Need For New Business Model in Banks

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ABSTRACT

The aim of this article is to assess the existing business models used by the banks operating in Latvia and 18 largest banks operating in the EU in the time period from 2006 till 2011.

In order to obtain research results, the authors performed qualitative analysis of the scientific literature on bank business models, which have been grouped into clusters that consist of such components as: 1) capital and reserves; 2) assets; 3) deposits, and 4) loans.

In their turn, bank business models have been developed based on the types of core activities of the banks, and have been divided into four groups: Wholesale, Investment, Retail and Universal Banks. Descriptive statistics have been used to analyse the models, determining mean, minimal and maximal values of constituent cluster components, as well as standard deviation. The analysis of the data is based on such bank variable indices as Return on Assets (ROA) and Return on Equity (ROE).

Having conducted the research the authors have come to the conclusion that Retail Banks both in Latvian and the EU may face the need for a new business model in future. Meanwhile, Investment Banking is the most efficient existing bank business model in Latvia, and Universal Banking is most efficient in the EU.

The authors see it necessary to conduct assessment of bank business models in future considering not only on financial, but also social and environmental aspects.

The research conducted by the authors may be of practical significance for the banks analysed in the article while they review their future aims and plan their future business strategy.

Keywords: Banks, business model, Latvia, the EU banks, ROA, ROE

1. INTRODUCTION

The world has been witnessing the economic recession for the last four years or so and there seems to be no end in sight. The supreme mortgage crisis in the USA has been the genesis of this financial disaster. In the period of unbridled optimism that preceded the recession, American banks, mortgage companies and savings and loan associations granted housing loans and mortgages to thousands of eager buyers, and that enabled less than stellar credit worthy individuals to purchase an ownership in homes and other medium to long-term assets of their choice. The EU has taken steps to revive its industries, enacting new capital requirements, governance and other rules and regulations that it hopes will prevent such a crisis from happening again. But by and large, the world economy needs to be rescued and put back on its feet [1].

Clearly something is wrong with the way business has been conducted at the banks. We not only need a new business model, we also need good and honest governance in order to make it a success. The greed of bankers and their short-term insistence on earning fees and commissions need to be looked at thoroughly. New rules need to be enforced that would look at the long-term fundamentals and prevent a crisis from happening in any of the sectors that are so important for our business progress. Consequently, the banks also need to introduce economic innovations, as banks play a significant role in the national economy [2].

However, the peculiarity of the Latvian banking system in that its total assets equal the assets of just several North American banks, which means lack of competitiveness of the banking industry. Thus, the total assets of Latvian commercial banks together with the assets of the Bank of Latvia at the end of 2009 did not exceed 30 billion LVL. For example, in the U.S. there were 6.9 thousand commercial banks (in Germany – 2.4 thousand). Four of them - JPMorgan Chase, Citigroup, Bank of America and Wells Fargo - owned 64% of total banking assets in the country. The assets of only one of them - Bank of America Corp. - exceeded 2.2 trillion USD [3].

The purpose of this research is to assess the existing business models used by the banks operating in Latvia and 18 largest banks operating in the EU in the time period from 2006 till 2011.

To achieve the goal the following research methods were used: quantitative and qualitative methods, including monographic and descriptive methods.

2. LITERATURE REVIEW

A bank's business model is described considering the following factors: how the bank's operations are organised, the way it actually performs its business activities, the quality of its products and services, as well as their price [4].

In the last decade banks mainly focused on consumer credits, considering lending the main bank product, at the same time disregarding other products and services. For example, Beck et al. mention loans and deposits as the main products offered by commercial banks [5]. However, their activities should perform three basic functions:

1. banks provide the public with liquidity (money) and payment services through their deposit-taking business;
2. banks transform assets in terms of denomination, quality and maturity, as well as manage the associated risks;
3. banks process information and monitor borrowers using specialized technologies [6].

Particularly after the onset of the economic crisis in the scientific literature it is widely discussed that banks cannot anymore work according to the same principles as before, and that they should without delay change the traditional business model for a new one.

Beattie and Pratt state that with the increase of competition among the banks, know-how, patents, qualified staff and other

intangible assets become the main values of the enterprise [7]. In the scientific literature two types of models that characterise banks are discussed: those considering a bank's economic activities and those considering a bank's ability to take risk [8].

The President of the Association of Commercial Banks of Latvia Tverijons also points at the necessity to introduce new business models, „encouraging entrepreneurs not to rely on the business model that foresees development based on lending only – in the post-crisis Latvia such model would not anymore be feasible" [9].

Many authors mention that the existing banking business as well as its existence is threatened by new bank capital requirements, which have been introduced according to Basel III. A global regulatory framework for more resilient banks and banking systems. Basel III regulatory framework foresees to strengthen global capital and liquidity requirements with an aim to improve elasticity in the banking sector, to improve the banking sector's ability to absorb shocks arising from financial and economic stress, in such a way reducing financial sector risks, which have the most direct impact on the real economy [10]. In order to introduce these requirements three parts of the framework have been developed: capital reforms, liquidity reforms, and overall stability improvement of the financial system. The essence of these reforms is to set firmer requirements for the first level equity capital and first level equity capital ratios [11].

Correlation among bank risks and other important factors, such as capital adequacy [12], securities and their connection with financial markets [13], operational efficiency and corporate governance [14], as well as the necessity to diversify risks [15] was analysed in the scientific literature even in the pre-crisis period.

Discussing bank business models, Argosh points out that the processes used in bank operations are very obsolete, as still at present banks relatively widely use non-digitalised processes. In this respect banks will have to introduce digital products, as well as products and services which will respond to consumer needs [16]. In turn, Rajan stated that banks can obtain competitive advantage if they have as much information about their clients as possible [17]. That will give them the opportunity to adjust products and services to the needs of their clients. Haldane also stressed that banks should be as diversified as possible thus safeguarding themselves against financial crises [18]. Fremerey and Hagen, in their turn, point out that long-term development of a bank can be ensured only by such business model that will be focused on dynamic development, diversification and volume of the assets, balance between income and expenditures, and relative market share in relation to three biggest banks [19]. Other sources stress that monitoring is an important component of a business model [20; 21].

3. METHODOLOGY

Analysis of the business models have been performed on the basis of clusters discussed in the scientific literature. They consist of: 1) capital and reserves; 2) assets; 3) deposits, and 4) loans.

Descriptive statistics have been used to determine the constituent cluster components, it was performed distinguishing four types of business models:

1. Wholesale Banks – provide services to large corporate clients, characterised by a relatively small branch network, few distribution channels developed, concentrate on lending and financial markets;

2. Investment Banks – activities are concentrated on financial markets, transactions in the stock market, issuance of shares, raising capital;

3. Retail Banks – core activities are concentrated on providing services to individual customers, fewer activities aimed at legal entities and fewer operations in financial markets;

4. Universal Banks – combination of all three previous clusters, offer all types of bank products and services.

Taking the above-mentioned cluster components as the basis, the authors analysed the data on the existing bank business models in Latvia and 18 leading EU banks considering December 2011 figures. The analysis was also based on such indices as Return on Assets (ROA) and Return on Equity (ROE).

The data were mainly extracted from publicly available information on the home pages of the Association of Commercial Banks of Latvia [22], European Central Bank [23] and other banks. The indicators were obtained from annual reports for the period from 2006 till 2011 as of December 31 of each year.

4. RESEARCH DATA

4.1. Business model used by Latvian banks

As it is demonstrated by the data on deposit and loan volumes from the home page of the Association of Commercial Banks of Latvia [22] summarised by the authors, a considerable decrease in loan volumes can be observed since 2008. At the same time, in the period from 2009 till 2010 the volume of deposits grew, in consequent periods it was characterised by dynamic trends. The summarised data are presented in Fig. 1.
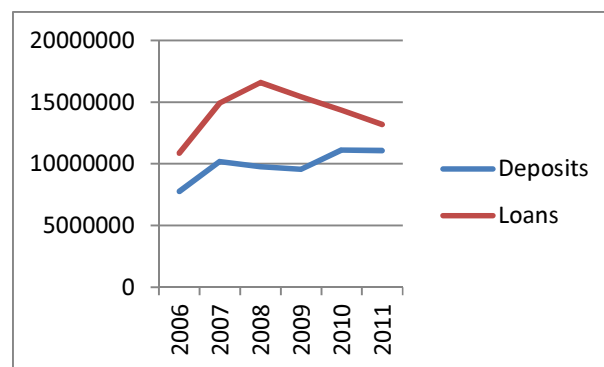

Fig. 1. Dynamics of change in deposits and loans at Latvian banks

In order to present the data on the total assets of Latvian banks as of 31.12.2011., as well as the changes in assets from 2006 till 2011, the data available on the home pages of Financial and Capital Market Commission [23], the Association of Commercial Banks of Latvia [22] and banks were summarised. The changes in assets are summarised in Table 1.

As the data in Table 1 demonstrate, the most significant reduction in assets has occurred at Allied Irish Banks Latvia Branch – 52.4%, UniCredit Bank – 23.7, Swedbank – 21.9%, Danske Bank Latvia Branch – 17.3%, Skandinaviska Enskilda Banken Riga Branch – 13.4%, but at Citadele Bank – 5.2%. However, other banks are characterised by increase in assets. For example, in case of ABLV Bank it can be explained by the fact that it refocused its activities from granting loans to active monitoring of the clients.

Table 1. Change in assets of Latvian banks from 2006 till 2011

No	Name of the bank	Assets (LVL thousands, 2011)	Change in assets (2006-2011)
1.	Swedbank	3 708 979.3	-21.9%
2.	SEB banka	2 699 140.8	8.5%
3.	Nordea Bank Finland Latvia Branch	2 175 220.9	105.4%
4.	ABLV Bank	1 853 188.9	96.8%
5.	DnB Bank	1 790 143.7	36.5%
6.	Citadele Bank*	1 439 436.1	-5.2%
7.	Rietumu Bank	1 438 083.9	51.9%
8.	Mortgage and Land Bank of Latvia	755 453.1	15.2%
9.	Latvian Savings Bank	641 489.6	61.1%
10.	UniCredit Bank*	622 032.5	-23.7%
11.	NORVIK BANK	618 025.4	107.5%
12.	TRASTA KOMERCBANKA	312 738.5	27.1%
13.	PrivatBank	300 422.9	135.1%
14.	Regional Investment Bank	246 503.2	150.8%
15.	LTB Bank	242 554.9	88.2%
16.	Danske Bank Latvia Branch*	235 704.2	-17.3%
17.	Baltic International Bank	235 676.9	151.3%
18.	Baltikums Bank	213 249.3	157.8%
19.	SMP Bank	148 127.1	171.1%
20.	GE Money Bank	143 477.0	
21.	BIGBANK Latvia Branch*	59 000.6	196.3%
22.	Latvian Post Bank*	47 357.4	344.9%
23.	Allied Irish Banks Latvia Branch*	28 268.2	-52.4%
24.	Eesti Krediidipank Latvia Branch*	28 020.3	0%
25.	Svenska Handelsbanken AB Latvia Branch*	26 359.9	524.1%
26.	Rigensis Bank*	13 212.8	0%
27.	Latvian Business Bank	4 476.0	48.5%
28.	Skandinaviska Enskilda Banken Riga Branch	466.6	-13.4%

*Data on Citadele Bank for 2010 and 2011, as on 30 June, 2010, it was detached from the restructured Parex Bank, and started its activities on 1 July, 2010. Data on UniCredit Bank for 2007. Danske Bank Latvia Branch started its activities in 2007 having acquired Sampo Bank (Danske Bank). Data on BIGBANK Latvia Branch for 2009. Latvian Post Bank started its activities in 2008, Allied Irish Banks Latvia Branch – in 2008, Eesti Krediidipank Latvia Branch – in March of 2011, having taken over Latvian Business Bank. Data on Svenska Handelsbanken AB Latvia Branch for 2008, Rigensis Bank was founded in 2011. Asset values of Parex Bank have not been reflected, as the data are not available until restrictions imposed on the bank activities by the cabinet of Ministers and Financial and Capital Market Commission (FKTK) are called off. The data on Scania Finans Aktiebolag Latvia Branch are not available.

On the basis of cluster components considered in the methodological part of the article, the authors classified the existing Latvian banks and branches of foreign banks according to 4 business models, as seen in Table 2.

Table 2. Classification of Latvian banks according to business models

Wholesale Banks	Invetsment Banks	Retail Banks	Universal Banks
Mortgage and Land Bank of Latvia	Norvik Bank	Latvian Business Bank	Swedbank
ABLV Bank	Baltikums Bank	Nordea Bank Finland Latvia Branch	SEB Bank
UniCredit Bank	ABLV Bank	PrivatBank	DnB Bank
Regional Investment Bank	Rietumu Bank	LTB Bank*	Nordea Bank Finland Latvia Branch
	Trasta komercbanka	Danske Bank Latvia Branch	Citadele Bank
		Baltic International Bank	SMP Bank
		GE Money Bank	
		BIGBANK Latvia Branch	
		Latvian Post Bank	

Financial indicators of LTB Bank from 2006 till 2008 are available for 9 months of operation, starting with 2009 – for 12 months of operation.

Extracting the data the indicators of Latvian Savings Bank have not been taken into account, as the activities of the bank have been suspended. The data summarised in Table 2 demonstrate that the largest banks in Latvia are Universal Banks, but other three models do not display any marked features, rather some features of Wholesale, Investment, as well as Retail Banks.

On the basis of the classification developed by the authors it is possible to obtain 4 different business models, as reflected in Fig. 2.
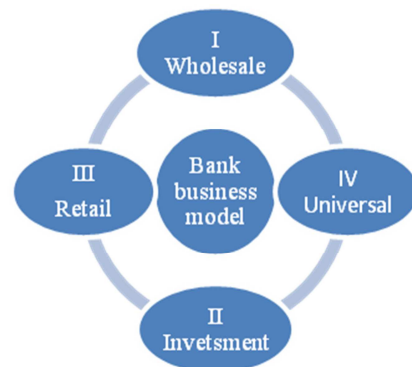

Fig.2. Bank business models

Upon development of the business models, descriptive statistics was calculated. The results are presented in Table 3.

Table 3 Descriptive statistics on bank business models

	Capital and reserves	Deposits	Loans	Assets
Model 1 - Wholesale Banks				
Mean	3.183.485	2.849.5270	15.495.019	1.277.723
Std. dev	1.153.522	11.803.7999	5.620.413	581.324
Min.	44.420	50.220	192.587	550.357
Max.	14.520.536	21.5504.303	83.836.244	412.6304
Model 2 - Investment Banks				
Mean	61.944	52.340	314.773	1.117.547
Std. dev.	75.63	75.167	44.847	485.664
Min.	74.50	37.904	16.863	60.142
Max.	137.909	1.603.143	686.674	14.490.894
Model 3 – Retail Banks				
Mean	2.510.576	22.549.760	18.438.382	169.415
Std. dev.	695.217	6.379.053	4.987.872	17.735
Min.	41.67	193	12	803.4
Max.	21.317.129	195.894.020	175045369	582000.7
Model 4 - Universal Banks				
Mean	1.269.253	12.157.618	17.787.110	2.457.509
Std. dev.	381.398	4.104.307	5.893.438	308.273
Min.	81.248	317.336	625.773	235.704
Max.	5.260.000	68.260.000	99331000	5272900

As demonstrated by descriptive statistics, the largest volume of capital and reserves is characteristic of Wholesale Banks, but the lowest – of Investment Banks, the same applies considering deposit volumes. At the same time, Retail Banks and Universal Banks are characterised by large loan volumes.

In order to assess every business model in the most effective way, the changes in ROA (Return on Assets) indices for each model were analysed separately. The obtained data are presented in Fig. 3.
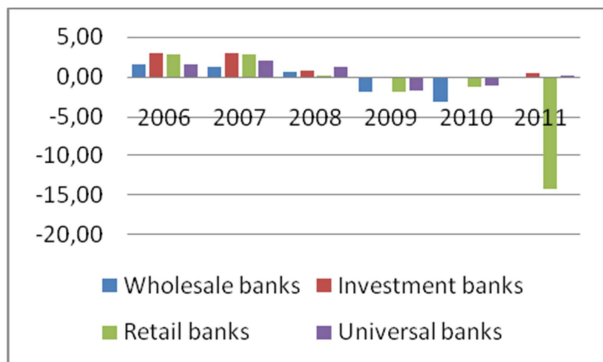

Fig. 3. Change in ROA (%) according to a business model Latvian banks

As demonstrated by the data in Fig. 3, Investment Banks, which managed to maintain their ROA index positive in the period analysed, successfully performed their activities. In turn, with the onset of the financial crisis Retail Banks experienced the

largest decrease. They still are unable to obtain positive results, this fact may attest that they need to develop a new business model. Wholesale and Universal Banks experienced the fall in ROA index in 2009 and 2010, however, in 2011 a positive tendency could already be observed.

Also the authors were conducted the ROE data index in Latvian banks, how it is shown in Figure 4.
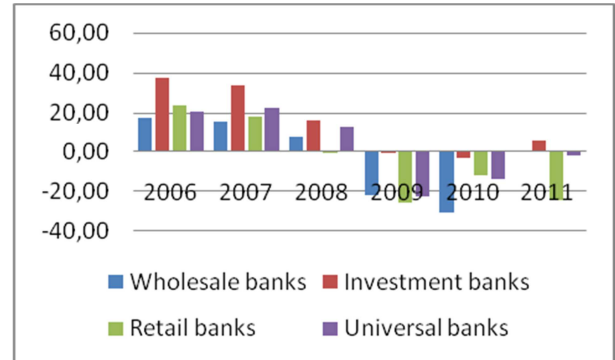

Fig. 4. Change in ROE index (%) according to a business model Latvian banks

The summary of ROE index has demonstrated that, similar to ROA indices, Investment Banks performed their activities most successfully, but Retail Banks again demonstrate the need for a new business model.

4.2. Business model at the EU banks

The assessment of 18 largest in terms assets EU banks and of the changes in their assets in the time period from 2006 till 2011 was performed. The results are presented in Table 4.

Table 4. Change in assets of the EU banks from 2006 till 2011

Pos. in 2011	Name of the bank	Country	Assets (EUR trillion 2011)	Change in assets (2006-2011)
1.	Deutsche Bank	DE	2164103	23.10%
2.	HSBC Holding	UK	2031685	35.36%
3.	BNP Paribas	FR	1965283	34.54%
4.	Royal bank of Scotland	UK	1765186	80.23%
5.	Barclays	UK	1926265	70.58%
6.	Credit Agricole	FR	1723608	33.78%
7.	ING Group	NL	1279228	5.65%
8.	Santander Group	ES	12515260	42.68%
9.	UBS	CH	1419162	-41.95%
10.	Societe Generale	FR	44827869257	16.40%
11.	Lloyds Banking Group	UK	1195713	156.24%
12.	Groupe BPCE	FR	1138395	37.10%
13.	UniCredit Group	Italy	926769	15.05%
14.	Credit Suisse Group	CH	872905	-15.97%
15.	Rabobank Group	NL	731665	28.60%
16.	Commerzbank	DE	661763	14.86%
17.	Intesa Sanpaolo	IT	639221	11.25%
18.	BBVA	ES	597688	40.07%

As demonstrated by the data summarised in Table 5, among 18 EU banks the majority are Retail Banks, there are fewer Wholesale Banks. Classifying Latvian banks according to business models the picture was identical. However, in contrast to Latvian banks, the EU banks employ more clearly distinct business models.

In order to assess all four business models, they have been grouped into clusters. Using descriptive statistics mean, maximal and minimal values for each models have been determined as well as standard deviation. The obtained data in terms of descriptive statistics is presented in Table 6.

Table 6 Descriptive statistics for EU bank business models

	Capital and reserves	Deposits	Loans	Assets
Model 1 - Wholesale Banks				
Mean	132.701	453.228	437.487	7.889.134
Std. dev	44.57	30.71	50.01	3.850.008
Min.	17.01	100.00	72.54	1.028.802
Max.	606.855	648.776	763.228	63.327.573
Model 2 - Investment Banks				
Mean	55.59	442.456	458.338	1.848.986
Std. dev	4.23	25.60	37.33	82.045
Min.	31.914	298.652	198.892	1.227.692
Max.	80.321	604.903	684.686	2.529.332
Model 3 – Retail Banks				
Mean	53.47	486.378	535.954	1.108.706
Std. dev	5.72	44.90	32.27	88.200
Min.	11.949	75.920	90.236	423.313
Max.	132.044	996.87	780.331	2.031.685
Model 4 – Universal Banks				
Mean	35.13	390.639	373.692	4.455.661
Std. dev	3.03	31.28	46.47	1.084.198
Min.	12.289	238.529	17.162	858.147
Max.	57.582	641.892	730.296	12.515.260

The data summarised in Table 6 demonstrate that the highest mean capital and reserves values are characteristic of Wholesale Banks, deposit values – of Retail Banks, loan values – of Investment Banks, asset values – of Wholesale Banks.

ROA (Return on Assets) index was evaluated for each EU bank business model for the period analysed. The results are presented in Fig. 5.

The data in Fig. 5 demonstrate that in 2011 the highest ROA index was characteristic of Universal Banks, despite the fact that in 2008 they experienced the most significant fall. That may attest to the fact that Universal Banks managed to refocus their business model for a new model in relatively short time. In turn, Retail Banks had the highest ROA indices in 2006 and 2007, which in comparison with other models has decreased most significantly. Considering ROA indices it may be seen that

Wholesale and Retail Banks will experience the need in a new business model.
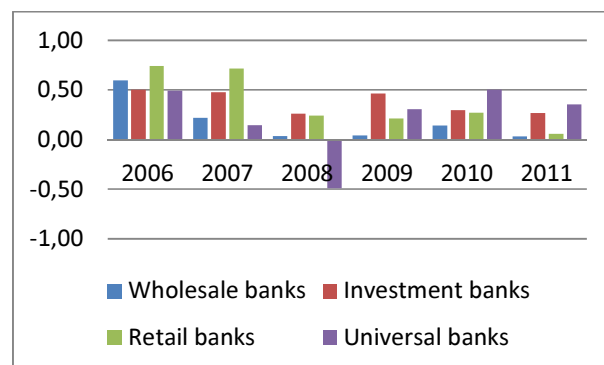

Fig. 5. Change in ROA (%) according to a business model at EU banks

Another essential bank performance index is ROE (Return on Equity). Changes in ROE index at EU banks are presented in Fig.6.
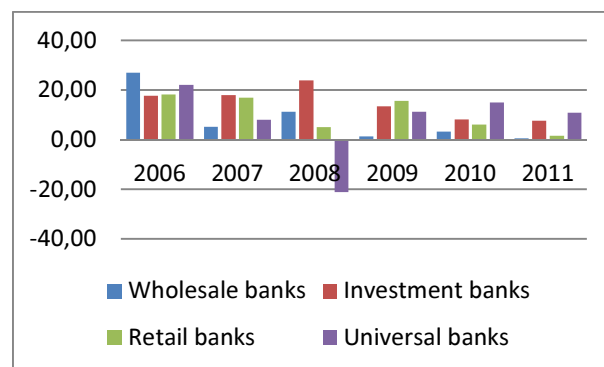

Fig.6. Change in ROE (%) according to a business model at EU banks

ROE index data also demonstrate that Universal Banks have changed their business strategy, but Wholesale and Retail Banks will have to review their existing business model in future.

CONCLUSIONS

Having conducted the research the authors have come to the conclusion that Retail Banks both in Latvian and the EU may face the need for a new business model in future. Meanwhile, Investment Banking is the most efficient existing bank business model in Latvia, and Universal Banking is most efficient in the EU.

The authors have concluded that one of the main factors that the banks may use to ensure their sustainable development is to develop a unique entrepreneurial strategy based on business objectives, which would include development tendencies of sustainable factors both in the sector and in the market, in which a bank operates. In this respect, financial institutions should continuously improve working processes, as well as integrate the best standards, and that will provide financial value in the long term not only to the bank, but also to its clients and the society on the whole. The banks, which will use such strategy as the basis for their activities, will not only obtain a competitive

advantage, but also will reinforce their position in the sector, promoting macroeconomic development in the country as well as integration at the international level and good sustainable model practices.

In order to be able to objectively assess advantages and disadvantages of each business model, the authors see it necessary to conduct assessment of bank business models in future considering not only on financial, but also sociological and environmental aspects.

The research conducted by the authors may be of practical significance for the banks analysed in the article while they review their future aims and plan their future business strategy.

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