to a country's competitiveness and productivity. The main idea derived from this is that healthy human resources are more productive, which can lead to lower costs in business and people can work at higher level of efficiency. This means the health care sector is very important for human capital and shows its sustainable necessity as well as proves that it will always be an actual discussion topic. Health care sector has a significant role when talking about the overall development of society, industry, economy, country etc.

The company competitiveness is influenced by the changing internal and external environment of the company. In evaluation of the company's internal environment the focus is on competitive advantage development, the company value chain and its ability to tailor to internal changes. When discussing competitive forces, derived demand has also always been one of the powerful competitive forces in existence. According to Michael E. Porter (1998a) the five forces that can be used in order to reflect the industry's competition level are rivalry among current competitors, bargaining power of suppliers, threat of new entrants, bargaining power of buyers, threat of substitutes.

The changing environment shows that time in different aspects has a very important role in ensuring sufficient competitiveness level for the company. Successful time management can lead to a better company's performance in the market. As an example, according to Stalk, Hout (1990) time is equivalent of money, quality, innovation and productivity. The ways and manner of how the leading companies manage their time is a very powerful source of competitive advantage. Companies are concentrating on reduction of the delays and use of their response advantages to attract the most profitable customers. The factors that influence company's competitiveness are reflected below in the Figure 1.

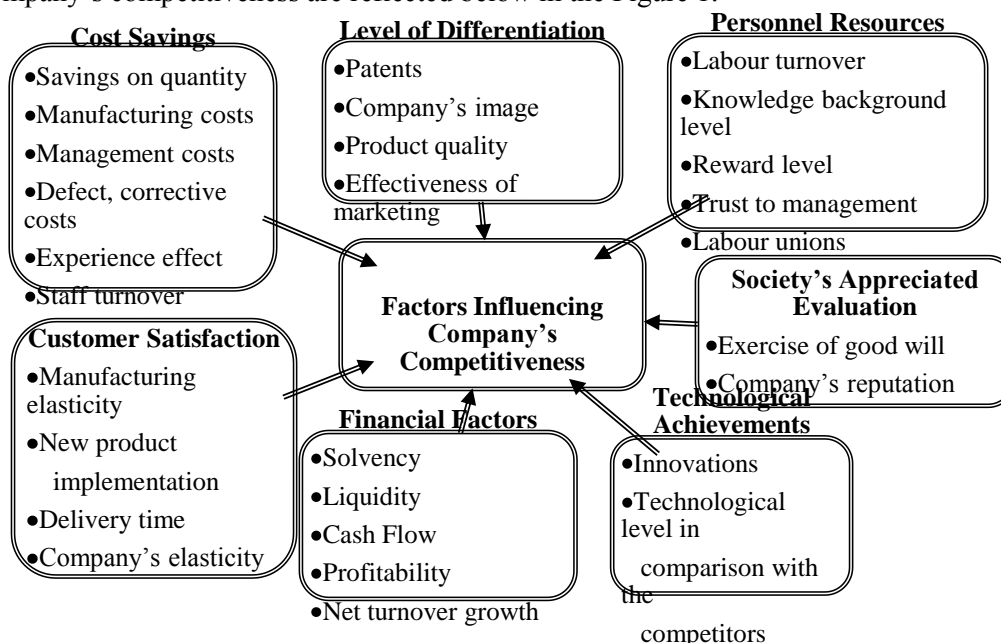


Figure 1. Factors Influencing Company's Competitiveness*Source: Porter (1998a), Caune, Dzedons (2009)*

Porter (1998a) thinks that "Rather than seeing the company as a whole, managers have turned to "core" competencies, "critical" resources, and "key" success factors. In fact, fit is a far more central component of competitive advantage than most realize".

Porter and Teisberg (2006) have shown the fundamental nature of competition and value for the customer in health care industry in United States of America. They have come to fact that health care delivery ought to be transformed. They believe that in order to reform the health care, the competition in the field itself needs to be reformed first. In order to reform the competition, first of all the strategies should be transformed, measurement practises. They have also shown that value based competition in health care industry has a significant impact, because improves the value to customers, the quality in relation to the price level.

In order to analyze the company's value and competitiveness at first the company's financial position should be researched. The company's competitiveness and market value are closely related. Further the company's market value calculation methodology is disclosed as well the balanced scorecard model is used in order to determine value of the private health care company.

The Role of Financial Aspects of Company's Competitiveness

In order to have stable company's financial position there should be a well-balanced and organized financial management system. In order to have a well-balanced system, companies should first identify the factors that influence them internally and externally. Companies ought to analyze the possible risk factors and to be able to adapt to market conditions. The financial risk mainly is influenced by the capital structure, but the operational risk takes a very important role in company's daily activities as well. Both of them are related to company's strategy. The company's financial position shows how the company is managing its internal process mechanisms and responds to changing environment external modifications. This financial position is one of the perspectives that allow determining company's competitiveness (Glen, 2008). The adequacy of financial management system to company's strategy is also a condition that influences company's market value (Damodaran, 2001). In order to detect company's future financial position, at first the company should analyze its actual financial position. At the micro level, company can analyze its financial position through internal company data and financial statements. Afterwards the company can proceed to more detailed analysis and perform following analysis of the financial statements (Vause, 2005): dynamic (comparing with the past period), structural (comparing the structure), tendency (analyzing the dynamics), comparison (comparing with the certain optimal levels, industry's average and competitor data). Furthermore, the company can calculate their financial ratios, by making the comparison (Van Horne, Vachowisz, 2005), for instance, with the average ratios of competitors and industry.

Evaluation of results can be used further in making projections and evaluating company's financial position further development.

In order to calculate the company's economic value added, EVA[®] ratio that can assist in company's market value and competitiveness determination can be used. It is calculated as follows (Stern Stewart & Co, 2012):

$$EVA^{\text{®}} = NOPAT - Capital\ Invested * WACC, \quad (1)$$

where

EVA[®] – Economic Value Added,

NOPAT – Net Operating Profit After Tax,

WACC – Weighted Average Cost of Capital.

In evaluating the position of company's competitiveness and finding roots for improvements, it is advisable for the company to analyze its future cash flows, investments and possible market value (Damodaran, 2001). In **Error! Reference source not found.**Table 1 three business evaluation concepts, approaches and methods are reflected.

According to the Table 1 one of the financial performance indicators` is Free Cash Flow (FCF) (Glen, 2008)that can be calculated in accordance with formula (2):

$$FCF = NOPAT + Depreciation \ \& \ Amortization - Change \ in \ Net \ Working \\ Capital - CAPEX, \quad (2)$$

where

FCF – Free Cash Flow,

NOPAT – Net Operating Profit after Tax,
CAPEX – Capital Expenditure.

Weighted Average Cost of Capital (WACC) that is based on capital structure and its price, can be used as a discount rate.

WACC can be calculated in accordance with formula (3) (Glen, 2008):

$$WACC = C_E * \frac{E}{E + D} + C_D * (1 - CIT) * \frac{D}{E + D}, \quad (3)$$

where

WACC – Weighted Average Cost of Capital

C_E – Cost of Equity,

C_D – Cost of Debt,

CIT – Corporate Income Tax,

E – Equity,

D – Debt.

Table 1

Business Evaluation Concepts, Approaches and Methods

Concepts	Approaches	Methods	Formula
INCOME	Income capitalization	Profit capitalization, Net cash flow capitalization, Gross cash flow capitalization	Projected Value ₁ / (r-g) ¹ + Projected Value ₂ / (r-g) ² + Projected Value ₃ / (r-g) ³ +...+ Projected Value _∞ / (r-g) [∞]
	Discounting future income flow	Discounting net cash flow, Discounting future profit	Please, view following formulas (4) – (7)
MARKET	Market data comparison	Price / EBITDA, Price / Net profit, Price / Dividends, Price / Gross cash flow, Price / Book value	Market Value ₁ = (Market Value ₂ / Variable ₂) * Variable ₁
COST	Asset - based approach	Net asset value	(Assets – Liabilities) + Not Listed Assets
		Liquidation value	(Fixed Asset Liquidation value + Inventory, Debtor forced sale selling value – Liquidation costs – Liability value) * Discount coefficient

Source: Created by the authors

In order to calculate a company's market value according to discounted income method, at first the company should discount its free cash flows for several years ahead according to formula (2) and can use WACC formula (3) as a discount rate.

In order to calculate the present value of a projected free cash flows, formula (4) can be applied (Damodaran, 2001):

$$\sum DFCF = \sum_{t=1}^T \frac{PFCF_t}{(1+r)^{(t-0.5)}}, \quad (4)$$

where

DFCF – Discounted Free Cash Flow,

PFCF – Projected Free Cash Flow,

t – Projected Period,

T – Planning Horizon,

r- Discount Rate.

After that, company ought to calculate the terminal growth rate according to formula (5) (Damodaran, 2001):

$$g = \frac{(PFCF_T - PFCF_{(T-1)})}{PFCF_{(T-1)}}, \quad (5)$$

where

g – Terminal Growth Rate Value,

$PFCF_T$ – Projected Free Cash Flow for the Planning Horizon,

$PFCF_{(T-1)}$ – Projected Free Cash Flow before the Planning Horizon.

The projected free cash flow for the post planning horizon can be calculated according to formula (6) (Damodaran, 2001):

$$PFCF_{(T+1)} = PFCF_T * (1 + g), \quad (6)$$

where

$PFCF_{(T+1)}$ – Projected Free Cash Flow for the Post Planning Horizon.

Finally, companies that are going to operate according to same principle also further should determine the terminal value – the gain from the company in a long term, which afterwards ought to be discounted in order to get present value or discounted net cash flow according to formula (7) (Damodaran, 2001).

$$DTV = \frac{(PFCF_{(T+1)})}{(r - g) * (1 + r)^T}, \quad (7)$$

where

DTV – Discounted Terminal Value.

By summing up company's discounted free cash flow sum (DFCF), the discounted terminal value (DTV), and surplus the assets not listed, as well as minus the pure debt, it is possible to acquire the company's net worth that can be one of the indicator's showing company's competitiveness.

Balanced Scorecard as a Strategic Management System

The solution to improve the health care environment is a healthy competition to improve value for patients, the quality of services relative to their price (Porter, Teisberg, 2011). The health care company performance in the past was more often measured only from financial and quality improvements' point of view, but the further described Balanced Scorecard (BSC) has combined four perspectives that are crucial for company to be competitive.

Robert S. Kaplan and David P. Norton published article 'The Balanced Scorecard - Measures that Drive Performance' in Harvard Business Review (1992) where created a new management system tool where the strategic objectives of companies have been transformed into the balanced set of indicators. The purpose of this system was to balance company's financial and non financial measurements.

Now this system is popularly used in wide range of businesses by its adaptability in different industries, the main reason is because of the balanced view which is provided by this system. So the balanced scorecard framework can be used daily in business activities.

"Balanced scorecard has been hailed as one of the 75 most influential business ideas of the 20th century" (Niven, 2005). Nowadays employee knowledge, relationship with customers, cultures of innovation and change generate success and this success can be generated by the company's intangible assets that can be measured through balanced scorecard.

In addition, (Blokdijs, 2008) considers managerial accounting as criticized over the past years, but the introduction of balanced scorecard has accepted the process innovation to the corporate world. It sets operational measures on customer value that can lead to business growth and development.

So (Brown, 2007) discloses that BSC is not a reporting tool, it is an analytical tool and is like aid to improving performance.

According to previously discussed concept, BSC means various things to different people. To ones it simply is performance measurement framework, for others it is a robust organization-wide strategic planning, management and communication system (Rohm, 2008).

The tendency of the 21st century indicates that the basis of effective management of health care companies is the balance between the service quality and patients' satisfaction. The BSC can assist in achieving strategic goals. BSC is important for service companies, especially for health care industry

because health care companies should balance their business activities with patient's health. BSC allows better to plan and measure certain aspects to company's strategy.

BSC is a management's system that supports the company's management in leading significant processes and changes in order to be more competitive in the market. In order to be competitive each company ought to have a developed system of its effective measures that are responsible for company's performance not only in a short term, but in a long-term perspective as well. The BSC includes not only usual financial indicator analysis as, for instance, indicator profit, but also measurements in perspectives such as relationship with customers, innovation and employee learning and growth, as well as measurements in company's internal process management. This system can be used to achieve significant improvements in changing company's competitiveness position, because it can help the company to add value in its processes, contribute to customer satisfaction and product positioning by improving company's overall performance. The advantage of this system is its ability of being tailored to specific company or specific company group. In addition, this system allows to evaluate company's existing performance and points out milestones of further company's development. This system can assist successfully by indicating the actions for improvement, but factors like market situation and competition conditions should be taken into account regularly.

A widely discussed problem is companies having difficulties in creating ties between the measures used in evaluation and the company's strategy and its objectives. As an example when the company uses the same measures (sales, sales growth, profit) in order to evaluate the performance of its strategy for completely different segments, this methodology will not lead to increasing the level of company's competitiveness. This proves there should be change in evaluation of company's performance and the BSC can provide this.

The BSC should be subordinated to company's strategy and focus on company's vision by providing the balanced evaluation between the measures influencing company's inside and outside environment and the overall company's performance. This system should be tailored to suit the company's corporate culture, capabilities, information system, technological level of development etc. The BSC can be used for gathering information for various user groups, the management, potential investors, employees, customers etc. The BSC can be considered as a basis tool for competition strategy.

As a success factor for BSC there can be mentioned the systems transparency with 15 – 20 indicators that assist in monitoring and controlling the strategy of competitiveness, previously the yearly budget used to be the prime mechanism for planning the financial management, but now the BSC is being used as a language and basis for evaluation of all the new projects and businesses (Kaplan, Norton, 2004).

As competition environment and characteristics change companies should tailor their strategies to these changes as well. The companies that will tailor their strategies and go towards the strategic objectives will increase their company value and become more competitive in the market. The business that is built on value creation will be more successful in a longer term.

The four BSC perspectives are reflected in Figure 2, where it is possible to observe that BSC includes Financial, Customer, Internal Business, Innovation and Learning Growth Perspective.

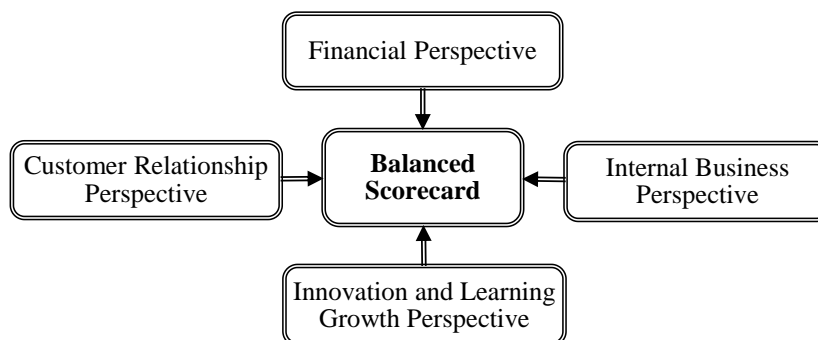


Figure 2. Balanced Scorecard Perspectives

Source: Kaplan, Norton (2004)

Financial Perspective provides with information on how the company intends to create its sustainable shareholder value growth. This perspective focuses on the measures of other three perspectives. By analyzing this perspective, company's sales growth can be determined, new product, customer, market, and

pricing strategy impact on sales can be analyzed. Cost reduction, productivity improvement, as well as investment strategy analysis can be performed.

Customer Relationship Perspective highlights the customer and market segments in order to determine the strategy that is tailored to the needs of customer and market segment. These measures should be tailored to company's customers who generate the greatest sales growth. Customer satisfaction, retention, acquisition, customer database can be analyzed. Customer loyalty, relationship, product or service attributes, company's reputation and image assume a very important role in this perspective as well.

Internal Business Perspective is responsible for defining the processes that are the most relevant in achieving customer and shareholder objectives. There can be analyzed the company's process value chain as well as the processes that create the value for customers and result in financial outcomes. The aspect of company's innovations is a significant point as well.

Innovation and Learning Growth Perspective links company's objectives and measures the company's learning and growth. Here the crucial aspects for analyzing are employees' contribution to the company, employees' satisfaction, retention, productivity, hiring, experience, education level, corporate culture, employees' learning possibilities, company's information system capabilities, motivation.

All BSC aspects can assist in intangible asset evaluation and develop company's strategy in compliance with company's objectives. It ought to be noted that all of these measures should be created with the aim to increase the company's economic value added.

According to the BSC to manage company's strategy, for instance, can be used indicators reflected in Table 2.

Table 2

Balanced Scorecard Indicators

Financial Perspective	Internal Business Perspective
<ul style="list-style-type: none"> → Net turnover → Production costs → Direct and indirect expenses → Amount of interest payable → Equity and borrowed capital weight and price for use in % → The amount of taxes paid → Total asset value → Fixed asset profitability in % → Invested capital profitability in % 	<ul style="list-style-type: none"> → Digitalization level in % → The average decision making duration in days → Average Debt Settlement Period in days → Company's provisions with inventory in days
Customer Relationship Perspective	Innovation and Learning Growth Perspective
<ul style="list-style-type: none"> → Market share in % → The division of company's customers in accordance with ABC method in % → Customer satisfaction index in % → Price level change → Amount of lost customers 	<ul style="list-style-type: none"> → Employee turnover → The average employee length of service in years → Employee satisfaction index in % → Registered patent, received license amount → Investments in new market development

Source: Mavlutova (2009)

By measuring the above-mentioned indicators, a company will be able to investigate its performance in a more accurate way and it will be ready to detect its disadvantages for further improvements. For the shareholders it will allow to control and improve the company's value increasing, for management to optimize the daily processes and decision making for future activities.

The intangible assets can be defined as intangible value of a company that shows the company's performance. It can be evaluated positively if the intangible assets create positive association with the company and improve the company's competitive position.

According to Kaplan and Norton (2004), following asset contributors usually relate to the intangible assets:

- Human capital – employee knowledge, skills, talent,
- Information capital – technology infrastructure, databases, information networks and system,
- Organization capital – knowledge management, organizational culture, teamwork, employee learning ability.

The intangible assets can be measured and analyzed through the BSC.

Investing in intangible assets can be a powerful force in company's development, for instance, "...companies can now focus their human capital investments and, more generally, their investments in all intangible assets to create distinctive and sustainable value" (Kaplan, Norton 2004). According to this the sustainability is the balance of all the intangible assets such as brand, corporate culture, human resources, information databases, relations with customers, suppliers, partners etc. and, as an example, innovations related with company's economic activity.

The global trend shows that economy is rather knowledge and service than product driven, and intangible assets which are not measured by financial system account for more than 75% of the company's value in contradiction to average company's tangible assets that net book value minus liabilities reflect for less than 25% of market value" (Kaplan, Norton 2004).

Intangible assets are those that assist in long-term sustainable value creation at micro and macro level. For instance, those companies which invest in human capital, innovation, learning, customer relationships and internal business process improvements altogether improve their quality and that allows the company to be more competitive.

If the company's value mostly consists of intangible asset contribution then company's strategy should also be based on intangible asset maintenance and improvements and a BSC can be a powerful system that can lead to higher company's market value. In order to have a whole picture of the company's performance the company should focus its evaluation in four previously mentioned perspectives. The measurement system that can provide BSC allows managing company in a more accurate way.

The further research results are based on the two survey results conducted by the authors of the paper - the private health care company patients` and private health care company managers`, as well on the industry and on the private health care company's analysis, company which is used as an example. In order to achieve the aim of the paper the questionnaire included different questions about competitiveness, market value and balanced scorecard, as well included indicators in four Balanced Scorecard categories for private health care companies and patients to evaluate which are the most important indicators for them. Altogether 36 responses from the private health care company managers and 184 responses from the private health care company patients were received (Mavlutova, Babauska, 2012).

In evaluating the factors that influence competitiveness, the survey results show that patient and public appreciation, resource base of medical professionals and technological equipment level are the most important competitiveness factors from the perspective of the private health care manager. Detailed results are reflected in Table 3.

Table 3

Importance of Factors Influencing Private Health Care Company's Competitiveness			
Factor	Rank	Factor	Rank
Patient and public appreciation	1	Satisfaction of patient needs	5
Resource base of medical professionals	2	Health care service differentiation level	6
Technological equipment level	3		
Financial factors	4	Cost savings	7

Source: Survey results

The survey results of the importance of factors that influence the competitive advantage show that the quality is the leading factor of importance. Majority or 67% of private health care company managers, do not know what the Balanced Scorecard is, but they would like to know what it is. Only 3% say that they know what it is; however, they do not use it in their company's strategic management. 30% of respondents do not know and that is why do not see it as an using option. This shows that the main problem is the lack of information about using the BSC in health care sector in Latvia.

Based on the survey results and analysis, indicators in four categories of balanced scorecard system that can be used for intangible asset evaluation were created, the indicators were listed in the order of importance in each BSC category based on the private health care company patients` and managers` survey results.

The survey results in Table 4 show that private health care company managers, who evaluate their company's competitiveness level as average also think that balanced scorecard assists in managing company's market value and can increase the competitiveness of the company.

Table 4

The Balanced Scorecard Role for Private Health Care Companies

BSC assists in managing company's market value and can increase the competitiveness	Private Health Care Company's Competitiveness Evaluation			Total
	Low	Average	High	
Yes	2	22	2	26
No	1	2	1	4
Hard to say	1	3	2	6
Total	4	27	5	36

Source: Survey results

According to survey results also the most important intangible aspect indicators are related with accurate patient problem identification, interest in providing qualitative health care service, staff education and qualification and from the financial point of view profitability ratios.

Implementation of the BSC is one of the management approaches to strengthen company's strategy. The problem that may arise is that the BSC approach is rather built on long term and it can conflict with short-term objectives. The problem that may arise in intangible asset evaluation is that it is very hard to evaluate intangible asset contributors separately, since all the components together provide the value to company and assist in achieving its strategy.

The Practical Example of Private Health Care Company's, Ltd. Balanced Scorecard and Market Value Evaluation

In recent years the health care system in Latvia has experienced reforming that left impact on the whole health care industry by influencing the competition level.

The Table 5 reflects basic indicators of the health care that show the recent changes in the industry.

The development stage of Latvian health care system falls behind the average development of health systems in the Baltic States and EU. The growth rate is slow in the industry and health care service availability is not provided in the highest quality.

Table 5

Basic Indicators of Health Care at the End of the Year from the Year 2006 to 2011 (Csb.gov.lv)

Indicator	2006	2007	2008	2009	2010	2011
Physicians of all specialties	8 341	8 014	8 437	7 964	7 951	7 987
Residents and apprentices	420	478	637	489	463	440
Specialists with higher medical professional education	379	391	462	483	519	611
Nurses with higher education	593	700	692	831	1 090	1 480
Medical personnel with secondary medical education	14 751	14 546	15 197	13 492	13 217	12 494
Hospitals	106	94	88	69	67	70
Beds in Hospitals	17 599	17 497	17 001	14 434	11 920	12 111
Health care institutions providing outpatient services- total	3 183	3 285	4 078	4 583	4 756	4 658

Source: (Csb.gov.lv)

As the ground of the empirical research Latvian private health care company, Ltd. was taken – company which provides general health care services, diagnostics, rehabilitation, dentistry, and other health care services, meaning that this company offers a very wide spectrum of health care services. Company's key indicators at the end of 2011 were: net turnover was almost 5 mln LVL, total assets almost 3.5 mln LVL, number of employees 405, in accordance to statistical data company is in the list of 600 largest Latvian companies. The target customer is a resident with average or medium high income level. The results of financial analysis show that the further described private health care company's, Ltd. example has typical characteristics of Latvian private health care companies. That is why the company can represent the whole Latvian private health care industry in the exact period. The main argument - company's business development trend is in line with the Latvian health care industry's tendency, when the average net turnover of industry decreased then also the company's turnover decreased. Company is influenced by the growth rate of industry's development. Another point - the company is one of the leading company's in its field so the processes in larger companies related with the certain changes in the industry can be more easily visualized and afterwards more detailed and complex solutions can be found out.

The asset structure of the company is acceptable for a private health care company, but the company's long-term investments and total assets are not used in required intensity.

The company performs steady, in the period of 2006 - 2011 70 - 85% of the company's assets constituted of long term investments. In general, company's long term investment asset structure is balanced and is maintained in an adequate level for the private health care company.

Analysis of the structure of liabilities shows that in the period of 2006 - 2011 the shareholders' value has been between the ranges of 14 - 38%.

Company's liquidity ratios are below the 1 – 2 optimal levels for current liquidity, also below the quick liquidity margin, but cash ratio lower than 0.2. The profitability ratios until the year 2008 had increasing trend, but after this year decreasing, the year 2011 shows increasing tendency that can be evaluated positively. Total asset turnover in 2010 was 1.24 and below the competitor's data 1.44 and the industry's data 2.16. Average debt settlement period in 2010 for the analyzed company is 25 days, which is better than industry's average ratio 30 days and better than competitor's 36 days.

In conclusion despite the fact that the competition intensity in the private health care sector in recent years has increased, the health care company is able to compete in the market due to its intangible assets.

Economic Value Added (EVA) calculations show that company's business activities during the period of 2008-2009 have added positive value, but the company's economic activity can not be evaluated as effective, because when analyzing company's positive value added in comparison with the company's total asset value, the proportion is very low and there should be improvements. In 2010 company's effectiveness dropped significantly. The calculation results of EVA are displayed in Table 6. The EVA ratio shows that company's business activity is not effective in the research period and that is why in further calculations will not contribute significant value to financial perspective in value creation. The results are also influenced by the financial crisis impact.

Table 6

Economic Value Added of the Private Health Care Company during the period of 2006-2010

Calculations	2006	2007	2008	2009	2010
NOPAT LVL	434 898	269 136	541 045	399 040	88 249
Capital Invested LVL	1 460 504	3 083 213	3 253 067	2 791 219	2 192 905
WACC %	25.58	9.13	15.50	13.72	13.35*
EVA LVL	61 315	-12 340	36 819	16 066	-204 504
EVA / Total Asset Value * 100%	2.15	-0.27	0.70	0.37	-5.93

* Calculation based on the adjusted WACC

Source: Company's financial reports and calculations of the authors

In order to show the BSC's concept impact on private health care company's market value, further the market value according to two methods is calculated. Results show, if in the determination of business value are not taken into account market conditions and competitive intangible asset value, then company's value would be the balance sheet value of the shareholders' equity as of 31.12.2010 which is 1.17 mln LVL. However this value does not precisely reflect the company's market value. If, for instance, it is compared to company's net turnover 4.8 mln LVL of 2010, the equity value is 4 times lower so does not display objective value. The example shows that there is a necessity of balance sheet item revaluation and company's intangible asset assessment.

The authors made revaluation of the private health care company's balance sheet, which is reflected in Table 7.

Table 7

The Revaluation of the Private Health Care Company's Balance Sheet

Balance Sheet Item	31.12.2010 LVL	The Revaluated Value LVL	Comments
Long Term Investments	2 756 743	2 503 090	Decreased by 9.20%

Current Assets	688 992	669 360	Decreased by 2.85%
Long Term Liabilities	1 129 270	973 907	Decreased by 13.76%
Short Term Liabilities	1 147 219	1 147 219	Remained in the same level
Shareholders` Equity	1 169 246	1 051 324	Decreased by 10.09%

Source: Company`s financial reports and calculations of the authors

The calculations of the value of shareholders` equity according to cost method show that from the sum of long term investments and current assets subtracting the long and short term liabilities results in the value of shareholders` equity. In accordance with Table 7 the value of private health care company`s shareholders` equity has decreased by 10.09%. In order to calculate overall company`s value the authors of the paper have taken into account also the evaluation of the private health care company`s intangible assets. The main idea of the research is to offer the balanced scorecard concept for private health care companies that purposefully assists in managing company`s market value and increases the company`s competitiveness. Based on the offered concept provided by the authors, the factors influencing company`s competitiveness and indicators can be divided in four BSC perspectives, where the financial perspective is responsible for the company`s tangible and intangible asset management, but other perspectives about intangible asset management. As a result, if company regularly follows to its business processes, measures especially the important indicators of intangible assets, analyzes and tries to improve the results, company will be more competitive, because its market value and competitiveness will increase.

According to offered concept, the results of health care company managers` and patients` survey is the base for competitiveness influencing factors that can be divided in four BSC perspectives. By the successful management of previously mentioned perspectives, the tangible and intangible assets can increase the value and competitiveness of private health care company.

In conclusion, the highest added value provides the intangible assets, not the tangible. However, the difficulties usually arise when there is a need of evaluating the intangible assets. The intangible assets that add value to company`s value are often called as competitive assets that is why it is very important to recognize them in the company in order to analyze and afterwards manage with the aim to achieve higher effectiveness and benefit from the existing position in the market.

The research results reflect the following - the highest significance coefficient is allocated to those indicators that contribute more to company`s market value. Please view the Table 8.

Table 8

Learning and Growth Perspective Indicators` Significance in Value Creation of the Company, Ltd.

Indicator	Significance Coefficient	The Value in LVL
Staff education and qualification	0.22	425 620
Staff average length of working in the company	0.19	367 581
Staff experience level in the field	0.17	328 888
Training course, seminar, conference attendance	0.08	154 771
Staff turnover ratio	0.11	212 810
Investment in staff training and development	0.06	116 078
Average age of the staff	0.14	270 849
Publications by medical staff	0.03	58 039
Total	1.00	1 934 638

Source: Calculations of the authors

The evaluation of company`s financial perspective does not show significant contribution in value creation due to not very good financial results of the year 2010, which are described previously, for instance the low EVA indicator where is necessity of improvements. The overall financial perspective can be evaluated as 1% of the net turnover, which is 48 366 LVL. Each indicator contribution, please view in Table 9.

Table 9

Financial Perspective Indicators` Significance in Value Creation of the Company, Ltd.

Indicator	Significance Coefficient	The Value in LVL
Profitability ratios	0.16	7 739

Gearing ratios	0.02	967
Economic Value Added	0.15	7 255
Net turnover	0.18	8 706
Future cash flows	0.11	5 320
Liquidity ratios	0.05	2 418
Shareholders` equity	0.07	3 386
Market share	0.09	4 353
Activity ratios	0.04	1 935
Total balance sheet value	0.13	6 288
Total	1.00	48 366

Source: Calculations of the authors

The authors of the paper researched and calculated the value of private health care company`s, ltd. intangible assets according to four BSC perspectives. The summarized results of all the perspectives are reflected in Table 10.

The total value of the company according to cost method is calculated $1\,051\,324\text{ LVL} + 4\,643\,132\text{ LVL} = 5\,694\,456\text{ LVL}$.

In order to compare cost method results of the company`s market value, authors calculated also market value according to income method, based on projected free cash flows for 10-year period. The calculation formulas used in calculation are described previously and the results show that company`s market value according to income method equals to $6\,008\,219\text{ LVL}$.

Table 10
BSC`s Four Perspective Contribution of the Private Health Care Company in Total Intangible Assets

Item	Contribution LVL	Weight %
Innovation and learning growth perspective	1 934 638	42
Patient relationship perspective	1 450 979	31
Internal business perspective	1 209 149	26
Financial perspective	48 366	1
Total Intangible Asset Value	4 643 132	100

Source: Calculations of the authors

The results show that difference between the market values is not very large; this means that company`s intangible assets are not overestimated and this can be evaluated positively. In order to get the final private health care company`s market value, the authors assume that both market values contribute to final market value equally. The final market value is equal to $(5\,694\,456\text{ LVL} + 6\,008\,219\text{ LVL}) / 2 = 5\,851\,338\text{ LVL}$.

Based on the previously mentioned aspects, the authors of the paper conclude, that the previously mentioned BSC concept can be applied to Latvian private health care companies to increase the value of the company.

Conclusions

1. Competitiveness is a concept, which assists as a comparing tool, it allows to make comparisons and to make decisions, how the company`s competitiveness can be improved.
2. Human resources have a significant role in intangible asset contribution and competitive advantage creation and development due to their added value with knowledge and experience.
3. Majority of those private company managers, whose companies have strategy and who consider strategy and management skills as the most important success factor for maintaining the competitive position, also evaluate their company`s competitiveness.
4. The conducted survey results of the authors show that Latvian private health care companies do not use the balanced scorecard in their strategic management because they have no information about it.
5. By summarizing different opinions, authors came to conclusion that price level, quality of health care services and the company`s image in Latvia are significant factors that can influence the health care

company's competitiveness not only in the local markets, but in global ones as well. The health care industry competition environment has been driven by the activities of private companies.

6. The private health care companies should think about a value-based competition where companies can compete in delivering better value to customer. One of the ways to deliver the better value to customer is through the management of factors that are important for patients. Factors that usually create a benefit for patients are related with intangible aspects.
7. The use of BSC can allow companies to focus on things that are the most important for company and measure their success. Intangible assets play an important role of market value management in health care companies. The intangible asset value increase the company's market value and that is why also the company's competitiveness. Balanced scorecard can better allow organizing the health care company's work because shows those business areas, which require better strategic management.
8. It would be preferable to implement assessment criteria's such as technological, personnel qualification and patient satisfaction level of evaluating the performance of Latvian health care companies. This would allow differentiating companies in categories or levels so that patients have the opportunity to choose the best health care provider.
9. According to the developed BSC concept for Latvian private health care companies in order to evaluate health care company's competitiveness level during the empirical research, the results show that improvements should be on such areas:
 1. *Innovation and learning growth perspective:*
 1. Publications by medical staff, 2. Investments in staff training and development, 3. Training course, seminar, and conference attendance
 2. *Patient's relationship perspective:*
 1. Needs to be change in price level, 2. Time for patient spent on problem solving, 3. Improvements in waiting time to get to the doctor.
 3. *Internal business perspective:*
 1. Compliance with ISO quality standards, 2. Length of time in order to make important management decisions, 3. Collaboration with suppliers and partners.
 4. *Financial perspective:*
 1. Gearing ratios, 2. Activity ratios, 3. Liquidity ratios.

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The problems of Russia's transition to international finance reporting standards

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Abstract

Purpose- Business globalization objectively demands from Russia the unification of formation business activity data according to the international approaches, therefore the introduction of the international accounting standards is dictated by economic necessity. The Transition from national standards to IFRS objectively has country specification influencing to both: a choice of a way of transition, and to its dynamics. The aim of the article is to show the retrospective analysis of Russia's transition to ISFR, the evaluation of its modern condition, the determination of some key problems and the development of offers which should be solved on the way of harmonization with IFRS.

Design/methodology/approach- The comparative analysis of allocated stages of introduction IFRS in Russia in the economic literature and corresponding normative documents. Generalization and ordering of the results reached at each stage, existing problems, ways and methods of their decision.

Findings- Russia has founded all legislative conditions for introduction of the international standards of the financial reporting in its legal system. However in the pure state they can be used for drawing up of the consolidated financial reporting. Russia in the near future cannot refuse national standards of accounting. Their maintenance should be as much as possible harmonized with IFRS. Thus, the ways of overcoming of the basic difficulties of a transition period are defined.

Research limitation- Process of transition on МСФО is analyzed only in theoretical, methodological and organizational-legal aspects.

Practical implications- The research results can be used for the subsequent theoretical and empirical development of process of harmonization of the Russian national standards with IFRS. They can also be used by the state and nongovernmental regulating subjects of Russia for the determination of corresponding actions on development of the account and the reporting on the basis of IFRS.

Originality /value - Author's vision of process of transition of Russia on IFRS, its prospects and restrictions is offered.

Keywords: Russia, IFRS, the retrospective analysis, problems of transition.

Introduction

The international standards of the financial reporting has been chosen as a tool of Russian accounting system reforming by the government of Russia since 90s on the way of market economy foundation. As it known accounting is one of the elements of its infrastructure. The reforming process of accounting, focused on market economy has been going for almost a quarter of a century in the Russian Federation. There are several systems of financial reporting: IFRS, the American rules, the Instructions of the EU. IFRS has been taken as the basic reference point as it most adequate and perspective for unification of the financial reporting in a global economy.

Transition from national standards to IFRS objectively has the national specificity influencing both: on a choice of a way of transition, and to its dynamics. The main aim of the article is researching the problems of Russia's transition to IFRS and defining the factors influencing this process. The purposes of this article are: carrying out of the retrospective analysis of Russia's transition to IFRS; an estimation of a modern condition of the given process; definition of some key problems and offer's development which should be solved on a way of harmonization with IFRS. The article highlights that system approach, methods historical; logic and comparative analysis are used for the decision of these problems. The research results can be used for the subsequent theoretical and empirical development of process of harmonization of the Russian national standards with IFRS. They can also be used by the state and nongovernmental regulating subjects of Russia

for the determination of corresponding actions on development of the account and the reporting on the basis of IFRS.

The retrospective analysis of Russia's transition to IFRS

Concerning the Russian history of legal regulation of application IFRS is necessary to note the following. In December, 1997 the accounting methodological council of the Ministry of Finance of the Russian Federation had approved the Concept of accounting in market economy of Russia. It contained base positions of the document "Framework in many respects for the Preparation and Presentation of Financial Statements", developed in 1989 by International Accounting Standards Committee - (IASC.), and in 2001 International Accounting Standards Board (IASB) as a basement document for the International standards of the financial reporting (IFRS) (International Financial Reporting Standards - IFRS)

The key document "the Program of reforming accounting according to the International standards of the financial reporting" was confirmed by the government of the Russian Federation in early 1998. (Russian Federal Program, 1998). The main point of this document was to lead the system to international requirements of accounting. Originally supposed to perform work on reforming accounting system in 2 years, but it's become impossible in such short term. After the confirmation of the Program, Russian financial reporting has undergone substantial changing on the way to rapprochement with IFRS. So, lots of accounting documents was substantially reworked, specially which are due to defining the order of conducting the account of the basic means, financially-industrial stocks, other objects of the account are essentially advanced. In practice of accounting essentially new concepts were introduced into accounting databases, forms of the reporting became recommendatory, and requirements to drawing up of the reporting were added by a number of the positions corresponding principles of IFRS. At the same time traditional bases of the Russian standards of accounting incorporated hadn't been changed in the by Federal law in 1996. Simultaneously the balance with operating legislative and statutory acts should be kept. As a result there was a greater share of national specificity in the Russian positions on accounting.

The further serious step to introduce IFRS was the confirmation the order of Russian Ministry of Finance in the middle of 2004 "Concepts of development financial reporting on middle term prospect in the Russian Federation" (The RF Order, 2004). Its purpose was the establishment of priority directions of development of accounting and the reporting up to 2011, providing improvement of quality of the data formed in accounting and the reporting, and the guaranteed access to it of the interested users.

According to the Concept approaches to rapprochement with IFRS for the individual and consolidated reporting were essentially various. For the individual reporting the core by rapprochement with IFRS is its drawing up under the Russian standards developed on the basis of IFRS. The consolidated financial reporting should be made on IFRS with obligatory carrying out of audit and its publication.

As middle term prospect the Concept considered the period 2004 - 2010, allocating two basic stages.

At the first stage - 2004 - 2008 - was provided:

- Obligatory translation on IFRS the consolidated financial reporting of socially significant financial subjects, including opened joint-stock a society, banks, etc.;
- The statement of the basic complete set of the Russian standards of the individual accounting reporting on the basis of IFRS.

At the second stage - 2008 - 2010 was assumed:

- Obligatory translation on IFRS the consolidated financial reporting of other managing subjects, including socially significant, which securities address in the share markets of other countries;
- An estimation of an opportunity of drawing up by the certain circle of managing subjects of the individual accounting reporting it is direct on IFRS instead of the Russian standards.

Thus, stage-by-stage transition to the international standards of drawing up of the reporting has been stipulated by the Concept only for the certain circle of the companies.

The long way to standards speaks also that the operating domestic legal field till now conflicts to separate requirements IFRS. Introduction IFRS, according to many scientists and experts, should be accompanied by full revision of the concept of accounting in Russia, and sharp transition can adversely be reflected in quality of the accounting reporting of the Russian companies. In this connection in Russia the way of stage-by-stage introduction of changes which was essentially tightened has been chosen.

The process of transition on IFRS has considerably become more active in the Russian Federation since 2010.

Modern condition of transition of Russia on IFRS

The Federal law "about the consolidated financial reporting" which has made a duty to the public companies drawing up of the consolidated reporting on the basis of IFRS was passed in the middle 2010. Urgent acceptance has been caused by the law of the decision of "the Big twenty" about universal transition on IFRS in 2010 and not later than 2011 such term has been established for end of convergence of the international and American standards of accounting. The number of the companies, on which this Law extends, has included: the credit organizations, the companies - participants of a securities market, the insurance organizations. The majority of them have been obliged to prepare for the reporting by rules IFRS. The insurance organizations became the exception. Simultaneously, The Order of the Ministry of Finance of Russia approved the new forms of the financial reporting to requirements of the International standards which should have been being applied already from the reporting for 2011.

However, a real coming into force coordinated by additional procedure of acceptance IFRS in Russia. It was not regulated by the law. The rule, about the consolidated reporting start to operate only from the annual report, following after a year of an official recognition in Russia IFRS. Thus for the companies making the reporting by other international-recognized rules (for example, GAAP the USA) and which securities address at stock exchanges, and also concerning all companies, whose bonds are admitted to the reference on a securities market, application of the Law will begin with the report in 2015 or later. With this purpose the special Governmental order of the Russian Federation had been approved Position about the recognition of the International standards of the financial reporting and Explanations of the International standards of the financial reporting for application in the territory of the Russian Federation. The order describes procedure of the consecutive analysis of the International standards, decision-making on introduction of each document in action in the territory of Russia, their statement and publication. Procedure has been stipulated uneasy, that confirmed skeptical opinions of experts on the tightening of transition period. At the same time the subsequent events have confirmed intentions of the Government of Russia, to create a base to transition on IFRS already in 2012r. So, the expert body for accreditation IFRS has been approved on July, 8th, 2011. The order of the Ministry of Finance of the Russian Federation "About introduction in action of the international standards of the financial reporting and explanations of the international standards of the financial reporting in territory of the Russian Federation" established the list of 37 IFRS and 26 of the Explanations officially recognized in the Russian Federation. Now it's on examination IFRS, which will come into force in 2012-2013. All these events have led to that the consolidated reporting officially could be made on IFRS from 2012. Besides "New Federal law on accounting" which essentially changes system of its regulation and pulls together with IFRS was passed in December, 2011. There are direct references to the international standards of the financial reporting and it comes into effect in 2013. Federal standards of accounting are formed on the basis of the international standards. It is very important, because such reference point is fixed legislatively now. And they are entered not especially for preparation of the consolidated reporting, and for any purposes.

Thus, in Russia legislative conditions for introduction of the international standards of the financial reporting in legal system of Russia are created all.

It is necessary to note, that there is no official statistical data about quantity of the enterprises making the financial reporting on IFRS in Russia at the moment. Partially it can be received on the basis of the rating information on four hundred to the largest companies of the Russian Federation on a parameter of volume of realization of production. So, according to for 2011 relative density of the companies forming the financial reporting on IFRS made only about 30 percent.

That transition to the international standards of the financial reporting brakes

The validity of the Concept has expired in 2011, but it was not executed. At the same time those measures which were undertaken by Russia for transition to the international standards and the necessary volume of work requiring end are visible. New detailed project of the Plan of the further development of accounting and the reporting in the Russian Federation has been developed on the basis of the International standards of the financial reporting for 2011-2015 which testified to gravity of intentions of reformers of accounting and strengthening of the tendency to a recognition of direct action IFRS in Russia. The given plan included 5 sections uniting 59 items, defined concrete actions and directions of activity and assumed to finish reform of accounting and audit on the western sample by 2015. Officially the Plan has been approved in November, 2011, it's the same as the Plan of the Ministry of Finance of the Russian Federation for 2012-2015 on development of accounting and the reporting in the Russian Federation on the basis of the International standards of the financial reporting. Thus it not only has twice decreased in sizes, but also in it many items of the previous project of the plan which are basically have disappeared. These are: introduction

of the simplified procedures of accounting and the reporting for some categories of managing subjects; preparation of recommendations on structure and the maintenance of the explanatory note accompanying the annual accounting (financial) reporting; participation in the works connected with application of expanded language of the business reporting (XBRL); consideration of a question on expediency of development Russian State High Education Standards in a direction “Accounting and audit”; Four more items, devoted to preparation of recommendations on modification in curricula of the maximum and average special educational establishments directed on profound studying IFRS and formation of skills of their application on an expert for the economic staff.

Despite of the certain successes, there are still unresolved questions of transition on IFRS in Russia. Among them it is necessary to allocate:

- Presence of essential distinctions in the Russian standards of accounting and the international standards of the financial reporting; discrepancy of the Russian legislation;
- Shortage of qualified personnel and insufficient professional standard of accountants and auditors on IFRS;
- Resistance of a company management to reflection of the full and transparent data in the financial reporting, and also absence of skills of use of the data prepared on IFRS;
- High expenses for preparation of the consolidated financial reporting on IFRS by transformation of the accounting reporting prepared by the Russian rules;
- Incorrect translation IFSR into Russian;
- The Weakness of the monitoring system of quality of the accounting reporting, low quality of audit of the accounting reporting.

Ways of overcoming of difficulties

As it has already marked, a vital issue of transition is presence of the kept distinctions in the Russian standards of book keeping and the international standards of the financial reporting and discrepancy of the Russian legislation. The Russian rules of the account in comparison with IFRS are more focused on the legal form, technical procedures of the account and strict requirements to the documentation and less on the economic maintenance of operations.

In this connection a question of principle becomes a choice of a variant of introduction IFRS in the Russian Federation. In a world practice it is allocated to three basic approaches in a recognition of action IFRS in the concrete country. The first approach is the acceptance of the international standards in the pure state. The second is the acceptance IFRS with their opportunity of “the limited updating”. The third approach is the development of national standards by their greatest possible harmonization with IFRS.

Research of history of development of normative regulation of accountant shows that Russia has no opportunity to refuse national standards of accounting in the near future. There are several objective reasons for such decision. They are connected mainly with an estimation of elements of the reporting at fair cost and professional judgment. There is no corresponding developed market for the application of fair cost as an estimation of the objects of the account in Russia for the present. It is possible to note, that IFRS are full databases which has saved up world experience in its practical application. It is necessary to point out, that Russia is only at the initial stage of this complex process, the sufficient practical and enforcement experience in the is absent country. Besides it, use IFRS as national standards will be led by supervising bodies (courts, tax bodies will interpret application IFRS in Russia), and it discredits IFRS as non national standards. Thus, Russia has chosen the third way of introduction of the international standards – the development of national standards by their greatest possible harmonization with IFRS. The Documents of normative regulation of accounting will be new national federal and branch standards from 2013. As a basis of their development the international standards will be applied. Thus the financial reporting of the legal person is formed according to federal standards of accounting. The consolidated reporting is made on ISFR, and for public sector of economy on IPSAS. In future it is necessary to undertake serious steps on expansion of a circle of the organizations which make the financial reporting on IFRS.

The following problem is a shortage of qualified personnel and for the present an insufficient professional standard of accountants and auditors on IFRS. In this connection the significant part of the plan of the Ministry of Finance of Russia is allocated the organizations of vocational training of accountants on studying IFRS down to their professional certification and system of improvement of professional skill on the basis of standards of the International federation of accountants and auditors that should bring essential results. It is necessary to note that the project of the plan provided consideration a question on expediency of development of the federal state educational standard of the maximum vocational training in a direction

“Accounting and audit” in 2012-2013, and also profound studying IFRS, formation of skills of their application and in other directions of economic preparation. This item is absent in a final variant of the plan of the Ministry of Finance of Russia. At the same time, allocation of preparation “Accounting and audit” as separate direction in the List of directions of preparation of the maximum vocational training is necessary for economy of Russia. It is caused by many reasons. The great bulk of practicing accouters was learnt during the Soviet time and under the age and qualitative characteristics mismatches modern requirements of dynamically developing economy. The operating system of preparation of bachelors in a direction "Economy" basically cannot realize this need. At the same time, it is a separate greater problem.

Resistance which has historically developed in Russia of a company management to reflection of the full and transparent information in the financial reporting and absence of skills of use of the information prepared on IFRS, is a uneasy problem. As according to operating the code about administratively-legal infringements of the Russian Federation rough infringement of rules of conducting accounting and representation of the accounting reporting attracts imposing the administrative penalty on officials of all the size from 2 up to 3 thousand rubles that makes no more than 80 Euros. Thus rough infringement is understood as distortion of the sums of the added taxes and tax collections or any clause of the form of the accounting reporting not less than for 10 percent. And it, according to IFRS, can admit essential distortion of size of elements of the financial reporting, leading to deception of users of the reporting. Toughening of the administrative responsibility of officials, and their professional retraining as users for acceptance of the administrative decision on the basis of the reporting made on IFRS, propagation of advantages of the given reporting, allow to remove existing barriers.

High expenses for preparation of the consolidated financial reporting on IFRS the most widespread in Russia by transformation of the accounting (financial) reporting prepared by the Russian rules, and do not do IFRS attractive. It is made more often with use of spreadsheets and does not allow reaching an appropriate level of the internal control over quality of preparation of the reporting. Use of the new technologies widespread in a world practice at transition on IFRS would allow reducing essentially costs at increase in disclosing of the information and its transparency. The Extensible Business Reporting Language (XBRL) research has shown that expanded language of the business reporting, is more and more widely used worldwide, but it is unknown at the present in Russia. Now the given language is officially recommended by Fund of Committee on IFRS for electronic drawing up of the reporting under standards IFRS. The Principal cause is the aspiration to the maximal standardization in application of standards IFRS in practice in the different countries. The purpose of creation XBRL is the development of the optimum scheme of an exchange by the financial information between participants of the international market and methods of creation, an exchange and comparison of the business reporting. The most advanced users are the USA. XBRL is the obligatory standard of representation of the financial reporting according to requirements of the Commission under securities and the share market (SEC) in the USA from 2009. The program of introduction means obligatory transition for all types of emitters to 2012 starts the largest companies in 2009 and finishes with small in 2011 Its application in Russia for the enterprises of any level can be attractive as purchase of program licenses and payment of payments for its using is not required.

To other questions demanding the decision, is unsatisfactory quality of Russian language translation IFRS at the present. Spanish translation has been taken as a basic. However the expansion of participation of Russia in activity of Fund IFRS, the activization of discussion of standards at a preliminary stage will allow reducing negative influence of the given factor. The serious lack is the absence of official Russian translation of Concept IFRS. It is necessary to accelerate work on transfer of the rights from Fund IFRS to the concept and its introduction in the national Russian legislation.

Moreover it is important to concentrate on a problem of weakness of system of internal and external quality assurance of the accounting reporting, including low quality of its audit. The plan of the Ministry of Finance of Russia had been stipulated the reduction of operating federal standards of auditor activity conformity with IASB. The given work has been begun in February, 2012. Moreover, The Advice on auditor activity has approved transition from national standards of audit to use in the pure state the international standards of audit that can essentially raise its quality. The questions of a professional etiquette go on the foreground, and there is even a new edition of the Code of a professional etiquette of auditors. The positive result also can give, on the one hand, the development of system of the internal control, and on the other - the development of offers on strengthening the state supervision of timeliness and completeness of disclosing of the accounting (financial) reporting managing subjects.

Conclusion

In the conclusion, it could be stated that Russia purposefully and consistently has moved on the way of introduction IFRS for a quarter of a century, reforming all system of accounting and the reporting according to development of market economy and idea of its harmonization with the international standards. Time has shown that the choice was correct. The companies of the European Union which securities are quoted in the markets of Europe should make the consolidated financial reporting exclusively on IFRS since January, 1st 2005r. American standards are actively tending to IFRS at the moment. The essential merge and the decision of possible use IFRS by the US companies is expected in 2012 (IFRS, org. website, 2012).

In Russia has considerably become more active process of transition to IFRS since 2010. As a serious push was the decision of «the Big twenty» about universal transition to IFRS not later than 2011. Russia has served key federal laws, normative documents in the field of accounting and have been passed of the financial reporting which essentially change system of their regulation and pull together with IFRS. In conclusion it can be stressed that, in legislative conditions for introduction of the international standards of the financial reporting in legal system of Russia are created all. At the same time, there are essential features which influence on a choice of the way of transition and its dynamics.

The Research of national specificities of transition to IFRS shows, that Russia in cannot refuse national standards of accounting in the nearest future. So, the most adequate variant of introduction of the international standards - the development of national standards by their greatest possible harmonization with IFRS is chosen. The main idea is that this process must be consecutive and extended to the enterprises of all patterns of ownership, including small and average business.

Despite of the reached legislative successes, there are still unresolved questions of a transition period. They are in detail considered in the article. The Dynamics of process of transition depends on that how much quickly and effectively the theoretical basement will be turned out, new decisions of organizational, administrative, normative and legislative character are found. The vector of movement, despite of difficulties and contradictions is chosen right.

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DEVELOPMENT OF INSOLVENCY EVALUATION SYSTEM FOR SMEs

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Abstract

Purpose

The aim of the paper is to prepare recommendations how to improve the system for the assessment of viability of small and medium enterprises (hereinafter “SMEs”). This paper gives account of some indications arisen during the course of the assessment of viability of the SMEs that applied for EU support. The EU guidelines recommend some indicators (for example, loss of the registered capital, increase of trade payables, increase of stock, increase of trade payables). Also certain signs of insolvency are stipulated in the Latvian legislation. These signs, however, appear to be more suitable for legal procedures such as insolvency or bankruptcy. The signs specified in to the Latvian legislation are very complicated to be used for economic decisions and can rather be used only in cases if one has access to contracts with suppliers and customers and if one possesses more detailed financial information about the company. All the signs referred to above are calculated based on the financial figures at a particular point in time (balance sheet data). However, viability of the companies is more dependent on their ability to secure appropriate cash flow, capacity to obtain loans, absorb them and recover back to creditors and others. That raised doubt whether the calculation stipulated in the legislation shows the real picture of the viability of a company.

Approach

The calculation of viability of more than 500 companies was performed according to the signs referred to in the EU regulation. The signs stated in the Latvian Insolvency Law were not used as the calculation of those signs requires very deep analysis of each particular company and is too time-consuming, thus it is not recommended to be used in making economic decisions. As the second step, various sources of information were investigated and companies were reassessed according to a wider range of indicators. This paper presents the comparison of the results of both calculations.

Findings

During the course of the assessment it was concluded that the signs showing the situation at a particular point in time did not give a fair view of the viability of the company. In order to arrive at more reliable and credible results the assessor should use a wider range of signs, including cash flow indicators and financial stability indicators.

Research limitation

Only companies that applied for one particular EU supported activity were selected for calculation.

Practical implications

The signs recommended in this paper can be used in the selection of projects and the assessment of their viability. This paper also proposes certain recommendations for amendments in the national rules regarding the signs of insolvency. These signs can also be used by the managements of SMEs to conduct on-going analysis of financial results and identify financial problems on a timely basis.

Value

The paper describes the situation regarding the signs of insolvency and reviews national and EU legislation in this area. The testing of certain signs of insolvency was done based on the actual financial statements of a limited population of companies that applied for the state aid.

Keywords: *viability, viability of SMEs, signs of insolvency, cash flow indicators, financial stability.*

Introduction

The national legislation does not stipulate any specific signs to identify insolvency or indicators how to identify companies in financial difficulty. The Latvian Insolvency Law defines certain signs; however, according to the interpretation distributed by the Ministry of Justice as the author of the Law, the signs referred to in the Law are valid only after the court has made a decision after which the name of the Company is entered in the Insolvency Register which is an official public register. It means that the financial decisions can only be made by the court which should not be the best practice.

The signs of insolvency should be used not only by the court for protection of creditors but also by other stakeholders who are interested in the financial situation of the companies. The management of small and medium enterprises should monitor the financial ratios in order to make appropriate decisions in due time and to avoid bankruptcy.

The legislation of the European Union stipulates that only companies without financial difficulties should apply for state aid. Any grant or subsidy or any other support issued to firms in difficulty may be considered illegal state aid except for under certain exceptional circumstances when such a support is approved by the Directorate General for Competition according to the specific approval procedure.

Research methodology

The author used a variety of methods for the study. First of all, the population was analyzed to select the most typical sample. Data analysis was based on the quantitative and financial coefficient methods, as well as data comparisons. To disclose the results of the study in a visually perceptible manner the author used the graphical method.

During the course of the study, the author of the article chose a population of approximately 500 financial statements for 2008 to 2010 of the small and medium companies that applied for state aid in 4 activities during the period 2009 – 2011 partly financed by the Structural Funds of the European Union. The information was sourced from the internal data bases of the Ministry of Finance.

The aim of the activity partly supported by the EU is the expansion of business and the development of new products. Thus, the companies that applied for this aid should have been small or medium companies and not in difficulty and having stable financial positions which would allow them to develop or expand their business. Of course, these companies are not as big and do not have as many assets as to be able to apply for substantial bank loans without state guarantees. The author did not expect the companies to be in an excellent financial situation; however, their financial indicators and coefficients were expected to demonstrate the ability to increase the capacity and successfully implement new products, meaning that the financial coefficients were expected to be within the normal range or not less than minimum of the normal interval.

The author performed her study in several steps and further analysis was performed on the particular group. First of all, companies that had applied for credit holidays were excluded from further study because it was clear that these companies were in financial difficulty at the reporting date and were unable to repay their current loans. Out of a total of 500, such companies were identified by the author based on the financial statements to be 278 or 56%.

The current liquidity ratio was analyzed for the remaining 222 financial statements. The analysis showed that the current liquidity ratio of 102 or 46% of them was lower than 1.0. Nevertheless, if one analyzed events to date the insolvency procedure was started only for 6 companies. The question how other companies in such a bad financial position were able to go on and improve their business is the topic for other studies. The author analyzed certain coefficients of these 6 companies. The results are disclosed later in the article.

During the calculation of the loss of registered capital and the analysis of soft criteria referred to in Table 3 it was identified that practically 90% of the population may be identified as firms in difficulty. This significant percentage of the financial statements that demonstrated such an adverse financial situation at the end of 2008 or 2009 can be explained by the fact that most of the companies experienced difficulties after the crisis of 2008. The financial statements for 2010 demonstrated significantly better results. According to the author, the financial statements of Latvian companies as at the end of 2008 and 2009 did not demonstrate the typical financial situation. That is why 52 financial statements for 2010 were selected by the author for further and more extensive study.

For the average financial data of the selected population please refer to Table 1.

Table 1

Average financial data of the studied companies

Assets		Equity and liabilities	
Balance sheet item	Average, thousands LVL	Balance sheet item	Average, thousands LVL
Fixed assets	936	Equity	479
Inventory	339	Accruals	8
Trade receivable	242	Long term liabilities	556
Other receivables	272	Short-term loans	279
Cash	79	Advances from customers	108
		Trade payables	224
		Other creditors	214
Total current assets	932	Total current liabilities	825
Total assets	1 868	Total Equity and liabilities	1 868

Source: The author, based on the internal data bases of the Ministry of Finance (2012).

The main financial indicators

Current liquidity

The easiest way of calculating the ability of a company to meet its short-term liabilities is to calculate its current liquidity ratio. Current liquidity characterizes the ability of a party to use current assets to settle

current liabilities (according to the definition available in the webpage of the Latvian Academy of Science). The information required for the calculation of the current liquidity ratio is easily available from the public annual financial statements. The result of the analysis is disclosed in Figure 1.

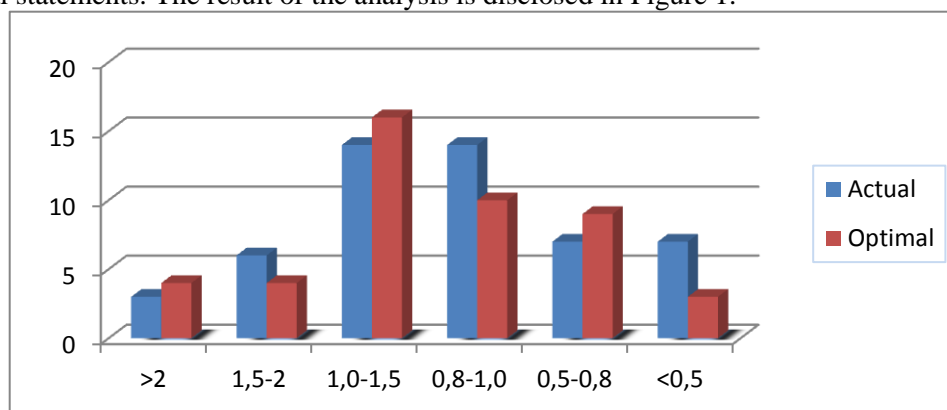


Figure 1. Actual and optimal current liquidity

Source: The author, based on the data from internal data bases of the Ministry of Finance (2012)

The author analyzed the actual current liquidity ratio and also calculated the optimal liquidity for the selected companies. The optimal current liquidity ratio shows how much current assets the company should have in order to pay its short-term liabilities in due time. The optimal current ratio is calculated individually for each company based on the information disclosed in the financial statements. Figure 1 shows that the optimal ratio differs from the actual ratio and the current liquidity ratio should not always exceed 1.0. The main difference between the calculation of the actual current liquidity and optimal liquidity is that the calculation of the optimal liquidity ratio takes account of slow moving assets and growth of daily expenses which is very important for the companies that plan to expand their business (it has been found in the webpage of the Commercial Register, www.lursoft.lv).

Figure 1 also demonstrates that current assets should not always be larger than current liabilities. In some circumstances, companies can successfully operate with current liquidity ratio below 1.0. For instance, Jansone, Nespors and Voronova (2010) calculated the average current liquidity ratio of the food processing companies and in 2008 it was 0.88. All companies analyzed in the article successfully operate in the Latvian market to this date.

However, the current liquidity ratio does not always demonstrate the actual financial viability. For example, according to the national legislation current liabilities include an item called "Next period income" which includes a part of non-depreciated income from different grants and subsidies. Grants and subsidies normally are booked as income in the following years which means that these liabilities are not payable in the normal course of business activity. It might also be the case that a company has purchased large amounts of goods at the end of the year and these goods are sold at the beginning of the next year.

Financing cycle

Another criterion for identifying possible financial difficulties which can be easily calculated from the balance sheet data is the financing cycle. It has been found in the www.vernimen.com that the financing cycle covers the period from raising financial resources to their repayment. Sometimes the Company holds sufficient working capital according to the balance sheet data as at the end of the financial year but the actual time when the company will receive cash from these assets is longer than the time in which the Company is required to pay its liabilities. The shortage of cash flow will lead to penalties and additional expenses or even to the insolvency procedure being initiated.

The calculation of the financing cycle takes account of the differences in the average turnovers of trade receivables, trade payables, advances of clients and customers and advances paid to suppliers. As a result, it is possible to predict whether cash received will be able to cover liabilities in due time. The results of the analysis of the selected 52 companies are provided in Figure 2. The calculation excludes companies with very low amounts of receivables or payables.

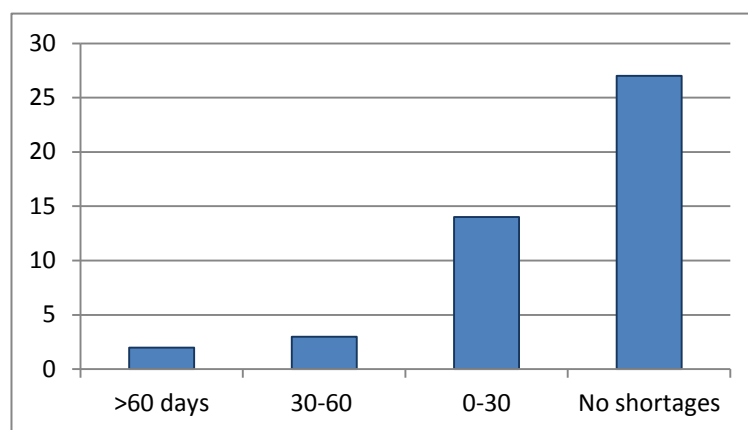


Figure 2. Shortage of cash flows.

Source: The author, based on the data from internal data bases of the Ministry of Finance (2012)

It is demonstrated in Figure 2 that most of the companies do not suffer from shortages of cash flow and that allows them to plan the expansion of business and to apply for the EU grants. However, cash flows cannot be improved by not paying trade payables in due time. The analysis of the turnover of trade receivables and trade payables shows that cash flow is managed primarily by delaying the payments of invoices on payables.

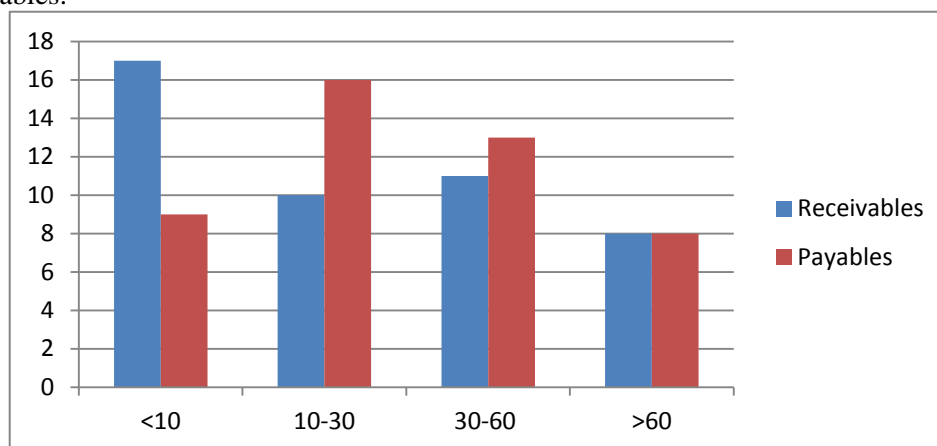


Figure 3. Turnover of trade receivables and trade payables in days.

Source: The author, based on the data from internal data bases of the Ministry of Finance (2012)

The difference between the turnover of trade receivables and trade payables is not critical. The companies should be very careful in their relationships with suppliers.

Financial autonomy

The coefficients recommended by different scientists are analyzed by Dr.oec.R.Šneidere (2009) in her book. One of the recommended coefficients is the proportion between own and borrowed resources – equity versus liabilities. Equity and liabilities should be at the right proportion in order for the company to have appropriate financial autonomy and at the same time to use shareholders' investments in the most efficient way.

During the research, the author of the article identified that Ciumag M. and Ciumag A. (2008) use the term *financial autonomy ratio* which is calculated as the proportion between equity and liabilities.

The companies selected for analysis applied for additional investments and were going to apply for a loan. That is why it was very important to monitor the companies' autonomy and capacity to assume the new loans. The calculation of the actual and required proportion between own and borrowed funds helped understand whether the Company had capacity to apply for new loans. For the analysis of the selected 52 companies please refer to Figure 4.

The actual autonomy ratio shows the proportion between own funds and borrowed funds. According to methodology explained by Kuzmina-Merlino (2012) the required autonomy ratio shows the proportion between the funds required for financing slow moving assets (fixed assets, inventory, raw materials,

unfinished goods, advances to suppliers) and quick moving assets It is very risky for a company to borrow more funds than it is able to repay.

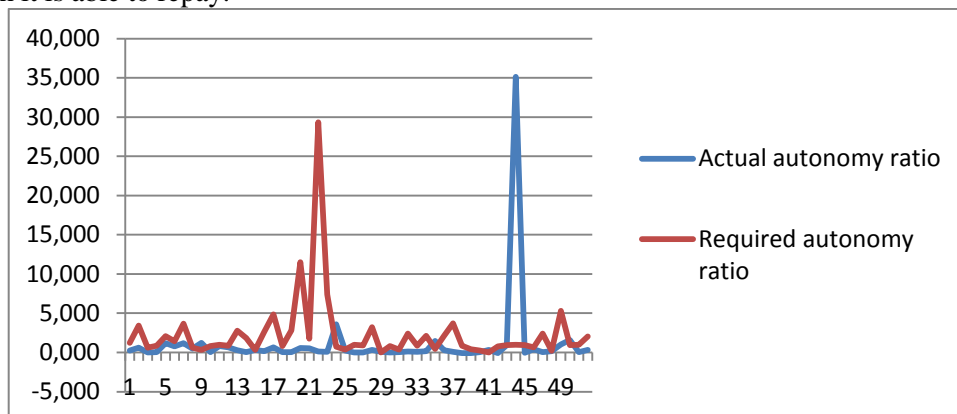


Figure 4. Financial autonomy ratio.

Source: The author, based on the data from internal data bases of the Ministry of Finance (2012)

Only some of the analyzed companies have sufficient capacity to absorb additional borrowed resources. Most of the companies have already exceeded their capacity to pay debts.

Measuring bankruptcy

During her empiric research while analyzing Latvian companies' R. Šneidere (2009) came to the conclusion that one of the most accurate models for predicting insolvency was Altman Z-score.

The analysis depicted in this article shows that each ratio and each coefficient leads to different results. Normally, management of an enterprise monitors all ratios as a complex before making a decision about changes in the business strategy. The American scientist E.I. Altman has created a complex formula – an algorithm for diagnosing insolvency of a company. The algorithm consists of five ratios. According to E.I. Altman, the sum of the ratios should be more than 3. Only then the business can be considered safe against insolvency; if the sum is 2.7 – 3.0 – insolvency is possible; if it is 1.8 – 2.7 – insolvency is highly possible; if it is 0 – 1.8 – insolvency is very highly possible; if it is less than 0 – the company is insolvent. For the results of the analysis of the 52 selected companies please refer to Figure 5.

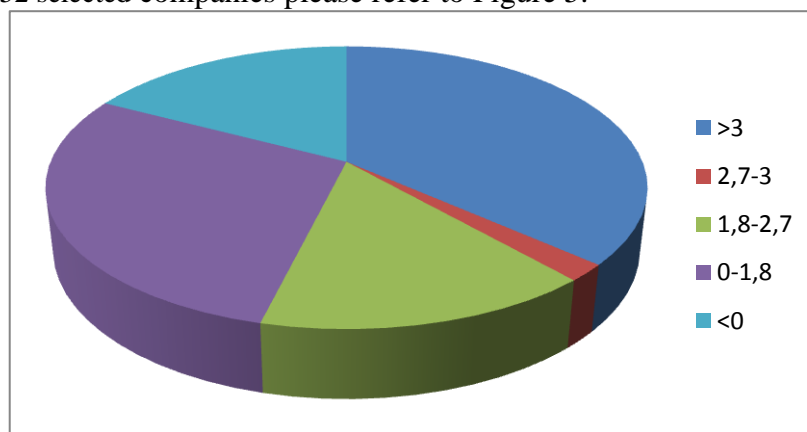


Figure 5. Altman's formula.

Source: The author, based on the data from internal data bases of the Ministry of Finance (2012)

According to Altman's formula, only 37% of the analyzed companies are under no stress about insolvency and 2% have a small possibility of insolvency; 44% of the companies have high or very high possibility of insolvency and 17% of them should already be insolvent. Of course, Šneidere (2009) finds that Altman's formula does not include national characteristics. It is typical of companies in Latvia, especially Latvian owned companies, to have lower financial ratios than those in the developed countries.

The author agrees that using a complex of coefficients provides one with a more comprehensive view on the situation, however, such complex algorithms may be difficult to analyze and they may require greater workload of a non-professional.

ROA and ROE

Among other very popular ratios one should mention return on assets and return on equity (ROA and ROE). The information required for these ratios is usually easily obtainable from the financial statements and the ratios are easy to calculate. ROA shows how profitable investments in assets are and how efficiently management is using assets. ROE shows how much profit the company generates with the money that the shareholders have invested (definitions available in www.investopedia.com). For the analysis of the selected companies please refer to Figure 6. Companies with negative equity were excluded from the analysis as it was not possible to calculate their profit from investments.

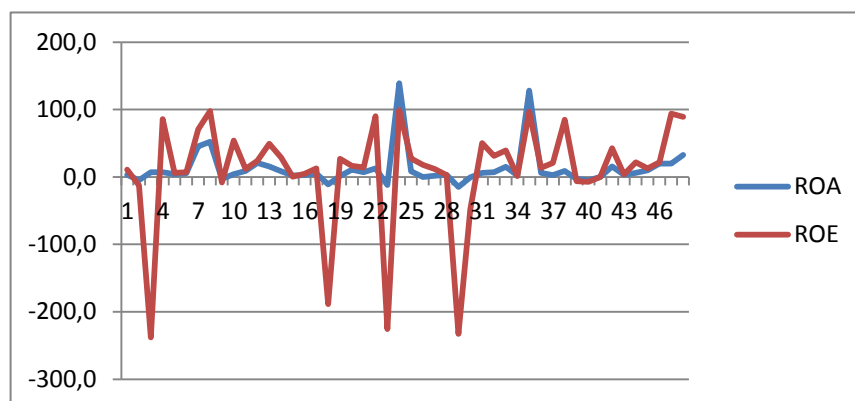


Figure 6. Analysis of ROA and ROE, %.

Source: The author, based on the data from internal data bases of the Ministry of Finance (2012)

Figure 6 reveals that only 11 companies are using their assets efficiently and their ROA is higher than 10%. In 9 cases ROA is below 0 when earnings before interest and taxes (EBIT) are negative. EBIT of two companies within one year is even higher than total assets invested in the business. This may be the case in the services line of business.

Profit generated from investments of shareholders in 10 cases is negative. In 6 cases ROE is very close to 100% (89-99%). It means that the shareholders received their investments within one year. It might be the case when a minimum share capital is invested, basically in short-term businesses. As the average of the selected cases, the shareholders of the companies that generated profit could return their investments within 3 years. It means that investments were primarily made for very short-term purposes. If one looked at the amounts of share capital, 43% of the companies have the minimum share capital of LVL 2,000. It goes with the grain of the assumption that most of the companies may have been established for short-term purposes.

Companies already under insolvency

The author of the article also analyzed the ratios of all 6 companies out of the scope that were declared insolvent within 1-2 years after the reporting date. For the results please refer to Table 2.

Table 2

Financial ratios of the companies before they were declared insolvent

Company	Current liquidity	Shortages of cash flow (days)	Financial autonomy	Altman Z	ROA	ROE
A	1.4	62	-0.05	0.3	17.5	-8.5
B	1.1	No	-0.03	-0.7	-49	n/a
C	1.0	No	0.25	1.3	-1.4	n/a
D	1.1	No	0.06	3.3	11.2	81.8
E	0.8	4	0.01	0.6	2.0	0
F	0.8	No	0.15	1.0	-3.9	n/a

Source: The author, based on the internal data bases of the Ministry of Finance (2012)

The table shows that the current liquidity ratio for all these companies was within or very close to the normal range. The financial autonomy of all the companies was very low – 5 of the 6 companies were fully dependent on creditors and 2 companies already had negative equity. According to Altman's formula, 5 of the 6 companies showed clear signs of insolvency. Only company D according to Altman's formula was solvent. Company D also demonstrated efficient use of assets (ROA) and profitable use of own funds (ROE). The only ratio that indicated insolvency of Company D was the financial autonomy – the dependence on creditors. The results of operations of all other companies before insolvency were losses.

Only 2 of the 6 companies suffered from shortages of cash flow. During deeper analysis it became obvious that cash flow problems were addressed by delaying payments to the suppliers which was very likely to cause the creditors to submit an insolvency application.

EU and Latvian Regulations

EU Regulations

According to Article 45 of Commission Regulation (EC) No 1828/2006 (2006) all small and medium enterprises that apply for state aid and that are not considered new firms should be assessed as to whether they are potentially economically viable. According to the Regulation, it is forbidden to support firms in difficulty. Supporting the firms in difficulty may result in serious penalties as it is the aim of the European Commission (hereinafter the “EC”) to safeguard equal competition.

The EC has published Community guidelines on state aid for rescuing and restructuring firms in difficulty. According to the guidelines, firms in difficulty can be assessed according to hard and soft criteria. Hard criteria are used as exclusion criteria while soft criteria should be used as a complex of criteria (See Table 3).

Table 3

Circumstances according to which the company is identified as being in difficulty

Hard criteria (exclusion criteria)	Soft criteria (can be combined and analyzed as a complex of coefficients)
1) loss of the registered capital by more than 50%, and more than 25% has been lost over the preceding 12 months 2) criteria according to domestic law for being the subject of collective insolvency proceedings	1) increasing losses 2) diminishing turnover 3) growing stock inventories 4) excess capacity 5) declining cash flow 6) mounting debt 7) rising interest charges 8) falling or nil net asset value

Source: Community guidelines on state aid for rescuing and restructuring firms in difficulty (2004/C244/02)

Latvian national regulation

Section 219 of the Latvian Commercial Law stipulates that “if the losses of a company exceed half of the equity capital of the company or the company has limited solvency, the signs of insolvency have been determined or they are likely to occur in the company, the board of directors shall notify the council (if a council has been established) thereof and convene a meeting of shareholders in which the board shall provide explanations”. Similar signs for identifying insolvency are stipulated also in the EU regulation as exclusion criteria for state aid.

The initial wording of the law required shareholders to perform certain activities such as reduction of the share capital, liquidation of the company or applying for insolvency to the court. According to the amendments in the law, such a requirement is no longer in compliance with the law. It is now required that the board of directors informs the council of shareholders if such is established. Further decisions should be made by the shareholders.

The Latvian Insolvency Law is the only official document in Latvia that stipulates the signs of collective insolvency. As the aim of the law is to encourage companies in financial difficulty to pay their liabilities and, if possible, to renew their solvency, the signs stipulated in the Insolvency Law should be used in line with the decision of the court and registration with the national Insolvency Register because the court makes the decision based on a complex evaluation of the financial situation rather than just any particular criteria.

Such a procedure is too long for the purposes of administering the EU funds because the administration authorities are required to make the decision within three months and cannot wait while the court makes its investigations which may continue for 2 years. Moreover, the court will make the investigation only if a creditor has submitted an application for it. In case no creditor has turned to the court it cannot be considered whether or not the company is viable and whether it is in financial difficulty. The signs stated in the Insolvency Law and the author's comments on them are presented in Table 4. Section 57 of the Insolvency Law states that the insolvency procedure can be applied in case any of the signs exist which means that every individual sign referred to may be the reason for a creditor to apply to the court about insolvency of the company.

Table 4

Signs of insolvency of a legal entity according to the national legislation

Signs	Author's Comments
1) it was not possible to implement the decision of the court about debt collection	In force only after the means for coercive debt collection have been used. The sign cannot be used for preventive analysis. At that stage it is clear that the entity has very serious problems.
2) LLC or JSC has overdue payables in excess of LVL 3,000	In force only if creditors turn to the court and if creditors have sent an official warning letter to the Company at least 3 weeks before submission of the application to the court. An analysis based on this sign requires a more extensive study of payables and contracts with suppliers. The criterion cannot be used by external evaluators as such information is not included in the financial statements.
3) Other legal entity, individual entrepreneur, foreign entity or partnership has overdue payables in excess of LVL 1,500	In force only if creditors turn to the court and if creditors have sent an official warning letter to the entity at least 3 weeks before submission of the application to the court. An analysis based on this sign requires a more extensive study payables and contracts with suppliers. The criterion cannot be used by external evaluators as such information is not included in the financial statements.
4) The entity has payables to employees and payables to tax authorities regarding social contributions overdue by more than 2 months	The sign is in force without any additional conditions. An analysis based on this sign requires a more extensive study of payables and payrolls and tax declarations. The criterion cannot be used by external evaluators as such information is not included in the financial statements.
5) The entity cannot pay liabilities in due time	The sign is in force without any additional conditions It is possible to make a calculation of different coefficients externally but the sign has a rather wide meaning and it is not clear how to identify this condition.
6) At the time of commencing liquidity procedures or during the liquidity process it is discovered that the entity does not have enough assets to cover liabilities	Cannot be used as a criterion for preventive diagnostics
7) If the legal protection process has been initiated for the second time within one year and it has not been implemented	Cannot be used as a criterion for preventive diagnostics
8) The administrator has filed an application to the court because the debtor does not meet his liabilities under the law	Cannot be used as a criterion for preventive diagnostics
9) The entity applies to the court itself and requests to interrupt the legal protection process	Cannot be used as a criterion for preventive diagnostics

Source: Latvian Insolvency Law (2010).

The above circumstances have given rise to the situation that there are no clearly stated signs for identifying companies in financial difficulty in the national legislation. The only sign used by the national authorities is the Insolvency Register where the inclusion is based on post-factum criteria and which cannot be used for preventive diagnostics. The condition has raised serious problems in discussions with the European Commission. According to the European Commission Latvia supports companies in difficulty and in such a way distorts competition in the common market of the European Union.

Other authors about insolvency

David Bridge (2009) recommends dividing insolvency evaluation in 2 parts. According to David Bridge (2009), insolvency means that the company is unable to pay its debts and it can be analyzed by both - balance sheet tests and cash flow tests.

In his promotion paper Subatnieks (2007) emphasizes the importance of cash flow analysis. The author of the article agrees that cash flow indicators are very important as cash flow problems are the first sign for all stakeholders, especially for creditors, but they should be used for operational monitoring and diagnostics of bankruptcy because cash flow problems can help identify operational problems which should be solved at the operational level. Strategic problems can be identified also by other groups of indicators. The article did not contain any analysis of the signs calculated on the basis of the cash flow statement. That could be the point for further analysis.

The author of the article looked for information in the book of Dr.oec. Ruta Šneidere "Methods of Financial Analysis for Predicting Enterprise Bankruptcy" (2009). Besides a more detailed analysis of the signs of insolvency, not just financial, in her book R. Šneidere (2009) has summarized the views of scientists from various countries regarding the most typical signs of insolvency and has produced recommendations for applying the methods and models for predicting insolvency. Some of the recommended signs were tested by the author of the article on the selected population.

Another author, Žuka (2010), classified companies into three groups - weak companies, medium and stable companies – using discriminant analysis and mathematical statistics' method. The methodology used by the author is very interesting and clearly demonstrates that more reliable results are achieved using a set of coefficients. However, the user of this method needs to have knowledge of mathematics and statistics. That is why the author recommends this method to banks, insurance companies, tax authorities and other financial institutions.

Conclusion

The best way for identification of firms in difficulty was sought by analyzing current liquidity and optimal liquidity, comparing the two ratios, analyzing the financial cycle, financial autonomy, ROA and ROE, as well as applying the Altman formula. The main objective was to find the sign or the combination of signs that can be used by non-professionals, provided that data for the analysis needs to be easily obtained from public information such as financial statements.

The author came to the conclusion that the signs of insolvency were displayed by the financial statements of the majority of the analyzed companies that planned expansion. However, these companies continue operating to date. Only 6 out of 500 have been subject to the insolvency proceedings. The author did not investigate in this paper how companies that showed conventional signs of being in difficulty were able to continue and to expand their business. It could be the topic for further research.

The analysis of the limited number of companies that planned expanding their businesses reveals that insolvency cannot be predicted by using any individual indicator. More precise results are achieved by using a combination of indicators. Another conclusion is that cash flow indicators are very important for analyzing the financial situation because cash flow problems may be the early signs of insolvency. In this paper, the author did not come to the conclusion regarding the optimal and easily used coefficient or model.

Development of the best model for the situation in Latvia which could be used by non-professionals for different purposes might be the topic of further research and respective amendments should be introduced in the national legislation regarding the signs of insolvency.

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Network Business Model And Its Geoeconomic Dimension

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Abstract

The article presents a new global model of economic development with geoeconomy as a central vector. It needs to review the fundamental theoretical approaches in key areas. In methods area it is the change of a geopolitical paradigm of the world development to a geoeconomic one. In organizational culture it is the transition to innovation culture based on the priorities and values of intellect. In the structure measures area it is the creation and progress of flexible network models and structures of national economy as the most sensitive to the changes of development tools.

Keywords: geoeconomy, network business model, “intellectual valley”.

Introduction.

The paper concerns the issue of modern structures of global economy especially network local systems in interaction with the economic strategies on national and local levels. The local network economic systems and their specific geoeconomic dimension are taken as a research subject and aim.

The paper aims to investigate the network business model as a new type of local economic system and its role as one of the drivers of modern global economy's progress. The main objectives to refine this aim are following: (1) to identify geoeconomy as a methodological paradigm of modern world development; (2) to develop local network structure of an innovation process in the link with tacit knowledge creation; (3); to define the main types of local network innovation systems; (4) to develop a new type of innovation-network structure – ‘intellectual valley’.

Geoeconomy is performed as a basic methodology approach. The geoeconomy should be taken in the unity of three aspects; firstly, as a theoretical concept, the system of new economic notions; secondly, as the system of economic relations, carried out of the national limits, determining the unity of a global economic space; thirdly, as the system of views (concept) presenting the foreign-economic policy of the state as the one determined by geoeconomic factors of participation of national economies in forming and distributing the world income (Kochetov, 2002).

Geoeconomy as the latest school and branch of scientific knowledge was born practically at the same time in the Russian and foreign scientific thought (Kochetov, 1994; Nester, 1995; Parmelee, 1949). In 2004, in Russia, the *Public Academy of Geoeconomics and Global Studies* was established that proved the presence of an independent scientific school of geoeconomic and global studies in Russia. An important milestone in the development of science was the textbook by Kochetov E.G. “Geoeconomy” for economic subjects in higher school (Kochetov, 2006).

Geoeconomic Paradigm of World Development

Today we see the transition of the world community to the global model of development with geoeconomy as a central vector. Geoeconomy includes a number of fundamental geoeconomic blocks:

- *firstly*, a methodological geoeconomic approach or geogenesis. It is a three-dimensional image of the modern world system in the unity of economic, political, international legal, information, cultural, ethnonational and other components of the world development;
- *secondly*, new understanding of social division of labour as an interenclave one, replacing international division of labour. In new division of labour economic boundaries not political-administrative ones define the main geoeconomic players;
- *thirdly*, accepting economic boundaries which do not match the state ones but mark conditional boundaries of economic activities of serious world players. At the same time some parts of national economies become the links of different world reproduction cycles. The boundaries of such global reproduction cycles (chains) overlap and cross national territories, existing over them, in another geoeconomic space;
- *fourthly*, transforming world economy into the field of forming internationalized reproduction cycles (chains) and transboundary networks where the world income is created;
- *fifthly*, understanding geoeconomic integration as approaching and interpenetration of national reproduction systems under the influence of driving forces and institutions of the development of global geoeconomic medium.

Network Organisation as the Determinant of Innovation Development

The basis of a high-technology industrial system is a cluster-network organization of an innovation type. A network is a system of joined and interconnected units. Networks have exceptional advantages as an organization tool due to their high flexibility and adaptiveness which are decisive characteristics making it possible to survive in a rapidly changing world. That is why networks penetrated all the spheres of the economy and society having excelled and surpassed vertically integrated corporations and centralized bureaucratic systems.

Networks are organisation forms characterized by free horizontal interdependent communications and exchange between all participants. Networks support open and mobile relations between specialists and experts solving different problems. Such international networks are sometimes called informal. It is the innovations that are the heart of their activity: they are created to promote and defend new ideas, norms, procedures. Among other advantages these organisations have the ability to accumulate, process, share various information quickly and use it effectively.

The cornerstone of the whole process is open communication and mutual progress as a result of network interaction and exchange of networking achievements. Without this openness the community participants will each apply their own competitive strategy, and the communication process will put obstacles in the way of intellectual success of the common cause. It corresponds to the fundamental principles of the development of science and technology: the results must be open, accessible to review, criticism and reproduction.

Innovation economy functions basing on the following network culture values:

- a) openness, open access to the necessary information;
- b) horizontal connections, free communication, free flow of information from many to many;
- c) self-developing network. Any person or organization can find their place in the operating network, and if they cannot then they create their own source (site) expanding the network;
- d) the highest value is intellectual freedom. The freedom to create, the freedom to use the present knowledge; the freedom to modify knowledge; the freedom to share new knowledge.

A brilliant example of rapid enhancing the potential of network organization of innovation process is the economy of China. Most national research centres of the country focus on adaptation of innovations to the Chinese market. But there are also innovation researches of a global character closely integrated into the world innovation networks. Table 1 presents the evolution of types of Chinese research centres. The least developed, the laboratory-satellite, has the least strategic importance to the company development, and the highest risk to lose financing. Another type, contract laboratories, usually built in a global innovation network, provides with relatively cheap resources: skilled labour, production capacity, and infrastructure. Partnerships equal in rights are the most developed type, practicing complete and equal interexchange of knowledge and innovations (Li, Jiatao and Jing Zhong, 2003).

Foreign investments in the sphere of research and development in China are mainly concentrated in knowledge-intensive industries: IT, motor industry, chemical industry. Motorola, one of the largest investors in China, in 2005 opened 15 local and global R&D centres and is planning to continue with this process. Large investments in creating new research centres and laboratories are made by Microsoft, Nokia, General Electric, IBM, Siemens, Nortel, DuPont, General Motors, Honda, Hitachi, Toshiba and many other companies. These research centres are placed mainly in big cities: in 2005, in Tokyo alone there were 189 international centres and laboratories, nearly 120 of them – in information and communication technologies. Many of them became the followers of IBM which, for the first time, in China, in 1995, had opened a foreign R&D branch with 100% ownership. In Beijing Zhongguancun Science Park with 40 universities and 130 research institutes placed in it became a real scientific heart of the capital (UNCTAD, WIR-05, 2005).

Table 1

Taxonomy of TNC R&D laboratories in China

<i>Type</i>	<i>Main features</i>
Satellite laboratories	<ul style="list-style-type: none"> • Act as listening post to detect ideas, incentives and innovations that reflect local market characteristics • Adapt existing products and processes • Are vulnerable to budget cuts
Contract R&D	<ul style="list-style-type: none"> • Exploits lower cost skills, capabilities and infrastructure • Implements a specific module of a global research project • Closely interacts with R&D teams at headquarters and at other affiliates • Requires tight mechanisms to control IPR leakage

	• Has dense information flows, but unequal knowledge exchange
Type	Main features
(More) equal partnership	<ul style="list-style-type: none"> • Full integration into TNC R&D strategy • Centre has regional or global product mandate • No barriers to fully-fledged knowledge exchange

Source: UNCTAD, WIR-2005. P. 166.

Science, high technology and transboundary network organization transform geoeconomic space: change relations in production, connections between regions and cities, the model “center-periphery”. Progressing differentiation of local structures of network economy transforms global infrastructure of a geoeconomic system in whole. Hence the announced transition to innovation economy in Russia must base on structure reconstruction on a local level, redistribution of information and resources flows, creation and activation of local systems and centres of growth that must be brought in the development of external economic complex of the country.

Innovation Geoeconomic Medium: Local Network Models and Mechanisms

Using the Internet as the main tool of communication and information, innovation business transforms the network into the form of its own organization. There are formal and informal innovation networks. Formal cooperation of companies can exist in numerous forms, mainly well-known ones: joint ventures, strategic alliances of technological orientation, business partnerships (see Table 2).

Table 2

Ways and Forms of International Exchange of Knowledge and Innovations

Ways	Participants	Forms
International use of national innovations	Commercial (national and transnational) companies and individuals	<ul style="list-style-type: none"> • Export innovation products • Sale of licenses and patents • Foreign production of domestic innovation products
International technical cooperation	Universities and state research centres National and transnational companies	<ul style="list-style-type: none"> • Joint research projects • International scientific exchanges • International exchange of students • Joint ventures • Collaboration with technical information exchange
International innovation production	Transnational companies Universities and nonprofit research centres	<ul style="list-style-type: none"> • R&D in host countries • A network of foreign R&D-branches • Contract R&D with research laboratories based abroad • Business-alliances of a technological type

Informal relationships in network systems are usually established between research teams or individual researchers working in different companies and institutions, and have a high degree of trust and low transactions costs. These costs are usually low because the decision “to sell or not to sell” the knowledge is made by the owners of this knowledge – engineers, specialists, scientists.

From the point of view of innovation character, in fact, a decisive importance belongs to *a local-network nature of an innovation process*. The innovation process is based on resources concentrated in compact local clusters of knowledge. These clusters cover applied and fundamental research, involve universities, agglomerations of industrial firms, business service, promoting interexchange and “cross fertilization” of scientific ideas, and creating face contact of researchers and constant knowledge exchange. In spite of a great number of ways to share knowledge, *a decisive factor for creating innovations* and stable competitiveness is still informal knowledge (tacit knowledge), inseparable from its bearers (we will talk about it below).

It is for this knowledge that local innovation network creates exceptional conditions (fig. 1):

- inside the innovation network there is *exceptionally high intensity of intellectual interaction* that results from nonlinear search character of the process requiring regular personal contact and information exchange between people involved in the search process. High-quality constructive process cannot be attached to time and place, is unpredictable, takes place by trial and error, the search process participants communicating continuously;

- there are informal barriers, *preventing new knowledge from going out* from a local innovation zone: an internal network of itself connecting insiders by informal knowledge is objectively the most effective barrier.

Though there are no formal barriers a real access to a social capital and the processes of knowledge generation and exchange are available to those who is connected by it;

- at the same time *the inflow of knowledge from outside does not have obstacles* and it comes in two ways: part of it is brought by new outsiders (transforming into insiders), and insiders themselves have free access to any outside open resources of knowledge.

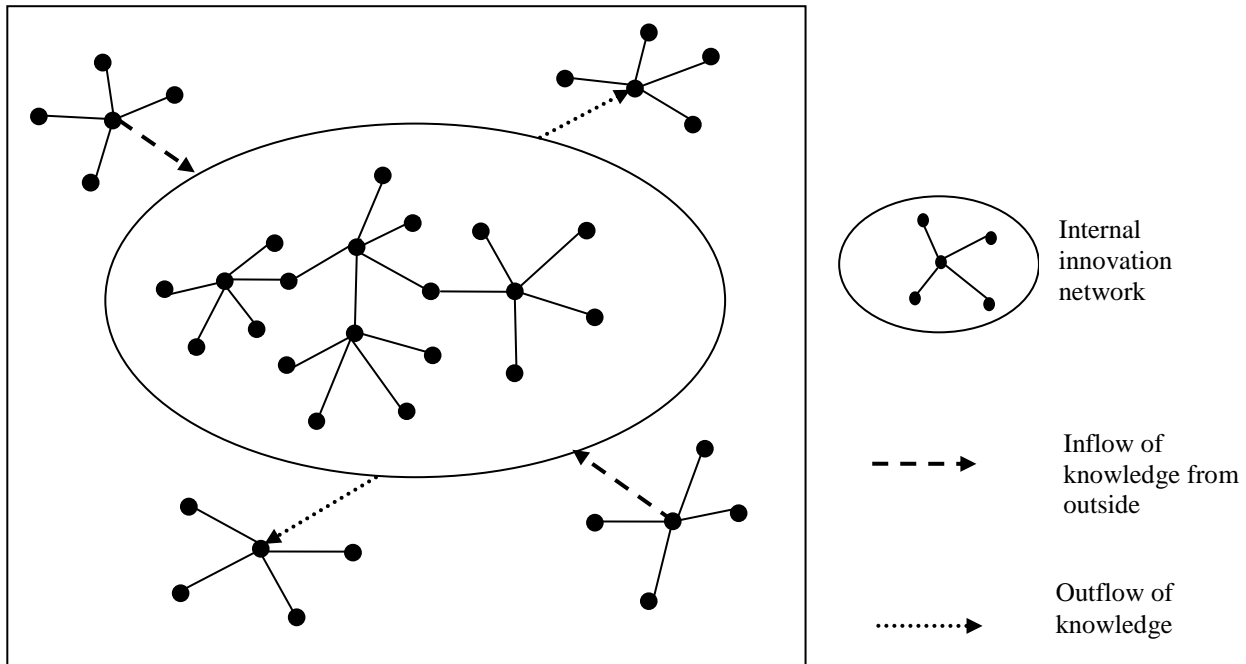


Figure 1. Local-network structure of an innovation process

Source: Dicken (2001). P. 173

To define present characteristics of the influence of locality on the structure of innovation processes it is important to establish the fact that network economy radically transforms the very meaning of the notion “local” giving birth, by the dynamics of network communities, network management and network procedures, to the effect of “deterritorization”, that is it eliminates the notions of local limitation, geographic isolation, remoteness, periphery and so on.

Firstly, *economic agents interact within networks*. Networks themselves become a new way of global actions with different forms of mutual orientation and responsibility;

Secondly, *a binding agent in networks is information*. It is absolutely transboundary and can be put not in words, terms, symbols and has a nonformalized form (for example, skills and abilities) or it can be precisely formulated and formalized (management procedures, laws). It can also exist in the form of habits, conventions, traditions, routines covering the whole global network;

Thirdly, *networks have a colossal educational effect*. A network can store information, generate innovations, as well as, disseminate them in all directions and irrelatively of any concrete point of space where the operator is situated at the moment.

Network innovation systems are formed according to other than commercial, economic laws and do not meet the needs to minimize the costs. What is meant by a network local system in economics? From our point of view a local-network innovation system is a concentrated economic object, the aggregate of united and interconnected participants of the innovation process having free access and control of information, innovations and dissemination of new knowledge in the system. Network local systems are characterized by high adaptivity, mobility, flexibility, openness, freedom, dehierarchization, communication without any barriers.

It is very important to reveal, describe and stratify the main types of local network systems functioning in the innovation space. Stratification means arranging local networks according to their functions, significance, priority, hierarchy, predetermined place and rank of each local system. Stratification of local systems involves not only their functional features but also their behavior as complex systems and presupposes considerable openness, interaction and mutual influence of all elements forming the strata. We offer appropriate terminology (see Table 3).

The Main Types of Local Network Innovation Systems

<i>Names of local systems</i>	<i>Separate features</i>	<i>Examples</i>
Geo-economic regions	An economic territorial system organised and functioning by means of interaction of a specific resource complex with region-forming institutional infrastructure	Rhein Zone (FRG); Emilia–Romagna Region (Italy); Manchester County (Great Britain); Ural Industrial Region (Russia); California and Tijuana (USA – Mexico); Hong Kong and South China
Clusters	A group of geographically neighboring interconnected companies and organisations connected with them, acting in a definite sphere, characterized by the community of activities, and supplementing each other	Glass Cluster in Bavaria–Bohemia; Shipbuilding Cluster in Frisland–Groningen; Digital Cluster in Horten
Science parks	Scientific organisations where the works include the whole research cycle (ripening and implementation of breakthrough scientific ideas)	Academgorodok, Korolyov, Kaskol (Russia); Houston, Seattle (USA); Bangalore (India); Zhongguancun Science Park (China)
‘Technology highways’	Connected with strategic traffic arteries scientific production complexes with technologically complicated productions and advanced technology	Route 128 (USA); Production system <i>English Channel – North Sea</i>
Industrial parks	Agglomerations of big technical universities with developed scientific-technical and economic infrastructure	"Silicon Valley" (USA); Kansai Region (Japan); towns Zhukovsky, Zelenograd (Russia); "Medicon Valley" (Denmark); "BioValley" (Germany – Switzerland – France)
Technopolis	A new or reconstructed town with the aggregate of innovation enterprises arranged by a sectoral or intersectoral feature	Stuttgart (FRG); San Antonio, Detroit (USA); Yekaterinburg, Volgodonsk (Russia)
Network business systems (B2B)	A model of a territorial network business including industrial, financial, service and other types of enterprises, logistics, transport companies, information and specialized centres connected by digital communications	Corporations Nokia; Dell; manufacture of ready-made clothes "Zara" (Spain); Swedish-Finnish banking concern "Merita-Nordbanken"; production-commercial networks in clothing industry "Gap" (USA) and "Benetton" (Great Britain); networks "Beeline", "Megafon" and "MTS"
Digital centres	E-exchanges, auctions and trade sites, changing the aggregate of isolated web-portals of numerous companies in the Internet by a common e-market	Mercedes Benz Consolidation Center (MBCC)
‘Virtual enterprises’	Global Network companies delegating their production, finances, research, accounting, marketing functions to independent subcontractors from different countries	IBM; "Simmens"; "Nokia"; "Dell"; "Cisco Systems"; enterprises acting in the organization form Keiretsu (horizontal keiretsu –Mitsubishi, Mitsui, Sumitomo and vertical keiretsu – Toshiba, Sony, Toyota)
NGOs	Private active organisations of civil activists, working with a network resource, initiating human rights, environmental, feministic, nursery and other activities of humanitarian nature	"Greenpeace", "Doctors without Borders"; Amnesty International; The Environmental Defense Fund; Friends of the Earth; The National Wildlife Federation; The World Wildlife Foundation
Digital cities	Internet projects of urban communities. A public local network in the form of an e-dialogue, having a social status of an interactive centre of public communications, uniting local institutes, organisations and computer networks into one virtual community	Digital City Amsterdam; Cleveland Civil Network
Internet-incubators	Joint pools of resources, providing an integrated “pre-first” and first support of innovation business, cooperation-network interaction with external business environment and network connectivity between created ventures	Brains park, Ideas Lab (USA); Ant factory (Great Britain); international Internet-incubator "Speed Ventures" (Great Britain, USA and others –11 countries all together)

<i>Names of local systems</i>	<i>Separate features</i>	<i>Examples</i>
'Glocal' nodes	Key regions of business development united into the world information network	Manhattan in New York; City in London; Pudong in Shanghai; "Nova Faria-Lima" in São Paulo

Source: Sapir (2004). P. 98-105

An Intellectual Valley – a New Type of Innovation-Network Structure

We made an attempt to identify a new type of a local system in the innovation economy based on the synthesis of economic and non-economic factors of the development taking into account a specific character of the economic growth in Russia (Sapir, 2004). Terminologically this type is described as “an intellectual valley”. *An intellectual valley* as we think is a large local organisational population of an innovative type, able to develop dynamically according to its own inner laws absorbing geo-economic, socio-cultural, civilizational, and spiritual spheres of a geo-economic space in unity.

Institutional aspect of an intellectual valley includes the whole system of organisations and institutions involved in the R&D process that is research and technology institutes, universities, private enterprises subdivisions, libraries, culture and information centres and so on.

Structural-functional aspect of an intellectual valley includes all the aspects and parts of the economy structure that influence the R&D process: product companies, marketing system, financial system, and all the subsystems within the systems mentioned above.

Scale-spatial aspect of an intellectual valley includes all the localized parts of the system placed in a certain region but integrated into a global system of information, employees, ideas, resources circulation.

An intellectual valley is the form of the productive-intellectual-cultural synthesis of technological, economic and ethical values, behavioral patterns, relations, rituals and so on. Professionalism in the newest areas of science and technology together with the skill of operating with high geo-economic technology on the global atlas really ensures a strategic role of intellectual local structures of the world growth. The key factors of the “Intellectual Valley” development are given in the table 4.

Table 4

Key Factors for the ‘Intellectual Valley’ Development

<i>Factors Group</i>	<i>Realization Forms</i>
Object of management	Innovative technological reproductive process
Denial of comprehensive administration	<ul style="list-style-type: none"> - absence of the organisation structures fixed forcedly; - decentralization of management; - absence of strict regulation of the organisation connections inside the structures; - creation of flexible market-strategic structures (modules); - variety of financial resources; - free access to resources
Nature of communication	<ul style="list-style-type: none"> - authority of personal contribution; - accuracy of tasks and fulfillment; - dehierarchization of personal relations; - breaking down of artificial barriers; - freedom of creation; - tacit knowledge - support of out-of-office sociality;
Motives and stimuli	<ul style="list-style-type: none"> - high professionalism; - great responsibility; - “nonfinancial” incentives; - opportunities to choose the place and time to do the task; - flexible work hours; - career development without privileges
Environment	<ul style="list-style-type: none"> - favorable psychological climate; - teamwork; - balance of global, regional, local interests

Source: Sapir (2004). P. 198

The point to develop intellectual valleys comes from the fact, proved by numerous researches, that the generator of innovations is not knowledge in general but special, subtle, tacit, implicit or nonformalized

knowledge³³, (see Table 5). It is not put into technical documents, publications, reports, lectures, patents, know-how. It cannot be expressed exhaustively, it is immanent to the bearer and it remains in whole only in the minds of those who created it as the aphorism says: “We know more than we can express in words”.

Table 5

‘Tacit Knowledge’ Features

<i>Feature</i>	<i>Content</i>
Composition	Experience, intuition, competence, skills, abilities, methods, views, values
Source	It is not contained in traditional sources of information (books, documents, digital carriers and others)
The way to obtain and impart	It cannot be obtained, formalized, preserved in a traditional way (transmission, digitization, writing, typing, codification, accumulation of data bases)
Uniqueness	People do not always identify its presence; it is unique by nature and belongs only to the individual
Value	It is the most valuable as it is context-dependent on people, place, ideas, experience
Forming	It is formed in partnerships, communities, networks and other informal but internally connected structures, where cooperation on different levels, inside and outside the company is not kept within formal limits
Access	Access is available if there is a close contact, trust and interaction

Source: Sapir (2009). P. 175

Nonformalizabilty of knowledge includes such components as intuition, personal experience, contacts and other things difficult to define, formalize or publish, that cannot be expressed completely by their bearers themselves, and have a purely individual character, but they can be imparted to colleagues, staff, co-workers (Saviotti, Pier Paolo (1998). Implicit knowledge can have different forms, for example, special abilities, skills and competences, specific to individuals or teams; common views or ideas but they all cannot be formalized. *Nonformalized* knowledge can become formalized in time as the world scientific community converges and develops its common understanding of concepts, notions, terms, theories. But this process needs much time, intellectual efforts and financial resources.

Local intellectual system creates exceptional conditions for this knowledge exactly. Many researchers think that two factors have crucial importance: trust and “common identity” (Hildreth, P. & Kimble, Ch., 2002). A regional intellectual valley is the model of development, the variant of harmonious connection of institutes, intellectual resources, organisations, as well as social traditions, cultural values, moral priorities combined with better mutual understanding and adherence to the common cause without which the science, industry and business of our country will not break into the innovation area.

According to the level of economic maturity, efficiency of a national economic model the society of Russia today is unfortunately considerably behind the leading countries of the world. The need to get to an innovation type of development has long been in the pipeline. The task is to move not just from export of raw materials to an innovation type of development but from administrative-mobilization development to an intellectual-innovation type. According to the concept of an intellectual valley the increase of compatibility of the Russian economy needs to overcome structural, institutional and spatial disproportions preventing the country from coming into a modern innovation network. A regional intellectual valley is the structure that can be a real help to the society today to obtain understanding of the route and character of movement from administrative-mobilization development to an intellectual-innovation type based on network business model and tacit knowledge.

³³ A special term *tacit knowledge* appeared in literature which in literal translation from English means “not put in words, silent”. *Tacit knowledge* – a unique composition of cognition, experience, skills and intuition, as well as the knowledge of rules, traditions, organization structures, practices and norms. (Bao, Y. and Zhao, S., 2004; Tsoukas, H., 2003; Sanders, A. F., 1988).

Conclusions. The new global economic model and national economic strategies' update require a fundamental shift from geopolitical views on the world system to geoeconomic ones that needs in its turn to review and renew the fundamental theoretical approaches in the following key areas:

1. In the area of foreign economic activity *methods* – the change of a geopolitical paradigm of the world development to a *geoeconomic* one.
2. In *organizational culture* - the transition to innovation culture based on the priorities and values of intellect, creativity, personal contribution authority, common cause.
3. In *structure measures* area - the creation and progress of flexible network models and structures of regional cooperation as the most adequate to innovations and the most sensitive to the changes of development tools and tacit knowledge.

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RISK ASSESSMENT OF COMPANY PROJECTS CO-FINANCED BY THE EU FUNDS AND PROBLEMS IN DIFFERENT SECTORS OF NATIONAL ECONOMY AND REGIONS IN LATVIA

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Abstract

The aim of the research is to study the possible connections of the risk factors of the implemented projects co-financed by the EU funds with inadequate expenses during project implementation in Latvia..

Findings: The research shows that in all phases of a project cycle, starting with planning and finishing with implementation a great role in achieving of project aims is paid by qualitative risk management process which allows identify and prevent different risks of project implementation.

Although, to get the EU co-financing for projects the risk management process is stated as compulsory requirement already in the project financing phase. Practice shows that not always entrepreneurs have sufficient capacity to carry out qualitative risk management process.

Research methodology: Research quantitative and qualitative methods of data analysis have been applied to carry out the research. To summarise the project risk management experience in the world and analyse the results of the previous research the monographically descriptive and logically constructive method has been used. To assess the risks of the EU co-financed projects and to analyse the connections between two independent project risk characteristics, the primary data obtained with the permission of the system holder from the information system of the European Structure and Cohesion funds of the Ministry of Finances of the Republic of Latvia were used in the research. The obtained data were analysed applying the sociological research data procession program – Statistical Package for the Social Science, using both descriptive and analytical data procession methods, including frequency measurements, dispersion and correlation analysis.

Conclusions: Having analyzed the research data it can be concluded that in the projects co-financed by the EU:

- the length of their implementation affects the amount of the non-received financing;
- the degree of the project risk assessment correlates with the amount of the non- received financing of the project during its implementation.
- the amount of the non- received financing of the project during its implementation does not correlate with a company activity in a definite region or field of national economy in Latvia.

The risk management process in the projects mostly takes place only in the project planning phases when it is stated as the obligatory requirement to get co-financing. The research shows that the obligatory requirement compliance quality and obtaining of co-financing depend on the risk management process quality during the project implementation. It allows conclude that it is necessary to research additionally and look for deeper regularities between the risk management process organisation and the ability to run projects qualitatively in companies.

Keywords: project management, project risk management, European Union funds

Introduction

In recent two decades project management in business environment has become topical and necessary in Latvia. In different sectors of entrepreneurship the notion 'project type processes' is being used more and more, and development of new products and services is linked with it, as well as their implementation as separate business process. With Latvia joining the European Union projects acquire even greater importance, as since 2004 entrepreneurs have a possibility to get the EU fund co-financing.

Companies with their ideas can apply for two activity programmes in the EU fund 2007-2013 planning period – *Human Resources and Employment* and *Entrepreneurship and Innovations*. In the activity program *Human Resources and Employment*, financed by the European Social Fund, entrepreneurs can receive co-financing for employee training, implementation of export promoting activities, thus increasing company creativity and the competitiveness of human resources. But in the activity programme *Entrepreneurship and Innovations*, financed by the European Regional Development Fund, those projects are supported which can both increase the effectiveness of production processes by purchasing equipment and carry out research and new innovation activities (www.esfondi.lv, 2012).

The above mentioned ways of support for company entrepreneurship give a possibility to develop and enhance their competitiveness which is especially important during the economic crisis the Latvian economy is recovering from.

The EU fund support for entrepreneurs is proportionally divided among all regions of Latvia, especially supporting those regions where the indicators characterising entrepreneurship are lower than the average ones in Latvia.

To be able to successfully implement the EU fund co-financed projects entrepreneurs have to fulfil all administrative requirements of the EU funds stated not only by the EU legal framework – directives and guidelines, but also by the national legislation on the EU fund administration and project implementation. Otherwise, the supervisor institutions of projects when conducting project documentation inspection state non-compliances and improper expenses. From the point of view of entrepreneurs they cause losses for the company, and it has to cover them using own finances. To minimise the risk for the companies to have non-compliances to the stated requirements during the project implementation and thus to lose the EU fund co-financing project risk management is stated as an obligatory requirement when implementing the EU co-financed projects in Latvia. Already in the project preparation phase entrepreneurs have to identify project risks. It is necessary to state the possibility of a range of various risks – strategic, financial, etc. and their effect on project aim achievement. Besides, the risk prevention plan has to be developed. During the implementation of the project the receiver of the financing has to manage the risks. Project risk management on the level of the EU fund programmes is done by the institutions involved in the EU fund administration. The Ministry of Finances which is the EU fund managing authority has developed the methodology of stating project risk degree (Guidelines on Making Financial Corrections in Projects Financed from the European Union Funds, 2010)

According to this methodology the EU fund managing authorities divide projects into three categories – low, medium and high risk degree projects.

The following factors to state risk degree are used:

- project implementation length,
- type of financing receiver,
- total amount of project financing,
- assessment of project activities.

In the framework of the EU fund project administration in the projects having high risk evaluation the managing authorities pay greater attention to project implementation adequacy requirements. However, despite the above mentioned, on the programme level in the implemented projects in this EU fund planning period (2007-2013) already inadequate expenses of 7.7 million lats which are direct co-financing losses have been stated (Informative Report on European Union Structural and Cohesion Funds, 2012). It shows that risk management process is insufficiently qualitative and should be improved. Studying the EU fund use in the regions of Latvia, it can be concluded that the entrepreneurs of Riga and Riga region more successfully use the possibility to attract the EU fund co-financing to develop ones' companies. Therefore in the framework of the research the division of the previously mentioned project risk factors and the possible interconnections will be studied. If statistically significant connections will be stated in the course of the research, the authors of the research will use them for further research and will look for the reasons of the problem which could be the lack of company employee knowledge and experience concerning project implementation in regions of Latvia, outside Riga, the non-existence of company quality management system and incorrect analysis of project implementation risks.

The aim of the research is to study the possible connections of the risk factors of the implemented projects co-financed by the EU funds with inadequate expenses during project implementation in Latvia.

The novelty of the research is as follows: the assessment of the risk level of the EU fund co-financed projects implemented by entrepreneurs in Latvia and stating of problematic questions.

Theoretical framework of the research

Many-year project management experience shows that there are no projects which do not have risks during their implementation (Rippenberger, 2000). Risks can be various and contradictory, and different criteria can be used to classify or group them, for example, financial risks, operational risks, etc. (Verdina, Verdina 2012).

Risk management is one of the main management responsibility fields which has to be carried out by the executive management of an organisation and its employees (Verdina, Kašētienē, Liela, 2010). Although many executive managers associate risk management only with particular processes, currently there is a transition to new understanding of risk management paradigm, i.e., all level managers and employees are involved in risk management. Effective risk management covers the whole organisation and is designed to

identify potential events which may have influence in the future, to obtain qualitative information for decision-making and thus to improve quality of strategic decisions (Pettere, Voronova, 2003).

The comprehensive risk management is structured, integrated and continuous process in all levels of organisation to identify, assess and report on opportunities and threats which influence goal achievement in an organisation, as well as to make decisions about them. Each organisation can individually choose the methodology of risk management process. It is important that all people and people groups involved in the organisational process are completely aware of the chosen methodology, and that the risk management process covers all basic goals (Verdina, 2010).

Risk grouping is an essential part of risk management in order to choose the most effective risk management methods (Pettere, Voronova, 2003). Project risk management is specific because like a project itself it has limited time, however, classical risk management methods can be used in project risk management. Project risk management is a process that envisages identification of project implementation risks, their analysis and planning of the events to minimise the risk setting and their effect on project aim achievement, as well as planning of unforeseen expenses for project implementation (Barton, Shenkir, Walker, 2002). Project risk management process can be divided into several phases. The first phase is the risk assessment phase when risk analysis is made and every risk setting probability, as well as risk effect on project aim achievement is assessed. The second phase of risk management is the phase of working out the action plan in order to envisage preventive events to avoid project risks. The next project risk management phase can be called the phase of the action plan implementation during which not only the previously worked-out events for decreasing risks are carried out, but also, if necessary, the action plan for risk decrease is supplemented. Research literature recommends during the project implementation to envisage also extraordinary action plans if the action plan to avoid project risks turns out to be ineffective and some of the risks has set in during the project implementation and is a threat to successful project implementation (McGrew, Bilotta, 2000). Effective project risk management is a continuous process during the whole project implementation time (Barton, Shenkir, Walker, 2002). Project risk management is characterised by its specifics – in project implementation various, characteristic to a definite project risks can arise, therefore the good practice of the project risk management is to be able to adapt and be dynamic according to the situation of the stated risks in the project implementation process (Zafeiropoulos, Metaxiotis, Askounis, 2005). Effective risk management includes all organization and is developed to identify the possible events which can affect project implementation in future in order to receive more qualitative information to make decisions, thus improving the quality of strategic decisions, as well as to manage risks in accordance with the risk level allowed in the organization (Verdina, 2008). Today a new paradigm in risk management is described in research literature, and this paradigm, contrary to the old paradigm which stated that risk management is done irregularly and fragmentarily, and the allowed risk management process includes only separate risks, states that risk management process is continuous and all employees of the organization are involved in it. Project risk management process according to the new paradigm includes risk management both in the project planning and implementation phase, it also includes all risk groups which can influence successful implementation of the project.

Scientific publications about risk management in projects show that risk identification in the project planning phase is often not more than a long list of risks which is not clear to everybody involved in a project. The list of project risks can give a possibility to assess risks and state which of them should be set off first during the project implementation, but it does not provide qualitative risk management. In the process of risk management it is important to assess risks not only before starting a project, but also during its implementation (Hilton, 2003). The research on risk management shows that heads of projects do not understand risk management, and often risk existence in projects is ignored and risk management does not take place. Heads of projects rely on a possibility that risks will not set in, however, for qualitative project management risk analysis is necessary, and heads of projects should be able both to identify and set off risks (Kutsch, 2008). Heads of projects should assess also the effectiveness of risk management process – the resources spent against benefits from setting off risks (Besner, Hobbs, 2012). In project management it is necessary to work out new risk management methods which are integrated in project management process (Dey, 2001). One of the ways of risk management in projects is the development of a project portfolio before starting the project implementation. Some researches described in literature prove that risk assessment following project portfolio information is successful (Olsson, 2008). A good project description that includes project activities and the time schedule plays a great role in project risk management, as it is mentioned in literature that project risks are often not identified due to incomprehensible or incomplete project descriptions (Tah, Caraa, 2000). Most frequent risk sources in projects are technologies, mistakes

made by staff and shortcomings in project knowledge management (Mobey, Parker, 2002). There are different new approaches concerning employee training about project risk management in the literature, for example, the use of multi media, creating new knowledge for employees, applying more effective learning (Loosemore, 2010).

However, practice shows that in Latvia in the risk management process of the EU co-financed projects still there is the old approach when risk identification and assessment is done only when risks have already set in, and risk assessment in the project preparation phase is done mostly only formally. It should also be pointed out that heads of projects do not understand the significance of risk management process.

Research methodology

Research quantitative and qualitative methods of data analysis were applied to carry out the research. To summarize the project risk management experience in the world and analyse the results of the previous research the monographically descriptive and logically constructive method was used.

To assess the risks of the EU co-financed projects and to analyse the connections between two independent project risk characteristics the primary data obtained with the permission of the system holder from the information system of the European Structure and Cohesion funds of the Ministry of Finances of the Republic of Latvia were used in the research. The data about 1733 projects which are implemented in the 2007-2013 EU fund planning period were obtained. The research involved projects implemented by business organizations which have been finished or are being implemented right now. The research included the period from 2007 up to 2011.

The primary data characterising projects included the information about:

- project length in months,
- project implementation region,
- risk evaluation level,
- project implementation sector (according to NACE classification),
- financing receiver's type of entrepreneurship,
- project total financing amount,
- amount of inadequate expenses, if there are any during a project implementation.

The primary data characterising projects were grouped in case it is necessary, dividing them into groups for data statistical procession. The following data groups were made:

- projects according to implementation length in months were divided into three groups:
 - the first group included the projects which implementation length does not exceed six months;
 - the second group – the project implementation length does not exceed twelve months;
 - the third group – the project implementation length exceeds twelve months;
- projects according to implementation sector were divided into five groups:
 - the first group included the projects which are implemented in the sectors of agriculture and fish hatchery,
 - the second group included the projects which are implemented in different sectors of industry, except food industry,
 - the third group included the projects which are implemented in food industry,
 - in the fourth group – the projects which are implemented in service industries,
 - in the fifth group – the projects which are implemented in other sectors of entrepreneurship;
- projects according to financing receiver's type of entrepreneurship were divided into five groups:
 - the first group included the projects which are implemented by stock companies,
 - the second group included the projects which are implemented by individual businessman,
 - the third group – by cooperative companies,
 - the fourth group – by state business companies,
 - the fifth group – by limited liability companies;
- projects according to non-compliance statement were divided into two groups:
 - the first group included the projects with non-compliances,
 - the second group included the projects without non-compliances.

The obtained data were analysed applying the sociological research data procession program – Statistical Package for the Social Science, using both descriptive and analytical data procession methods, including frequency measurements, crosstab measurements.

Research results

The research includes the analysis of 1733 project characterizing indicators. Analysing the project data using the descriptive methods of statistics it can be seen that in general business organizations in Latvia in the EU fund 2007-2013 planning period projects were implemented with the total sum – 1.2 million lats. The analysis shows that the average project total sum is 641 336 lats.

As it was mentioned in the introduction, the EU fund monitoring authorities state the risk degree for every project, then adequate project supervision is carried out. The research data show that most part of projects is assessed as low risk (45.2%) and medium risk (46.2%) projects. Only 8.6% of 1733 projects implemented by entrepreneurs are assessed as high risk projects.

Table 1.

The EU co-financed project division according to total project risk assessment

Project risk class	Frequency	Percentage
Low risk project	784	45.2
Medium risk project	800	46.2
High risk project	149	8.6
Total	1733	100

However, despite this, mistakes are often made in projects during their implementation what causes losses to entrepreneurs – inadequate expenses are stated in projects (22.7% from all projects included in the research). The descriptive analysis shows that that average non-compliance in projects is 172 695 lats.

Analysing other project characterizing data included in the research it can be mentioned that according to project length projects can be divided into similarly equal groups:

- projects which are implemented for less than six months – 33.4%,
- 35.4% of projects are implemented up to twelve months,
- 31.2% of projects are implemented longer than twelve months.

Table 2.

The EU co-financed project division according to project length

Project length	Frequency	Percentage
Less than six months	578	33.4
Up to twelve months	614	35.4
Longer than twelve months	541	31.2
Total	1733	100

Taking a look at project division according to the type of financing receiver's entrepreneurship it can be concluded that most often projects are implemented by companies which are limited liability companies – 85.2%, other types of entrepreneurship are not often represented among the EU fund co-financed project financing receivers.

Table 3.

The EU co-financed project division according to the type of financing receiver's entrepreneurship

The type of financing receiver's entrepreneurship	Frequency	Percentage
Joint stock company	115	6.6
Sole trader	84	4.8
Cooperative enterprise	30	1.7
Local government/ state enterprise	27	1.6
Limited liability companies	1477	85.2
Total	1733	100

The projects divide more evenly in the research sample if they are analysed according to project implementation sector (according to NACE classification). Most of projects are implemented in production industry – 48.3% of all projects, then 22.2% are implemented in service industries. Only some projects are implemented in agriculture and fish hatchery industry – 0.6% and food industry – 2.2%. 26.7% are implemented in other above not mentioned industries.

Table 4.

The EU co-financed project division according to project implementation sector

Project implementation sector	Frequency	Percentage
Production industry	837	48.3
Service industries	385	22.2
Agriculture and fish hatchery industry	11	0.6
Food production industry	38	2.2
Other	462	26.7
Total	1733	100

The project division according to Latvia regions is analysed as the last project characterizing indicator, and it can be seen that project division is even among Latgale, Vidzeme, Kurzeme, Riga and Zemgale planning regions, where on average about 12% of projects are implemented in each region. However, the analysis of the research data shows that among regions Riga, the capital of Latvia, stands out in term of project number with 38% implemented projects of all projects included in the research.

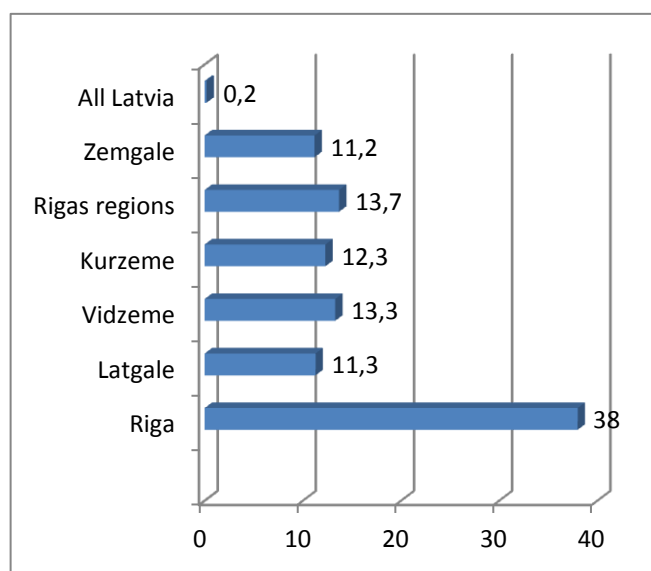


Figure 1. EU co-financed projects according to Latvia regions

To analyse the mutual division of project indicators according to groups and the risk degree assessment, crosstabs measurements were made, including also Chi-Square Tests.

To evaluate whether risk degree assessment is even between different project characterizing groups two hypotheses were forwarded:

- H0 hypothesis – between project characterizing groups (division according to project implementation length, financing receiver's type of entrepreneurship, entrepreneurship industry division and existence or non-existence of inadequate expenses in a project) risk degree assessment is statistically even;

- H1 hypothesis – between project characterizing groups (division according to project implementation length, financing receiver's type of entrepreneurship, entrepreneurship industry division and existence or non-existence of inadequate expenses in a project) risk degree evaluation is not statistically even.

Analysing the obtained results of data procession, it can be concluded that among all project characterizing groups of indicators there is statistically even project risk degree division (Chi – Square Sig value is less than 0.05).

To evaluate whether inadequate expense stating in a project is evenly divided among different project characterizing groups of indicators and whether non-compliances are not seen more often in some definite groups, for example, in the projects which are implemented longer or in the projects in some definite entrepreneurship industry, non-parametric statistics test – Kolmogorov – Smirnov Test was used.

Two hypotheses were forwarded before the analysis:

- H0 hypothesis – between project characterizing groups (division according to project implementation length, financing receiver's type of entrepreneurship, entrepreneurship industry division and existence or non-existence of inadequate expenses in a project) non-compliance stating in projects is statistically even;

- H1 hypothesis – between project characterizing groups (division according to project implementation length, financing receiver's type of entrepreneurship, entrepreneurship industry division and existence or non-existence of inadequate expenses in a project) non-compliance stating in projects is not statistically even.

Having analysed the obtained results of data procession, it can be concluded that among all project characterizing groups of indicators there are statistically even non-compliances (Kolmogorov – Smirnov test sig value less than 0.05).

To state whether there are statistically significant differences between the project risk assessment of different regions of Latvia where the projects are being implemented, crosstab measurements were made, including also Chi-Square Tests.

Two following hypotheses were advanced:

- H0 hypothesis – there are no statistically significant differences between the project risk assessments;

- H1 – there are statistically significant differences between the project risk assessments among projects of different regions of Latvia.

Having analysed the obtained results, it can be concluded that the project risk level is similar in different projects in different regions of Latvia – the projects of high risk are being implemented in all regions of

Latvia, what allows assert that project risk does not depend on entrepreneurs' location in some definite region of Latvia, but on individual competence in project management of each separate entrepreneur.

To state whether there are statistically significant differences between the stated existence or non-existence of inadequacies among different regions of Latvia stated during project implementation, crosstab measurements were made, including also Chi-Square Tests.

Two following hypotheses were advanced:

H0 hypothesis – there are no statistically significant differences in existence or non-existence of inadequacies among projects in different regions of Latvia.

H1 – there are statistically significant differences in existence or non-existence of inadequacies among projects in different regions of Latvia.

The analysis of the research data shows that also in this case the statistically significant differences among different regions of Latvia have not been stated.

Conclusions

Having summed up the results of the analysis of the obtained research data it can be concluded that:

- most part of the projects are assessed as low risk and medium risk projects;
- rise of inadequate expenses is stated in 22.7% of all projects included in the research;
- projects implemented by business organizations are evenly divided according to the length of project implementation;
- most often projects are implemented by limited liability companies;
- most percentage of projects are implemented in production sector;
- most percentage of projects are implemented in Riga, the capital of Latvia, but in other regions of Latvia the number of the implemented projects is even;
- among all project characterizing groups of indicators project risk degree division is statistically even;
- in all project characterizing groups of indicators non-compliances are stated statistically evenly.

The last two conclusions allow think that the EU fund institution project risk analysis methodology that as risk assessment indicators uses risk implementation length, project total financing amount, etc. project characterizing indicators analyzed in the research, cannot assess all possible aspects of risk rising. It can be concluded that the fact that inadequate expenses in project monitoring process are evenly stated in low, medium and high risk projects indicates the significance of each individual project management quality and the ability of definite head of project to assess project risks. The risk management process in the projects mostly takes place only in the project planning phases when it is stated as the obligatory requirement to get co-financing. The research shows that the obligatory requirement compliance quality and receiving of co-financing depend on the risk management process quality during the project implementation. It allows conclude that it is necessary to research additionally and look for deeper regularities between the risk management process organization and the ability to run projects qualitatively in companies. The research authors will continue project risk assessment research and the main risk factor analysis of the EU fund co-financed projects implemented by business organizations in Latvia.

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Developing a course on e-business in an emerging information society

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Abstract:

This paper will describe how an e-business curriculum and an e-business and information economy understanding is emerging through a process of trial and error. The subject of e-business is becoming increasingly more important in new disciplines (e-business is diffusing into new areas) and needs to find a way how to be taught and included in their curriculum.

The goal is to develop elements that can be taught in a course on e-business. Several experiments are discussed in which e-business is taught to different disciplines e.g. tourism; IT and business students and with different tools e.g. online and classroom. The benefits of collaborative teaching are experimented as well as benefits that can be achieved through scalability between classroom.

The paper concludes with several benefits derived from experimentation, but also with the observation that present structures of the learning environment are barriers to efficient teaching. A migration to a more open environment is necessary as well as a hand on, e-tool oriented approach.

Background and research setting

Society is transforming from an industrial society into an information economy. This means change at an individual level, change at the level of business organizations and institutions, and change at the level of society. New knowledge is continuously emerging, which helps to understand the underlining theories behind an information economy. New IT based tools are emerging to help the individual, the company (e.g. enterprise resource planning systems) and society. These tools and new knowledge have the potential to transform how institutions and governments work (e.g. the development of e-government).

Transformation however is not easy. The information society emerges when companies leave their traditional networks to create value in new ways and network with new and different kinds of companies in new value networks. In some cases laws have to be changed before new value networks can emerge. For established industrial societies the greatest challenge is in actively destroying the networks of an industrial society.

A university of applied sciences values collaboration with the surrounding community including private enterprises and the public sector. A university of applied sciences can simply not focus on building new knowledge and new disciplines; it has to work together with the community to learn together and to build change together. A university of applied sciences is embedded in established structures and is in practice not a “tabular rasa”, which can design new teaching elements from scratch. In particular a university of applied sciences is constrained by its curriculum, which is in turn monitored and reviewed by those who are themselves embedded in the structures of an industrial society.

This paper will describe how an e-business curriculum and an e-business and information economy understanding is emerging through a process of trial and error. This is a bottom up experience. Key to this evolutionary process has been the use of an opportunistic approach. E-business elements and theory have been embedded into existing and established curriculum. The need expressed by students for online courses and the need for courses during the summer has been used as a “market window” to offer courses on e-business. This paper describes a continuing search for new opportunities and possibilities i.e. “market windows” to teach e-business to students of also slightly varying disciplines e.g. business students, IT students, tourism students and future nurses.

The method can be regarded as experimental in which different experiments have been constructed, conducted and data collected during courses to different audiences and whilst conducting class.

Experiments

1. A course on strategy – experimenting with game theory and business models

Teaching strategy is a standard part of a bachelor course in business administration. However some e-business perspectives were embedded into the course. It is far easier to embed new elements into a course and test these new elements within a standard course than to build an entirely new course. A standard course will have participants, because it is part of a compulsory program whereas an optional course would have to compete for participants.

The course on strategy, with 50 participating students, is conducted in dialogue with three mid-sized companies. One of these companies is a manufacturer of domestic cleaning equipment. The second company

is a novel logistics company and a third an accounting company. This allows from the perspective of e-business for students to observe how e-business is conducted and emerging in these companies at the strategic level. The core focus of the course is not on e-business and the companies do therefore not feel intimidated by a possible lack in e-business capabilities.

The key objective of the course is for the students to study the history of these companies (path and network dependence), to apply strategy models to identify the present strategic position (e.g. Porters five forces, PESTEL framework) and also to debate future options (Ansoff matrix, BCG matrix) and for the students to understand the strategic process within the particular company and how strategy is taken into practice.

During the course students are introduced briefly to information technology used within a company e.g. the concept enterprise resource planning (erp) and the concept of customer relationship management (crm). The students are also taught the idea of a business model using the framework of business model generation (Osterwalder, Prigneur 2010). The students are also given a notion of how value is created and captured in a network through playing some practical games and by reading articles on game theory and value creation (Brandenburger, Nalebuff 1995).

In their study assignment the students can comment on the strategy creation and implementation process of the firm. In particular they can observe and comment on how new e-business projects emerge and are present in the portfolio of strategic projects of the firms e.g. change of accounting into over the Internet accounting, the need of a web shop interacting directly with consumers together with the traditional business to business distribution channel and the importance of an enterprise resource planning system tailored to the newly defined processes of a novel logistics company.

2. An online course on the emergence of e-markets

The emergence of online learning environments has allowed the creation of virtual courses. A virtual course is independent of time and location and hence allows for people with busy schedules and long travelling distances to find new ways to study. Also at the end of their studies students are allowed to participate in courses of their choice and a virtual (online course) is preferred because of its flexibility compared with a traditional class course.

A virtual course, which is repeated every second month was created focusing on market creation and the business models of the Internet. This course is also available during the summer months and was particularly popular in the summer months, because the low availability of courses during summer in general and also because it was available through the network of three different universities (www.fuas.fi) reaching a potential of 20 000 students and achieving a participation of 120 students during the summer semester.

This experiment has shown that there is a clear need - a market window – by the students for online courses. However it has also shown that existing internal business unit structures prevent the scalability of courses. During the summer of 2011 the course was available for any of the 20 000 students. In the summer of 2012 the course was available only to the students of a single campus, because there was no internal agreement on how other campuses would pay for their student's participation.

This course on emerging new e-markets has focused on some key theories of an information society and on the mobile internet market. These theories include the concept of the Long Tail (Andersson 2006), the idea of six degrees of connectedness (Barabási 2003, Watts 2004) and the value of a digital commons (Benkler). The theories were also made available as brief YouTube lectures (available with the search word VilleSaar).

The long tail allows for the students to understand the value of web shops compared with the value of traditional physical shops. The notion of six degrees allows for the students to understand the value of connectedness, which is the underlying characteristic of the Internet. The notion of the commons allows discussing and understanding the resource based view of the firm, but above all what happens when resources (computing capacity and communication capacity) become abundant and so cheap that value creation can no longer rely on limited resources. This leads into a discussion on the emergence of new business models e.g. open business models.

In the course task students are asked to collect material on the emergence of the mobile internet market in Finland. In particular they are asked to (1) focus on changes in legislation (e.g. how allowing bundling handset and operator, number portability and price caps to roaming) have changed and are changing the market. Students are also asked to study (2) how new business models are changing the market (e.g. flat rate pricing for mobile internet), (3) to try and find key products that have transformed the market (e.g. computer connectivity to 3G networks and smartphones) and to try and find (4) new companies and (5) new value

chains (e.g. the emergence of iPhone and its strategy to supply to one operator only). The focus of this exercise is to allow the student to understand that when building a new market, changes need to happen in legislation, key products, business models, key suppliers and their value chains.

The students also survey their friends with a questionnaire to find out (6) if their friends are lead users or lagging behind in their use and (7) to find what usability issues are possibly key to adoption. The students can then – having identified these potential barriers to entry – try and predict what factors will open the market of e.g. mobile web shops, e-identity on your mobile and mobile payments through the use of nfc.

To develop the course further collecting cases on different developing e-business markets is currently under way. The goal is that students could in the future compare how different e-markets are emerging e.g. e-education, e-health, music industry, mobile internet.

3 A course on Operative management systems in tourism

E business and it in business is emerging to become a core part of every industry. Traditional teachers of e.g. hospitality and tourism or of social and health care do not necessarily have the skills to teach the meaning of IT based systems to running a company. Thus there is a need for teachers outside their discipline.

This allowed for a course on operative systems of the hospitality and tourism industry to be created together with a teacher, who knows the industry. At universities classes are normally conducted and allocated to be taught by a single teacher. This does not a good way to encourage the diffusion of new information. E-business is a skill which is needed in several disciplines. It is therefore an interesting new practice to create co-operative classes in which general principles of e-business merge with the particular interests of the discipline. Two teachers are hence better than one. However, from the point of view of management, this may seem as costly (two teachers instead of one) and hence inefficient.

Tourism is one of the few industries which has already transformed and migrated onto the Internet. Thus it is an industry to learn from and an industry which needs to understand the theoretical principles of the information economy.

One of the key observations and outcomes of this course, which has now been conducted on two consecutive years, was a frame work in which the students looked at the industry from three different levels: the individual, the corporation and society. Groundswell (Li & Bernoff 2010) is defined as the phenomenon in which individuals interact with each other to perform the task of Institutions thus forcing traditional corporations and institutions to change.

Students are given three tasks. In their first task they work on the individual level and are asked to design a personal trip to a central European destination using available web tools and to comment on how they would use the Internet before and during the trip. In this way students will gain hands on experience of the groundswell phenomenon i.e. how they as members of a consumer mass can change the way the tourism industry works.

In their second assignment they focus on the corporate level and are asked to read the book of e-tourism by Buhalis (2002), which contains several cases of e-business within the tourism industry. Students can focus in groups on different segments of the industry e.g. hotels, tour operators, travel industry like railways, airlines etc. During the course live cases come to class to explain how their operational systems work. Amadeus and Sabre are traditional industry based communication networks. Students will familiarize themselves with these systems, but also get to know the operational systems of these new companies. Students will learn to connect the process with the system.

On the third level students are made aware of the society level. However no practical assignments have so far been found in which students could, in a similar way as in the mobile internet course study the tourism industry and the emergence of new e-business concepts in tourism. However some students have, at a later stage, researched into e-business opportunities in their final thesis study. These studies include the changing patterns of use of mobiles by tourists when roaming and tracking good horse riding routes and making them available for visiting tourists.

4 A course on innovation, experimenting with scalability and e-tools

During early spring a class on innovation and innovation methods is conducted. This is an introductory class into business plans and how companies create new business ideas. During the course students create new business ideas and are encouraged to participate in a business idea competition later on in the spring.

The course has allowed for experimentation in scalability and adoption of e-tools to experiment with scalability. A traditional class of students consists of 20-30 students. In this case five different classes from different disciplines are conducted by the same teacher. The students are IT students, business management

students, tourism students. One of the student groups is a group of adult learners ranging from their 30's to their fifties. All together there are about 140 students. They all share a common e-learning platform, in which they are encouraged to share problems and ideas with all the 140. They thus have a virtual class of 140, but a physical class of c 30. This allows to experiment with the difference both challenges and advantages in virtual sharing compared with sharing in a class dialogue.

During the innovation process the students create their business idea. A special focus is on services and open innovation (Chesbrough 2011). At the end of the process they are asked to present the idea to the class. This idea is videoed using a mobile phone and is then put on the e-learning platform for everybody of the 140 to view. The video's proved to be more popular than the cours powerpoint slides. A total of 25 videos were available for students to view. In the future some method should be developed allowing the students to both comment and rate the ideas.

At the end of spring, students are encouraged to participate in a business idea competition. This competition is open to all of the 20 000 students of three different universities. During the spring a total of c 800 students have participated in similar innovation courses. A total of over 200 business ideas participate in the competition. Thus far the ideas have been given in text format and reviewed by a set of judges. In the future the business ideas could be given video format, shared by all participants, commented and rated. Scalability allows for interesting possibilities and definitely changes traditional teaching environments.

5. Barriers in experimentation

A natural discipline, in which the society level is key in the emergence of e business opportunities, is the health care industry. This segment has worked with e-identity issues, e-patient care documents, e-prescriptions etc. Legal issues are characteristic to many of the new e-health initiatives. Thus interacting with the health care students and teachers and teaching e-business to them is of interest. However no opportunities have thus far arisen to do so. There are several possible reasons for this. The cultural mindset of e.g. nursing is not business oriented and thus a business oriented teacher is not necessarily welcomed. However it could also be that the curriculum in nursing is very normative and does not have room for voluntary courses experimenting with emerging fields.

Our university of applied sciences has 8000 students and several hundred exchange students. The e-business (digital) market is an emerging market effecting all disciplines and areas of the economy. Thus one would assume that an e-business course would be of interest to exchange students arriving to Finland from different parts of the world. It would also allow for the study of emerging e-business markets in different countries and thus the comparison in student based assignments of different markets.

The mobile internet online course was offered in English to the exchange students. The assumption was that exchange students need credits due to the lack of courses in English. There were no participants, which was a surprise. One given risen for lack of interest was that an online course on e-business does not fit into the curriculum of their home organization. This is somewhat surprising since e-business is a core growth area throughout Europe. Another possible reason is that online courses are not of interest to exchange students since their focus is on interactive, hands on, face to face experiences.

Conclusions and future areas of focus

Several conclusions can be made from these experiments on teaching e-business to students from different disciplines. First of all e business is an emerging subject and there is a need for an understanding of e-business principles in several different disciplines. Second, the evolutionary, bottom up and experimental tactic has proven to be effective since it allows for experimentation within existing curriculum courses. Elements which have been developed in individual courses can be recombined and adapted in other courses or complete courses focusing solely on e-business can be created. Thirdly, a need for an even more hands on approach exists. E-business is also about tools. Some of these tools are proprietary and company specific and expensive, but also many tools are available open source and for free. These tools are developing continuously and hence it should to an increasing degree become common practice that different software based tools are used to experiment, develop and run actual online businesses (e-businesses).

Fourthly, existing structures do create unnecessary barriers. Having two or several teachers on the same course allows for a multidisciplinary approach in teaching and for the diffusion of ideas and skills between teachers, but this is not the common practice and norm and hence requires an experimental attitude from the management. Traditional structures come in the form of budgets and who pays for the course and this unnecessarily limits even within a single university who can participate in a course. All courses are not open

to all. Structures also prevent scalability. Scalability is a characteristic of the Internet. The Long Tail emerges on the Internet, but it does not emerge on a university campus – structures prevent it.

The fifth observation is more of an open question than a fact: why experiment, why not use a book on e-business and build a course on existing material? After all, a good supply of e-business books do exist e.g. Turban & Volonino (2010), Reynolds (2010) and Laudon & Traver (2010). It is not only about teaching a subject – e-business. It is also about changing the way of teaching e.g. online and scalability. The subject e-business might be well enough formulated for books to exist, but it is not necessarily accepted as an element of curriculum in areas like nursing. Hence experimentation is a good tactic for entering new disciplines with the subject of e-business.

Finally, the sixth observation, future experimentation could focus on creating and experimenting with open environments and open data. Instead of storing course material and slides solely on the e-learning environment provided by the university, material could and should be stored on open environments like slideshare. One could clearly experiment with a more open approach in which course ideas, contents, methods, used material, data collecting etc. are done on open platforms.

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ELECTRONIC SIGNATURE AS PART OF STANDARDISED BUSINESS PROCESSES

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Abstract

The number of business areas requiring usage of electronic signature is increasing dramatically that could be explained by rapid development of information technology. The aim of this paper is to investigate the application of electronic signature in various business processes requiring identification and authentication of originator of respective information.

Purpose. The main goal is to determine advantages of the usage of the electronic signature, identify the reasons fostering the implementation of electronic signature and propose solutions for business process standardisation with electronic signature as integrated part of the possible applications. The scope of the paper is analysis and comparison of electronic signature solutions in the Baltic countries, different areas of application of electronic signature and investigation of some practical case studies.

Design/methodology approach. The methodology is based on comparison of different solutions used for identification and authentication of private persons, requirements of legal frameworks towards usage of electronic signature and analysis of recent trends in application of electronic signature.

Findings. The authors identify the most important applications of electronic signature and show its role in improving and standardising various business processes. The research focuses on practical applications of identification cards with embedded functionality of electronic signature as part of the electronic data interchange processes. Such cards are comparably new in some European countries (e.g. in Latvia) and therefore additional efforts are needed to adopt all functionalities offered by this type of identification cards.

Research implications. The paper outlines practical examples in the usage of electronic identification cards for obtaining and provision of information to different service providers and institutions. Since identification cards are mostly perceived just as a physical identification document, there is a need for additional efforts to explain the added value of electronic signature embedded in the identification cards. The paper also outlines how the electronic signature should be used in efficient and secure way to avoid potential risks of identity theft.

Originality/value: This study opens a road to a wider discussion for introduction of electronic signature into various business processes thus ensuring standardised cost-effective mode of doing regular operations, which is a common concern for governmental institutions, business and enterprise.

Keywords: *Electronic signature, Electronic data interchange, Business process, Data processing, Interoperability.*

Introduction

The digital world has experienced a fast development over the last decade enabling a wide range of technological improvements that make true revolution in many aspects of economy and business. Latest researches show that up to 80 percent of different business processes and workflows need usage of any paper forms either for data input like various application forms or vast range of output documents. Each of these paper documents should be collected, processed, stored, copied, and the most important, the majority of business documents should be signed. Each legal entity and each human being should spend a lot of time and definitely, pay some money for processing of paper documents. Wide replacement of paper documents with electronic documents is one of the most obvious examples of new opportunities provided by contemporary IT solutions. Electronic signature is an important part in the lifecycle of the digital documents securing the legal force of respective documentation where required. A lot of researchers mark the obvious trend in usage of electronic signature, mentioning that “application such as banking, stock trading, and sale and purchase of merchandise are increasingly using electronic transaction to minimize operation cost and provide enhanced service” (Khanh Phan Duy, 2011).

2. Electronic signature in business

2.1. Why businesses need electronic signature?

The necessity for electronic signature and its comprehensive introduction in various business processes started a long time ago, but only during the recent years governmental institutions and business enterprises

began to pay more closer attention to practical steps in this direction. According to ARX (n.d.), it makes sense to mark some general principles why enterprises, business practitioners, company managers and a lot of physical persons need electronic signature.

Usage of electronic signatures could provide a company big advantage in business competitive world by reducing expenses of paper and keeping high level of security, as a result companies considerably reduce operation costs. Paper-based signature or other signing technology can never provide such reliability and simplicity as electronic signature. With the proper electronic signature enterprises can get a lot of business benefits, like increasing trust and higher customer satisfaction, closer and stronger cooperation between business partners, thus facilitating sales, increasing performance and efficiency.

Companies are widely introducing electronic signature in internal business processes and workflows changing the way they are doing business, saving investments and dramatically fastening data processing within company. Various IT tools and groupware applications support close collaboration and groupware job being very popular in many industries, such as financing, engineering, government and insurance, supporting, for example, paperless agreements, invoices and a lot of various applications. Many authors, including Dulawat (2010) and Arizona Department of Transportation (2008) mention a lot of advantages in usage of electronic signature, common for various areas.

To be competitive and survive in tough business competition many enterprises are very keen to introduce electronic signature as part of their external business process.

So, the latest trend for majority of business companies is creation of enterprise portals with wide range of built-in customer services. Electronic signature can break the traditional habits and previous business experience to process a lot of paper-based order forms, which were asked to be signed and faxed. By supporting fast and simply unique customer identification with guaranteed data security and integrity within the portal, enterprise could dramatically increase sales and ensure closing of a lot of electronic deals. Companies with numerous customers, especially in area of electronic commerce and e-business, like B2C, B2B, G2C, other similar service providers, banks, insurance, utilities, and governmental institutions should manage a lot of electronic contracts. In these circumstances enterprise should manage and govern paperless virtual contracts in flexible and secure mode, ensuring cost-effective management of workflow. A lot of companies in Latvia are really interested in making their business in virtual world and, as a result, vast majority of them have introduced electronic document management systems with electronic signatures for originators' identification. Essential part of such systems is processing of electronic contracts.

Next step in job with virtual contracts could be "migration" to electronic invoices. The authors' experience in Latvia gives the evidence that in recent years more and more local companies are trying to introduce electronic signatures allowing company's users and customers to work with electronic invoices non-compromising user security data and being more and more acceptable by customer. On one hand, unfortunately, there are still some psychological issues in customer behaviour that deter them from wide usage of electronic signature. On the other hand, today's electronic signature in Latvia is standard-based, not requiring any proprietary software on the sender and recipient's parts.

As one of popular solutions we should mention combination of electronic signature with mobile technologies and integrating them into some business processes. These attempts were done mainly for financial services expecting to attract new customers who like new modern technologies and are too busy for doing business in traditional paper-based way. Financial institutions needed to get better performance and data processing speed thus reducing operational costs by incorporating electronic signature in mobile technology. At the same time by using mobile phone as device for user's identification, companies tried to be the best in competition, promoting their brand and enlarging customer base.

2.2. Electronic signature standardisation issues

Many researchers and practitioners pay large attention to the usage of electronic signatures in various business areas, supposing this new service could be extremely useful worldwide. Some authors even conducted detailed comparison of legislation in different countries, electronic signature laws and its possible influence to general business trends. The result of international efforts in electronic signature standardisation were reflected in various legal frameworks, like Directive 1999/93/EC of the European Parliament and of the Council on a Community framework for electronic signatures or official documents obligatory to follow in other countries (Mason, Bar Sol, 2012). For being competitive in international market it is essential for any company to keep up with various international standards, thus allowing cross border exchange of financial and other documents without any obstacles and in proper mode. Vast majority of developed countries have now begun adoption of special legislation on the subject of electronic signatures in fields of e-commerce and e-business. But on the other hand, introduction of electronic signature in real business practice may vary

widely and sometimes do not precisely meet all legal requirements in similar way. Some authors conclude that “dozens of pieces of legislation and legislative proposals now exist around the world on the subject of e-signatures” (Campbell, 2005), but in every case business enterprise must be assured that customers are in compliance while using electronic signatures.

Several years ago while investigating the situation, existing policies, related legal documents and standards in EU, researchers who were working for European Commission found out several main drawbacks in standardisation area, which in general are common for majority of European countries (Lacroix, Delos, et al., 2007):

- absence of real standards;
- lack of business practice standards;
- too complex and not applicable in practice;
- not self-explanatory etc.

With all due respect to EU experts and researchers, the authors do believe that over the last few years the situation has changed dramatically introducing the society with new philosophy of electronic signature. Electronic signature is presented in various physical ways for practical use and could be incorporated in every business industry converting it into e-industry or e-enterprise, like e-banking, e-procurement, e-health, etc. In Latvia and in all Baltic countries governmental authorities and institutions are doing their best in order to maximise meeting the expressed business requirements while launching electronic signature solutions that are more standardised than before and going towards business standards used in real practical economy. These standards try to overcome the problem of being excessively academic and not flexible, supplying the users the solid framework with wide possibilities for usage of electronic signature products. Main services needed for economic and business society will be electronic signing of documents, verification of electronic signature and unique identification of the person or enterprise.

2.3. Security of electronic signature

The fundamental advantages of electronic signature usage in business processes are the following: a) identifying the user - who is signer of the document; b) verifying the authenticity of the signed document; c) enabling non-repudiation of the particular document signed by particular signer, otherwise called integrity of the signed document. Essentially all abovementioned pros of electronic signature are the issues of security. Considering security aspect of electronic signatures, two main types of signatures should be investigated, each of them having slightly different level of security supported. According to Adobe Systems Incorporated (2008) “the term “electronic signature” encompasses all signature methods that include electronic components. Two main categories of electronic signatures have evolved: digital signatures and e-signatures.”

Digital signatures are based on Public Key Infrastructure (PKI) which is very common architecture used for authentication of physical persons and legal entities, signatures’ creation and verification, approvals, and confidentiality either for individuals or for enterprises. A lot of fundamentals are devoted to detailed description of PKI architecture, structure, signature schemes and algorithms, covering the basic foundations of modern cryptography (Katz, 2010), (Yang, 2011), (Aashish, 2012), and others.

Katz defines digital signature as “cryptographic analogue of handwritten signatures that, in fact, provides much stronger security guarantees. Digital signatures serve as a powerful tool and are now accepted as legally binding in many countries”. Digital signatures architecture is based on Public/Private Key infrastructure for cryptography being able to provide persons authenticity and documents integrity. PKI infrastructure’s keys and certificates should be managed by Certificate Authority; in general, this is governmental institution, which is responsible for keys and certificates non-repudiation, including certificate revocation when needed. Introduction of digital signature requires also implementation of additional hardware and software at the particular enterprise to establish separate server and other equipment for processing of digital signatures that undoubtedly leads to additional IT investments and increases the total costs of ownership of the solution.

E-signature contrary, in general does not require an existence of PKI infrastructure, using less sophisticated security mechanism than digital signature. The security and indemnity degree of e-signature becomes considerably lower making e-signature more unprotected and defenceless. As a result, e-signature should be used mainly in internal business processes and workflows at the enterprise, when data in general are not leaving the system-originator or enterprise computer network.

So, the complete and proper solution for introducing electronic signature in main business industries to be used externally between various involved parties, could be only and solely digital signature. But even in

case of using digital signature as main authentication and authorisation framework, enterprise management must be fully confident about security issues through the whole cycle of data processing. This is an issue of communication between signer and document receiver. Taking into account rapid evolution of modern technology and increasing prevalence of wireless technology and channels, one of the concerns in area of digital signatures is ensuring of highly secure communication protocols and wireless channels to be able to support immaculate and faultless sensitive personal and financial data transmission signed by digital signature. “These authentication methods should be robust against various attacks.” (Sravanthi, Prasad, 2011).

3. Experience of electronic signature introduction in Latvia

The first attempts to introduce electronic signatures in the economy and business in Baltic countries were taken at the beginning of the 21st century. Estonia was the first Baltic country who started to issue electronic signature in 2002 (see Table 1) by introducing electronic identity cards for all country citizens and ensuring the possibility to vote using ID-cards that contain e-signature certificate. For legally binding digital signatures time is very important factor, therefore eID card in Estonia allowed citizens using of time-stamping linking together signature, time and certificate validity.

Milestone / Country	Estonia	Latvia	Lithuania
Legal Framework			
Data Protection / Privacy Legislation	1996	2000	1996
E-Signature Legislation	2000	2003	2000
E-Commerce Legislation	2004	2004	2006
E-Communications Legislation	2004	2004	2004
Infrastructure			
Introduction of electronic signature	2002	2006	2005
Introduction of eID card	2002	2012	2009
Introduction of Mobile-ID	2007	2009	2007

Table 1. The main milestones in implementation of electronic signature in the Baltic countries (years of implementation)

Latvia chose slightly different way of electronic signature implementation policy, at first trying to launch some main business workflows, which required secure and reliable way of supplying information to and from institutions' customers. At the beginning of the 21st century the Latvian government took the decision to commence project of putting electronic signature in real business practice. During the initial period of implementation Latvian institutions used digital signature for enabling bilateral authentication of legal entities, mainly between financial institutions and enterprises for various types of business workflows. At this time government had done a lot of efforts for electronic signature standardisation, trying to launch various standards for electronic documents interchange (Zvīrbulis, 2008). In 2004 Latvian Association of Commercial banks accepted “Common Standard for Financial Data Interchange (FidaVista)” thus ensuring financial institutions with single common approach for regular banking data workflows. Key players on the internal financial market in Latvia were pleased with introduction of the industry issued standards satisfying essential business requirements and as a result many applications were created and launched to support data exchange between financial institutions and enterprises. The authors of current research have been working in banking industry and have many years' experience with introduction of electronic data interchange solutions into core banking systems.

In general, digital signature and FidaVista Standard were used mainly to support some particular workflows in the following financial services:

- getting account statement;
- applying customer transfer;
- getting actual rate of currencies;
- data exchange with data of direct debit contracts and direct debit transfers.

Seeing great perspective and a lot of business benefits for secure and reliable mass data exchange, leading Latvian financial institutions established long-term data interchange with their customers – large corporate enterprises introducing new application for business work flow usually called GateWay. The GateWay solution required usage of digital signature both on the sender-signer side and on the receiver side, so ensuring reduction in printing and paper costs, and cost-efficient secure electronic workflows.

During the first phase of implementation of electronic signature Latvian citizens could start to apply for personal electronic signature embedded in special card called E-Me with possibility to use time-stamping for signing of documents. First E-Me electronic signature cards were issued in 2006, but Latvian citizens were reluctant in applying for new electronic signature since the process for application was quite lengthy and usage of E-Me cards required additional equipment and software. In order to promote the usage of electronic signature a new type of electronic signature known as virtual electronic signature was implemented in Latvia in 2011. The new virtual electronic signature does not require specific hardware, but even despite implementation of such seemingly user friendly solution the overall number of users of electronic signature remained below 15 000 at the end of the year 2011 (see Diagram 1). Comparing this number with overall usage of Internet in Latvia (see Diagram 2), it is obvious that the reasons for extremely low usage of electronic signature in Latvia are not related with technical possibilities, but society's trust in usage of electronic signature and benefits provided by electronic signature. In light of low popularity of electronic signature, society still needed identification service which is one part of electronic signature's functionality. This gap has been filled by banking industry since internet bank identification tools fully meets requirements for user's identification and these tools can be also used to identify users in different internet portals.

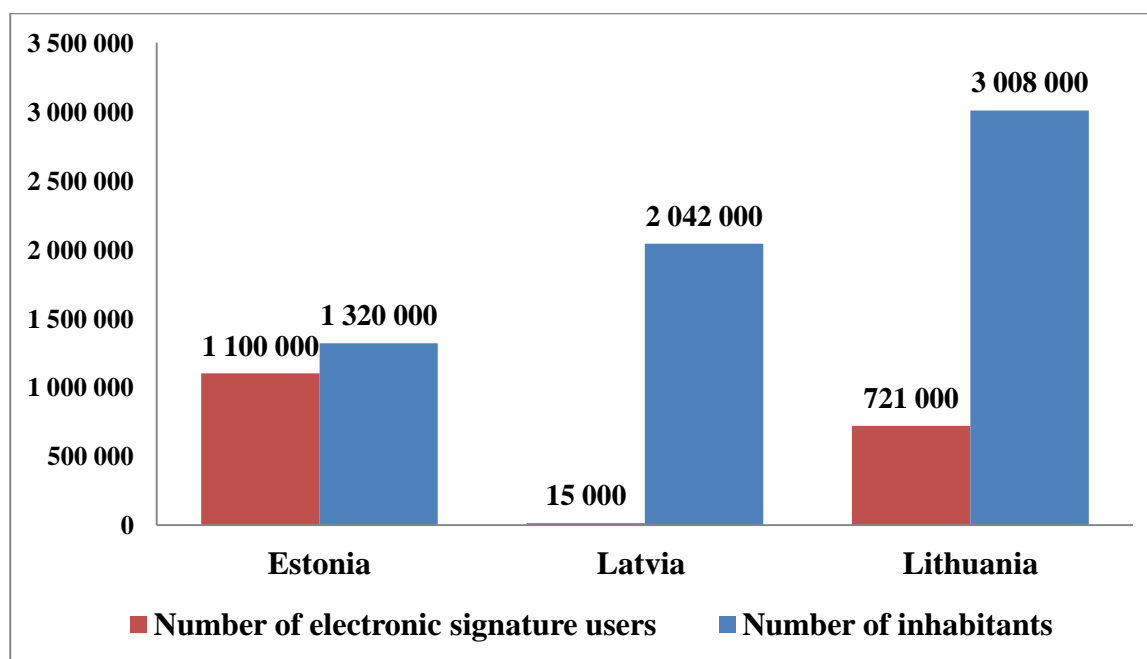


Diagram 1. Number of electronic signatures issued in the Baltic countries by the end of the year 2011. Sources: estonia.eu, Central Statistical Bureau of Latvia, Statistics Lithuania, the Communications Regulatory Authority of the Republic of Lithuania (RRT).

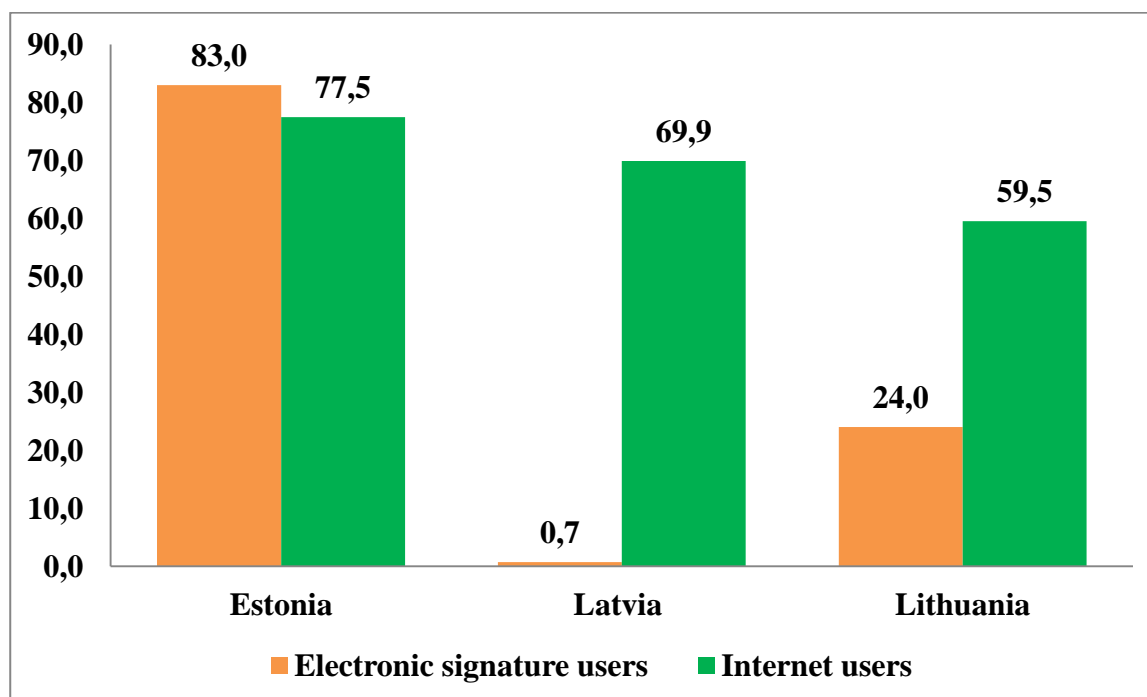


Diagram 2. Electronic signature users vs internet users (% of population at the end of the year 2011). Sources: estonia.eu, Central Statistical Bureau of Latvia, Statistics Lithuania, the Communications Regulatory Authority of the Republic of Lithuania (RRT), www.internetworldstats.com.

In April 2012 Latvia made the next important step towards implementation of perfect multi-purpose electronic signature. Hoping to rectify the impression of E-Me card implementation and polish digital signature image, government did large job in mass media trying to promote and foster new Identification Card (eID) usage and persuade individuals to accept this new solution. eID card is multi-purpose identification document, which could be used for wide range of services, such as:

- communication with state and local governmental institutions;
- signing the documents and transactions between legal entities, like contracts, invoices, applications, other documents;
- third persons' authorisation;
- individuals' authorisation and authentication.

Wide introduction of eID card in Latvian society could launch true digital signature as "gold standard" with irreproachable image ensuring unique digital fingerprint for each customer, clear and proper customer intention to sign particular document, and, finally, high integrity of signed document. In this case the enterprises and individuals get a lot of real benefits, starting with eliminating of the costs associated with paper, moving documents instantly across offices or even across borders and countries and finishing with improved workflows and document management system.

4. Conclusions

Electronic signature is efficient and it can save significant costs.

The modern trends in economy and business require wider usage of electronic signature for cost-savings and efficient way of doing business.

Implementing proper solution for business workflows could incredibly raise the Return-on-Investment (ROI) costs by realising full potential of business possibilities.

Electronic signature is reliable, legally binding, and it can fully substitute handwritten signature.

It is evident that both the handwritten and digital signatures are legally binding, but only the digital signature ensures non-repudiation of documents.

Electronic signature solutions produce legally acceptable electronic records, completely eliminating the need to print documents for signing.

Security aspects are highly important, and users must ensure that electronic signature is secure and all relevant data are properly protected.

E-signature could be used only and solely for internal workflows management, that definitely needs lower level of data security while managing external data flows with other partners require the highest degree of security and protection of the contents of the documents.

5. Recommendations

All relevant costs must be assessed prior making any investments in electronic signature infrastructure and corresponding business solutions.

While considering implementation of electronic signature, every enterprise should estimate its own business requirements for this solution. Before business invests an electronic signature system, it should investigate business needs and decide about proper solution.

Clear information regarding the purpose, usage and advantages of electronic signature must be provided. Society's commitment is the most important part of successful implementation of electronic signature infrastructure.

Launch of any successful software solution could fail if customers do not accept it, therefore governmental institutions, business companies and mass media should pay considerable attention to explain to the society necessity and benefits of digital signatures and provide clear instructions.

For successful implementation of electronic signatures and replacement of slow and expensive paper-based processes with efficient, low-cost and fully digital ones, business should gradually introduce regular, standard business workflows for their customers, thus making them familiar with new services and possibilities.

Favourable pricing principles must be adopted to make electronic signature available to all citizens.

Successful implementation of electronic signature depends on appropriate pricing models for eID cards, card readers, regular documents' signing and time-stamps.

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INFORMATION STRATEGY IMPLEMENTATION AND ASSESMENT

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Abstract

The objective of this article is to identify the ways of information strategy that can be implemented and to overview the basic steps of its assessment. To achieve selected objectives, a wide range of publications dedicated to information strategy from all over the world was analyzed, ranging from works on strategic management and enterprise life cycle management to latest researches on strategic information management and information rent calculation.

The results of the analysis let to identify the basic stages of the information strategy development and implementation. Moreover the integrated approach of information strategy assessment was proposed to complexly analyse all the benefits information strategy gives to the enterprise: both financial and non-financial for all the four strategic perspectives (finance, customers, internal processes, learning and development) and help provide and sustain the alignment between business strategy and information strategy objectives.

Information strategy approach may and must be implemented on all types of enterprises, including, but not limited to information intensive businesses. Properly developed and implemented information strategy may effectively support decision making on investment in information systems and information technologies, and will help avoid unnecessary costs and risks. In turn, proposed approach to information strategy assessment will help managers evaluate monetary benefits of having an information strategy.

Project-based information strategy implementation approach is proposed to make organization adaptation to new management aspect more easy and effective. The complex approach to information strategy assessment, based on evaluation of implementation projects return on investments and calculation of information rent is developed to monitor and evaluate information strategy effects more accurately.

Keywords: information strategy, information rent, strategic information management.

Introduction

The last decade was characterized by a significant increase in the importance of information in all areas of human life. Due to the latest definition information is “the oil that keeps the economy working smoothly” (Bishop M., 2004). The era of transition from industrial to post-industrial economy (when the key resource to have is information) led to the emergence and spread of information approach in economics.

The study of economic processes on the basis of information approach (Smith, 1990) allowed looking at the economy as a giant information network with its internal nodes (companies) that produce information and at the same time are its consumers and transmitters.

In today's hyper-dynamic environment one of the major ways to increase the competitiveness of the enterprise is to rationally manage information resources (Smith, 2008; Chang R., Oh W, Pinsonneault A. and Kwon D., 2010). Information today is treated as the most important and rare resource and as a part of the economic potential of the company. And its efficient usage determines the achievement of strategic goals of an enterprise. That is why the problem arises to determine and form information strategy for a company.

The objective of this article is to identify the ways of information strategy that can be implemented and to overview the basic steps of its assessment.

The methodology of the research includes theoretical research approach, involving a literature overview, publications study and analysis and drawing conclusions. On the basis of the methodology used in this article, the author has formulated the following main research questions:

- To identify the basic stages of the information strategy development;
- To show how can measure the effectiveness of information strategy implementation?

The results of the article let to identify the basic stages of the information strategy development and implementation and let to describe how information strategy effectiveness can be evaluated.

Literature overview

Information strategy as an approach to information technology and business strategy alignment appeared in 1970s. Today, the research of works of scientists indicates polysemanticism (dependence on the used context) of the nature of enterprise information strategy. Information strategy is described as information systems strategy (Keen, 2008), result or a part of information systems strategic planning (Fitzgerald, 1993), strategic information systems planning, together with information technology (IT) strategy, information management (IM) strategy, management of change strategy, and human resources strategy (Galliers, 1991), a combination of information systems strategy (aligning information systems with business goals, and

exploiting IT for competitive advantage), IM strategy and IT strategy (Earl, 1989), part of resource strategy, a component of innovation strategy, and even a type of production strategy (namely the strategy of information production) (Omelyanenko, 2010) or marketing strategy of IT department.

Analysis of scientific problem

In this study we define information strategy as a complex of actions that describes how a company will leverage information to create value in the long run in a dynamic business environment.

Before we go further, it is essentially important to determine the place of information strategy in the strategic set of a company.

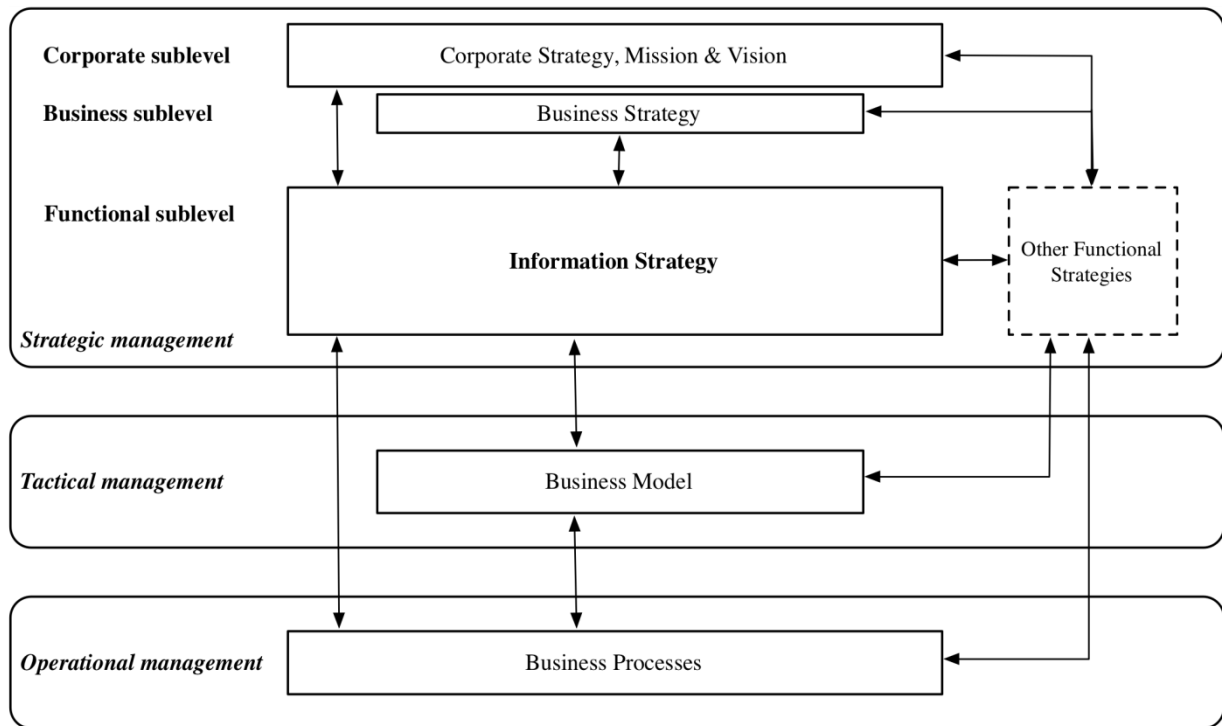


Figure 1. Positioning and alignment of information strategy of an enterprise

Source: developed by the author

As information resources and information systems are used throughout a company and relate to almost every business process we tend to consider information strategy as one of the functional strategies of the enterprise. And as a result we are able to establish a conceptual link between them and the information strategy at the strategic, tactical and operational managerial levels (Fig. 1).

It should be noted that the processes of managing the information should include the following tasks:

- determine the economic, social and political information that may affect the business;
- systematically gather relevant information;
- organize (index, classify, combine) the information and databases for the entire enterprise;
- process information;
- distribute and support information (reuse the existing information, update databases).

Based on the value chain model by M. Porter (Porter, 1985), cycle information management by C. Choo (Choo, 2002) and the work of S. Schwolow and M. Jungfalk (Schwolow S., Jungfalk M.), who formulated the principles of strategic management of information in the form of information value chain, which consists of primary and supporting processes. Here we suggest our vision of this framework in the light of information strategy concept (Fig. 2).

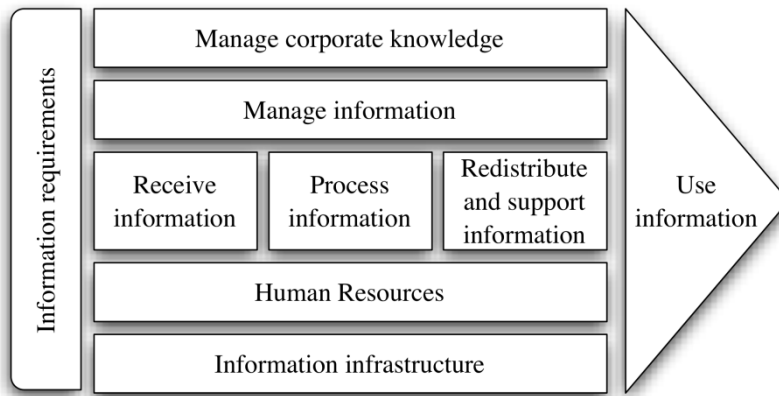


Figure 2. Information value chain of an enterprise

Source: summarized by the author based on Porter (1985), Choo (2002), and Schwolow S., Jungfalk M.

Primary processes include those which directly use information resources, thereby increasing their value: the processes of information gathering, processing and distribution of information.

Supporting processes are designed to ensure continuity and maximum efficiency of the primary process. It should be noted that the supporting processes in the bottom of the chain (human resources and infrastructure) are mainly focused on ensuring the continuity of the process of value creation, while supporting processes in the upper part (knowledge management and information management) – to ensure maximum efficiency of the process.

First block – receive information – includes the entire set of processes that scan the external environment. The collection of information is particularly important to identify market trends, opportunities, external risks, and causes of internal enterprise inefficiency, customer preferences, and structure of the demand and a host of other information resources that can be used to create strong competitive advantage.

Information technology can facilitate information retrieval by increasing the speed of information processing and reducing errors. Moreover a powerful information processing capacity is the undisputed source of benefits as the information overload can neutralize all the positive effects of good information supply. Therefore, it is important to balance diversity and growth process of obtaining information. For this purpose, accurate information management policy can be extremely valuable.

The processing of information includes all observation processes associated with the modification or synthesis of information resources obtained during the process of environment scanning and receiving information. Information filtering can serve as an example of such processes, reducing distortion of information and formatting information.

The value of information processing lays in the editing, preparation and representation of information resources for specific purposes.

The process of information redistribution covers all activities aimed at spreading and sharing information resources. Such activities can be organized, for example, by e-mail, through training and education sessions, publishing content via the website and so on.

Distribution of information adds value, based on the principle of “information is difficult to create but easy to play.” This can be especially useful in the field of knowledge management, which allows the enterprises to share their experiences. Other typical applications include marketing, internal communications and stakeholder communications.

Thus, as the outputs of the above chain we get increase in value compared to the value of inputs, which should be reflected in the growth of the company's capitalization. And this process goes on and on regardless of does the enterprise have a stated information strategy or not. Suppose that managers indicate inefficiency in information management process and choose to implement the information strategy of some kind for the company. But before they even select the right strategy, they need to take some important steps.

These steps include:

- 1) Conduct the information audit for the enterprise as a systematic examination (detection, monitoring and evaluation) of the use of information and knowledge, information resources and information flows and management of the company (and their relationship with the staff and documents), which is carried out to determine the extent of their contribution to the achievement of strategic business objectives. It involves identifying the information needs of users and how effectively (or not) they are satisfied. Methods of

information audit involve identifying critical processes where problematic situations occur most often. The most well-known methods of information audit are: information card building by Burk and Horton (1988); analysis of information flows by E. Orna (Orna, 2004); an integrated approach to information audit by S. Buchanan and F. Gibb (2007, 2008a, 2008b) and P. Griffiths (Griffiths, 2012); seven-stage model of information audit by S. Henczel (Henczel, 2001).

2) Due to results of the audit managers of the enterprise can determine what type of information strategy they really need, and are able to plan the shift from their current information strategy or its total absence to what they think the proper information strategy is.

3) Audit also clarifies whether the current information infrastructure contributes the strategic goals of the company, and whether the current information culture and relations in the sphere of information are really necessary for successful implementation of business strategy.

4) After defining all the obstacles to successful implementation of the necessary information strategy, projects should be proposed for the transformation of information structure of an organization to a structure which will facilitate the implementation of information strategy. Metrics and success indicators should be determined for these projects and the goals of information strategy should be aligned in line with the strategic vision of the enterprise (Table 1).

Table 1

Aligning the goals of information strategy in line with the strategic vision of the enterprise

Strategic perspectives	Strategic goals	Information strategy goals
Finance	Maximization of capitalization. The increase of net income - invest in product development	Growth of informational rents. Reduce transaction costs. Reduce the costs of information systems. Reduce the cost of outsourcing information services. Improvement of control spending on information technology
Customers	Increase market share. Attract new customers. Improve customers' retention. Increase customer loyalty to the brand and the company.	Integrate information systems with consumers' information systems. Improve customers' information systems. Improve channels of communication between departments. Improve customer service and satisfaction through IT
Internal processes	Improve processes effectiveness. The constant update of information systems and technologies. Find and develop new information products. Reduce business-processes costs	Improve information processes that create added value. Implement information systems to optimize business processes. Decrease IFRAG (degree of information fragmentation of business processes).
Learning and development	Improve and develop staff skills. Introduce qualification standards. Constant training. Staff motivation.	Improve communication in the enterprise. Improve access to knowledge base.

Source: developed by the author

Now, after the information strategy will be implemented through the chosen projects, one question remains: how do we measure the effectiveness of information strategy implementation? Information strategy effectiveness can be evaluated using appropriate financial and non-financial metrics and performance

indicators. Such basic financial indicators can be identified:

(1) ROI of proposed projects of information strategy implementation (returns on IT/IS investments and return on information activities that are the results of improvement of internal enterprise's information processes). Investments in information products and services include: software; database creation and support; improvement of communication networks; market research on the dynamics of product and factor markets as well as changes in competitive positions and plans of competitors; conduction of promotional projects; information services staff skills development etc;

(2) Reduce transaction costs (Fig. 3);

(3) One of the most important indicators for enterprises engaged in production of information products and services is the information rent. Information rent can be described as excess profits derived from the use of information products and services, which resulted in the growth of consumer value due to additional investment, or profit from owning useful for consumers information resources in conditions of inelastic supply and demand. The cause of information rent is a monopolistic ownership by limited, more valuable information necessary for the development of business areas.

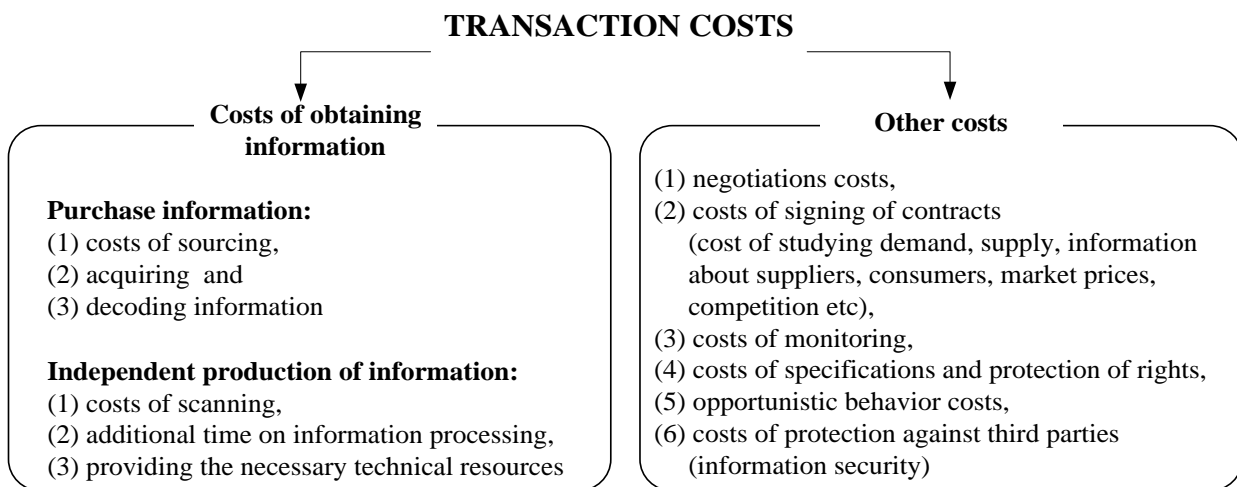


Figure 3. Enterprise transaction costs structure

Source: summarized by the author based on D'Hondt C. and Giraud J.-R. (2008)

There are also non-financial effects of information strategy, such as: user satisfaction, improvement of information capabilities, speed of information processing and decision-making processes based on it.

Conclusions

In the conclusion it is expedient to list some key benefits of having an effective information strategy. With effective information strategy properly developed, implemented and evaluated the decision making on investment in information systems and IT will be based on organisational strategy and users' needs, rather than latest "technological fashion". A strategy will help avoid wasting time on useless activities; particularly users having to interpret information received in unsuitable formats, a strategy also ensures an organisation meets its legal requirements, so avoiding unnecessary costs and risk to reputation. Properly managed information supports innovation, productivity and competitiveness. Through the strategy information activities are unified, so fully contributing to organisational objectives a strategy encourages co-operation and openness between managers of information resources. This results in more effective use of the organisation's information and in stimulating innovation.

Having analyzed the existing approaches to the evaluation of the information strategy of company, we conclude that the most effective method is to combine analysis of the effectiveness of information strategy implementation projects and information rent calculation by estimating the cut of transaction costs.

Furthermore, the ongoing monitoring and evaluation of the information strategy is vital.

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