TRIANGULATION RESEARCH DESIGN FOR STUDYING OF THE CONCEPT OF BANK VALUE

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Abstract

Shareholder value maximization should be an integral goal for any company, including financial institutions. The object of the given research is the concept of bank value. The current research is a sequel of the authors' earlier conducted researches in the fields of value-based management and sustainable development. The goal of the research is to verify the validity of the developed structural model of the concept of bank value. We used triangulation or multi-methods to ensure the validation of the developed model: (1) the academic staff with finance-related specialization from European universities was surveyed, using the mail questionnaire method, and (2) using the program AQUAD, the authors conducted a content analysis of the text segments, extracted from the description of the different value creation models. The paper offers the advanced conceptual model of bank value. The model combines the ideas proposed by relationship value management, value-based management, and concept of sustainable development.

Keywords: bank value, concept, structural model.
JEL Classification: M21.

Introduction

Banks are the most important category of financial institutions in the new Member States (NMS) of the European Union, including Latvia. Considering the fact that the performance of the banking sector is a big part of overall economic performance, value creation in Latvian commercial banks is a top question on the agenda. Financial crisis has had the largest negative effect on banking sectors in Baltic States comparing with other NMS. Return on equity (ROE) index has gone down dramatically in Latvia and in its neighbours. ROA and ROE dynamics for European Union NMS comparing with EU27 (27 European Union countries after enlargements in 2004 and 2007) are presented in the Table 1 ("EU Banking Sector", 2010).

Table 1. ROE and ROA indices, 2008-2009

Country	ROE %		ROA %		% of total banking assets of institutions with ROE<0	
	2009	2008	2009	2008	2009	2008
Bulgaria	8.0	17.3	1.1	2.0	1.0	1.0
Cyprus	10.0	14.7	0.6	0.9	1.6	1.4
Czech Republic	17.1	14.6	1.4	1.1	0.9	1.1
Estonia	**-48.5**	16.0	**-3.4**	1.3	n/a	0.7
Hungary	22.5	15.1	1.7	1.0	4.0	0.9
Latvia	**-52.4**	**3.1**	**-4.0**	**0.2**	**84.8**	**20.0**
Lithuania	**-70.1**	11.4	**-3.9**	0.8	**99.0**	2.7
Poland	7.0	14.3	0.7	1.3	5.4	3.4
Romania	5.9	18.8	0.5	1.7	20.5	8.5
Slovenia	1.1	**5.2**	0.1	**0.4**	38.2	3.0
Slovakia	5.6	10.3	0.5	0.8	20.6	6.3
EU27	0.3	-3.2	0.0	-0.1	29.3	36.6

However, the process of looking for ways to maximize value should be started with clarifying the term "bank value" and determining its key components. On the authors' opinion, it can assist to elicit the factors affecting value creation. The interpretation of the notion differs widely depending on the research directions and on the viewpoints of experts.

Thus, the object of the given research is a concept of bank value. It should be emphasized that our prime interest is related to the issues of value management, rather than to the questions of value estimation.

The research is the sequel of the authors' earlier conducted researches (Titko&Lace, 2010; Titko&Lace, 2011). The empirical results allowed constructing the structural model of the concept of Bank Value. Besides, the paper reflects the results of the practical survey, conducted in 2010.

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The scientific goal of the current research is to verify the validity of the developed structural model of the concept of bank value. To achieve the goal several objectives were determined, as follows:

- To develop a questionnaire for the experts in finance-related scientific areas in order to verify our developed model of the concept of bank value;
- To analyze the information obtained from the conducted survey and to confirm (confute) the necessity of including the certain value components into the model;
- To analyze different models of value creation in order to distil factors affecting bank value;
- To combine the most general value elements in the advanced structural model of the concept of bank value.

Thus, we used triangulation or multi-methods to ensure the validation of the developed model. We combined qualitative and quantitative methods in the study of the concept of bank value:

1. The academic staff with finance-related specialization from European universities was surveyed, using the mail questionnaire method.
2. The authors conducted a content analysis of the text segments, extracted from the description of the different value creation models. Text segments mentioned above were analyzed, using the program AQUAD as a software tool. Frequency tables generated by the program assisted to elicit factors, affecting value creation.

We developed several hypotheses for the current research:

H1: Shareholders are the most important stakeholder group for a bank;

H2: Finance experts associate bank value mostly with cash flows from business activities;

H3: Modern concept of Bank Value should involve the components of the concept of Sustainable development.

The paper offers the advanced conceptual model of bank value. The model combines the ideas proposed by relationship value management, value-based management, and concept of sustainable development.

Research design and empirical results

As it was mentioned above, with the current research we pursue the studying of the concept of bank value. The previous research yielded the structural model of the concept (Titko&Lace, 2010), which combines the ideas provided by the proponents of shareholder theory and relationship value management concept.

To verify the validity of the developed model, we used triangulation (Cooper&Schindler, 2006). Through triangulation we can improve the accuracy of judgments and thereby results, by collecting data through different methods or collecting different kinds of data on the subject matter of our study.

The general studying of the concept of bank value involves 3 stages:

The 1st stage. Within the framework of the previous research: (1) collection of definitions of the terms "bank" and "value of a company", and (2) quantification of selected definitions, using the procedures both of classical and interpretative content analysis.

The 2nd stage. Verification of model validity, using the method of expert survey.

The 3d stage. Additional verification of model validity: (1) selection of data (descriptions of the value creation models), and (2) distillation of value affecting factors, using content analysis.

For the procedure of content analysis the program AQUAD was used. AQUAD, in summary, is a program for the generation of theory on the basis of qualitative data. The special characteristic of the program is its ability not only to categorize and then to assemble the data for each category, but to allow the researcher drawing conclusions by relating categories to each other, i.e., by exploring the occurrence of typical and repeated configurations of category representations in the data (Huber&Gürtler, 2010).

The group of respondents for interview comprised of experts from Dokuz Eylul Universitesi (Turkey), Mykolas Romeris University (Lithuania), Leeds Metropolitan University (U.K.), Vilnius Gediminas Technical University (Lithuania), Riga Technical University (Latvia), Tallinn University of Technology (Estonia), Prague University of Economics (Czech Republic), University of Gdansk, Wroclaw University of Economics (Poland).

The content of the questions and ranked answers of the respondents are presented in the tables below.

Question 1. Use the 1 –to-5 scale (1 – not essential,..., 5 – critically important) and rank the offered bank functions (evaluate the importance of each function for maintaining a competitive advantages in modern business environment).

Table 2. Experts' answers to the question 1

Range	Bank function	Average importance of the function
1	Payment function	4.15
2	Accumulation of financial funds	3.92
3	Asset maturity transformation	3.83
4	Money creation	3.77
	Liquidity providing	
5	Risk management	3.92
6	Capital creation	3.54
7	Providing of innovative solutions in business	3.38
8	Reducing of information and transactional cost	3.31
9	Agent function in financial contracting	3.23
10	Information accumulating, processing and disseminating	3.15

The first question was aimed to find out the experts' viewpoints on the changing role of financial institutions in modern business environment. One of the hypotheses of our previous research (Titko&Lace, 2010) was about the difference in definitions of banking elements provided in the scientific literature before and after 2004. The research revealed that the authors of the scientific texts published after 2004 pay more attention to such functions of a bank, as risk reduction, asset transformation, information processing and agent role performing. However, our experts consider traditional banks' functions more important than modern sophisticated banking activities.

The second and the third questions were aimed to clarify the definition of bank value. According to the results of our previous research the term company's value is mostly associated with cash flows from business activities. This linkage was additionally confirmed, using Charles Osgood technique that allows analyzing the interrelationship between content elements (Titko&Lace, 2010). However, our experts associate bank value mostly with market price of bank stocks. Thus, the second hypothesis is rejected. Nevertheless, we insist on the priority of the element "cash flow" to define the term "bank value". Firstly, the total amount of analyzed information in the previous research (the number of definitions and text segments) exceeds the number of experts' answers. Besides, we added the market component to the factors affecting bank value. The basis for involving market component is the Boston Consulting Group's model of value creation. One of the critical dimensions of the model is "improvements in a company's valuation multiple, driven by investor expectations that shape how capital markets value a company's performance" (Olsen *et al*., 2008).

With the forth question respondents were offered to evaluate the priority of different stakeholders' interests for a bank. For evaluation the 1-to-5 point scale was used (5 – the highest priority, 1 – the lowest priority). The stakeholders were ranged, considering average value of all the answers (shareholders – 4.64; depositors – 4.00; managers – 3.14; society – 3.00; employees – 2.93).

Thus, on the viewpoint of our experts, the interests of shareholders are considered as the most important for a bank. Although the concept of shareholder value is often criticized by the proponents of stakeholder theory (Waal, 2008), the fact is "that the more shareholder value a company creates in an effectively regulated market, the better the company serves all its stakeholders" (Dobbs, 2005). Received answers confirm our first hypothesis.

We were perplexed with the fact that our experts underestimate managers and employees. No one of the respondents gave the highest grade to these groups of stakeholders. However, bank staff (front office employees and managers) is one of the most important value drivers (Payne *et al.*, 2000; "Lessons from change", 2010; Copeland *et al*., 2002; Kaplan&Norton, 2000).In turn, the value employees deliver to the organisation depends on value the organisation delivers to employees.

Answers to the fifth question were ranged, considering average value of experts' answers and the number of respondents, who gave the highest grade to the certain factor.

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Question 5. Bank value is influenced by: (5 – the greatest influence, 1 – the lowest influence).

Table 6. Experts' answers to the question 5

Range	Value affecting factors	Average mark	Range	Number of respondents, who gave the highest priority
1	The quality of top management decisions	4.21	2	47%
2	The level of competency and professional knowledge of bank staff	4.14	1	53%
	Corporate strategy of a bank		4	27%
3	Infrastructure development and quality of business processes	3.79	3	33%
	Capacity for innovation		4	27%
4	Bank capabilities to communicate with partners, competitors, public, state authorities, others	3.71	4	27%
5	The value of capital assets owned by banks	3.64	5	20%
	Bank image		5	20%
	Performance quality of middle range managers		4	27%
	Customer loyalty		6	13%
6	Volume of customer base	3.57	6	13%

In our opinion, customer factor is underestimated by the respondents. Consumers are one of a company's most important stakeholders (Brady, 2005; Payne *et al*., 2000). According to E. Deming, business guru of the past century, a consumer is the most important element in the production chain. A consumer is more important than the raw material. It is easier to change supplier than to find a new consumer (as cited in Neave, 2007). Many researchers discuss the relationships between customer satisfaction, customer loyalty, and profitability of a company (Storbacka *et al.*, 1994; Hallowell, 1996; Jamal&Anastasiadou, 2009).

On our opinion, the factor of bank image is also underestimated by our experts. As well as Brady (Brady, 2005), we consider that image and reputation are closely linked. In turn, reputational capital is crucially important for a bank (Jagersma, 2009). Bank reputation should be considered as a factor with a high impact on bank performance. Success of any company, including financial institutions, is influenced by its customers who all are human beings. And, all humans without exception are subject to the influencing power of imagery. Poor reputation or negative imagery results in reduced consumer confidence, and a subsequent decline in brand value (Brady, 2005).

Nowadays, public interests are focused on social and environmental issues. Banks are also affected by society's changing preferences and changing worldviews. This is the inducement for many banks to implement sustainable strategy.

According to McKinsey Global survey results (Bonini *et al*., 2010), more than 50 percent of executives consider sustainability very or extremely important in a wide range of areas, including reputation building. Besides, 71 percent of the respondents of Ernst&Young survey ("Green for Go", 2008) see sustainability as an opportunity for reputation strengthening.

Except reputation building, there are other arguments pro implementation of sustainability component into the conceptual model of bank value were presented in our previous paper (Titko&Lace, 2011). The final remark is that most of the world's best banks ("Annual Survey", 2010) are included into the Dow Jones Sustainability Indices ("DJSJ", 2010). Thus, our third hypothesis about the necessity of implementing sustainability components into the model of the concept of bank value is confirmed.

To complete the research, we conducted the analysis of different value creation models, using the program AQUAD. The first step was data collection. For a total, the 24 text segments related to the value creation process were analyzed.

Analyzing data segments, we divided the entire database into two files, according to the qualitative characteristic of the source of literature:

1. Textual information acquired from book/article/web site etc., published before 2008. The data base included descriptions of Rappaport's model (as cited in Walters, 1997), Service-Profit Chain (Heskett *et al*., 1994), Balanced Scorecard (Kaplan&Norton, 2000), Scandia Value Scheme (as cited in Ashton, 2007), Performance Prism (Neely *at al*., 2002), value model from Deloitte (Marsden, 2005) and others (Nikonova&Shamgunov, 2007; "Non-financial measures", 2002;

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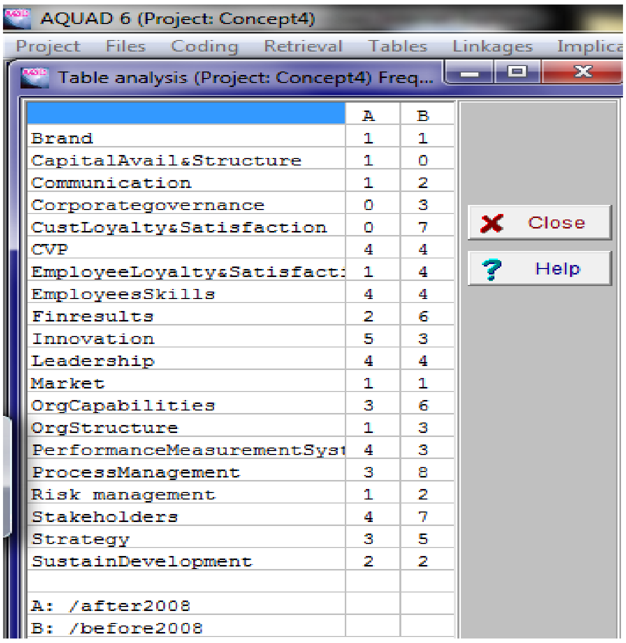
Amit&Zott, 2001 as cited in Zott *et al.*, 2010; Morris, 2005 as cited in Zott *et al.*, 2010; Copeland *et al.*, 2002; Dobbs *et al.*, 2005; Arnold, 2005; Payne, 2000).

2. Textual information acquired from book/article/web site etc., published after 2008. The data base included descriptions of Ernst&Young Performance wheel ("Lessons from change", 2010), EFQM Excellence Model (Gemoets, 2010), Boston Consulting Group's Model (Leichtfuss *et al.*, 2010) and other text segments related to the value creation theme (Johnson *et al.*, 2008; Zott *et al.*, 2010; Olsen *et al.*, 2009; Olsen *et al.*, 2008; "Value Creation Group", 2010).

We had two reasons for the breakdown: (1) technical peculiarities of AQUAD (the requirement for maximal number of lines in the text file), and (2) hypothesis about emerging of new value factors, stimulated by global financial crisis. However, the volume of the first block of our data base exceeds the volume of the second one. Thus, the results of the hypothesis verification are not sufficiently reliable.

Based on Huber (Huber&Gürtler, 2008), there are two strategies of coding, which can be used in the process of data coding in AQUAD: strategy of differentiation and strategy of generalization. The first strategy moves from general to particular considerations, while the second strategy starts with particular aspects and leads to general insights.

We used both of them in our project. At the first stage of coding, we paid attention to all the details and the analysis yielded 42 codes. Then, we summarized these detailed codes in more comprehensive and large categories (20 codes). For instance, the code 'Finresults' is related to the bank cost structure, operational margin, cash flows, revenue growth etc. AQUAD generated frequency table is shown in figure 1.



	A	B
Brand	1	1
CapitalAvail&Structure	1	0
Communication	1	2
Corporategovernance	0	3
CustLoyalty&Satisfaction	0	7
CVP	4	4
EmployeeLoyalty&Satisfact:	1	4
EmployeesSkills	4	4
Finresults	2	6
Innovation	5	3
Leadership	4	4
Market	1	1
OrgCapabilities	3	6
OrgStructure	1	3
PerformanceMeasurementSyst	4	3
ProcessManagement	3	8
Risk management	1	2
Stakeholders	4	7
Strategy	3	5
SustainDevelopment	2	2
A: /after2008		
B: /before2008		

Figure 1. Frequency table, generated by AQUAD

The received results allow developing the structural model of the concept of Bank Value (Figure 2). The world's most successful banks propose that a new characteristic of success is sustainable stakeholder management (Jagersma, 2009). This concept was chosen as an overwhelming theoretical framework for our model. The core of the model is shareholder value that should be a primary purpose of any company (Olsen *et al.*, 2009). In turn, based on stakeholder theory, shareholders' are not sole stakeholders whose interests should be respected (Waal, 2008). According to the value-based management (Arnold, 2005), three components of the approach are strategy, finance and organisational capabilities. Besides, the obligatory element is technique for measuring whether value is being created.

We used Skandia Value Scheme (Ashton, 2007) to reflect the value factors in a block of organizational capabilities. Human capital and customer capital are included in relationship capital.

Octagons represent different concepts. There some abbreviations in the model: TBA – traditional banking activities; KM – knowledge management; RM – risk management; INFO – information processing; CF – cash flow.

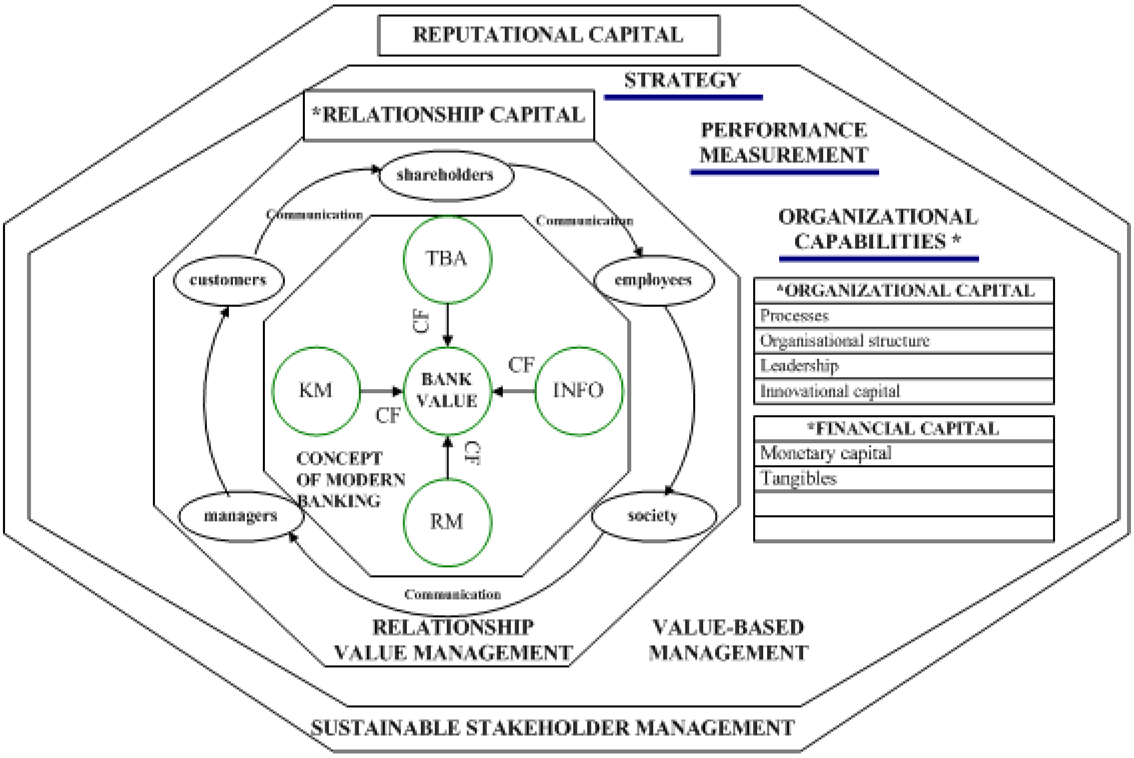


Figure 2. Model of the concept of Bank Value

Conclusions

Changes in economic environment and global financial turmoil have changed the face of banking business. Nowadays, banks are not only intermediaries between lenders and borrowers, but also are risk managers with superior information and knowledge management capabilities. However, the results of our survey revealed that our experts consider traditional banks' functions more important than modern sophisticated banking activities. Besides, the experts underestimate impact of customer and reputation factors on bank value. For example, among 11 value factors bank image was placed at the 7th position.

The results of testing of our developed hypotheses are the following: H1 – confirmed; H2 – rejected (confirmed in the previous research); H3 - confirmed.

Analysis of value creation model with AQUAD yielded 10 most often occurring elements: process management, strategy, stakeholders, performance measurement system, leadership, innovation, financial results, employee skills, customer value proposition (CVP), and customer satisfaction and loyalty.

Our developed model of the concept of bank value is a combination of four concepts: concept of modern banking, relationship value management, value-based management, and sustainable stakeholder management. The last is an overwhelming framework of the model.

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