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Financial sector reform (2016-2019): The impact on Latvian banks

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ABSTRACT

The purpose of this research is to get the first results on the impact of the recent financial sector reform started in 2016 by the Latvian FCMC (Financial and Capital Market Commission) and the Latvian government on the performance of two traditional Latvian banking groups: resident and non-resident banks. The main objective is to find out how the outflow of non-resident deposits caused by the reform has affected both banking groups' main performance indicators: the capital adequacy ratio (CAR) and return on equity (ROE).

The methodology of the research involves obtaining ROE and CAR parameters in the whole Latvian banking sector before and during the recent financial sector reform and analyzing these parameter dynamics and differences, particularly for resident and non-resident banks.

The results obtained clearly demonstrate that the recent reform of the Latvian financial sector has affected resident and non-resident bank performance in Latvia very differently.

The outflow of non-resident deposits during the reform implementation has made a minimal impact on the performance of resident banks, but significantly affected non-resident banks, triggering a decline in their total assets, total deposits, and profitability.

The results obtained show some "recovery" of non-resident bank performance at the second stage of reform (after 2017), which could demonstrate the reorientation of their business models agreed with the FCMC. However, there is a need for further research to be sure that this process will be sustainable.

Keywords: Latvian banking sector, financial sector reform, non-resident deposits, AML/CTPF, non-resident banks.

INTRODUCTION

An ambitious Latvian financial reform was started in 2016 with the aim to improve the reputation of the Latvian banking sector, which historically consists of two traditional groups: resident and non-resident banks.

Implementation of this reform by the Latvian government and the Financial and Capital Market Commission (FCMC) was based on OECD criticism (2015) of the shortcomings in Latvia's AML/CTPF (anti-money laundering / counter terrorism and proliferation of weapons of mass destruction financing) system, the European Parliament and Council AML IV Directive (2015) and the MONEYVAL report (2018) regarding the large cross-border flow of financial resources through Latvian banks, insufficient measures to fight corruption, poor quality of reports on unusual and suspicious transactions, shortcomings in customer due diligence, and risks related to circumvention of international sanctions.

By implementing the reform, the Latvian FCMC began to tighten up its assessment of bank compliance with the AML/CTPF standards and increased the amount of fines for violations of AML/CTPF.

The share of non-resident deposits in the Latvian bank total portfolio was significantly high (53% in 2015) and therefore particular attention in this reform was given to 12 non-resident banks in Latvia, which became subject to AML/CTPF inspections by independent advisory firms from the United States. During the implementation of the reform, major changes have been made in the legislation governing AML/CTPF, such as the clarification of the definition of politically exposed persons to include residents and the prohibition to cooperate with shell companies if they exhibit a certain set of characteristics.

The goal of this research is to obtain the first results of the impact of the Latvian financial sector reform (2016-2019) on the performance of Latvian banks and analyze the differences of this impact in resident and non-resident banks.

The research questions are as follows: What are the main consequences of the recent financial sector reform in Latvia for the whole banking sector? Are there any essential differences in the performance of the traditional two groups of banks (resident and non-resident) during the reform implementation? What could be the future of non-resident banks and their further business strategy in Latvia?

Theoretical background

The capital adequacy ratio (CAR) is one of the most important bank performance parameters in modern international banking regulation, which is the focus of more than 100 national central banks and banking supervisors (Diamond and Rajan, 2000). By

definition, capital requirements are rules that limit the amount of leverage and risk that banks can take, as well as the level of capital adequacy that banks must achieve (Howarth and Quaglia, 2013).

Basel III regulations (Basel Committee on Banking Supervision, 2011) set minimum reserves above the minimum capital requirement: the countercyclical capital buffer to be built up during economic upturns and to be used during downturns, as well as the capital conservation buffer (Repullo and Suarez, 2013). The structure of the minimum capital requirement and additional reserves is shown in Figure 1.

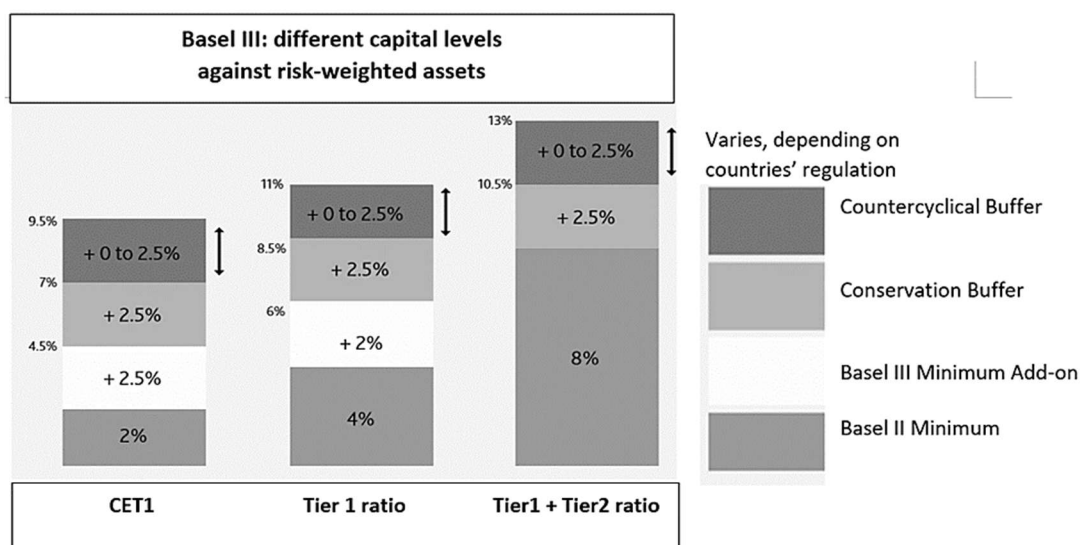


Figure 1 **Basel III requirements for CAR**

(Moody's Analytics, 2013)

In general, capital requirements for Latvian banks coincide with the requirements set out in the Basel III framework. However, there are differences that are characteristic of the EU capital regulation and the requirements set by the Latvian FCMC: the minimum CET1 and Tier 1 capital ratios have been raised to 4.5% (from 2%) and 6% (from 4%); the countercyclical capital buffer in Latvia was set at 0% in order to stimulate more lending (Financial and Capital Market Commission, 2012-2018). The total capital requirements binding on Latvian banks are shown in Figure 2.

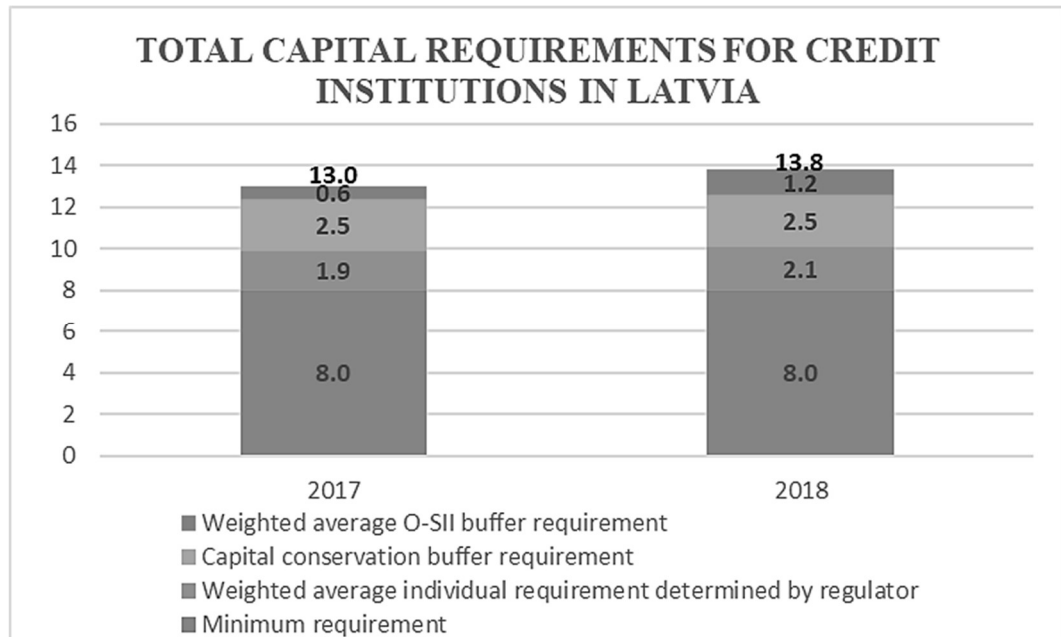


Figure 2 Total capital adequacy ratio (CAR) requirements for Latvian banks
(Bank of Latvia, 2019)

The asymmetric impact of Basel capital requirements on large and small banks is widely discussed. It has been emphasized that the same capital requirements for all banks, regardless of their size, distorts competition between different categories of banks and the impact of the same capital requirements on small and large banks is asymmetric (Hakenes and Schnabel, 2011).

There is a point of view (Haufler and Maier, 2016) that higher capital standards will lead to the consolidation of the banking sector as smaller or weaker banks exit the market.

A study on the factors contributing to the profitability of Central and Eastern European banks in the period from 2000 to 2013 (Djalilov and Piesse, 2016) shows that Baltic banks (including Latvian banks) are characterized by a positive effect of capital adequacy ratios on banks' ability to generate higher profits.

However, there is also the opposite view that increasing capital requirements run the risk of reducing investment and bank lending, which ultimately reduces their profitability (Kashyap and Stein, 2004). Another study on bank capital requirements reveals that higher capital requirements for banks significantly reduces their lending capacity, which in turn has a negative impact on profits (Fraisie *et al.*, 2017).

Analysis of bank profitability indicates that the most common determinants of banks' ability to generate profits are the size of the banks (in terms of their assets), such risk indicators as credit risk and liquidity risk, and capital ratios (Djalilov and Piesse, 2016).

Banks' profitability is usually assessed by calculating indicators such as the ratio of a bank's financial result (net profit) to the amount of resources used – return on equity (ROE) (Casu *et al.*, 2006).

The ROE indicator describes the efficiency of the use of equity and determines the level of return on shareholders' funds invested in the bank. It is calculated according to Formula 1 (European Central Bank, 2010):

$$ROE = \frac{\text{Net Profit}}{\text{Capital and Reserves}} * 100\% \quad (1)$$

METHODOLOGY

The research is based on the financial data statistics of Latvian banks from the banks' individual public quarterly reports for the period from 2012 to 2018, available on the FCMC website (Financial and Capital Market Commission, 2012-2018).

Banks were divided into two groups as defined by the FCMC (Financial and Capital Market Commission, 2019). The first group (Group 1) includes banks with a share of non-resident deposits of less than 20% (resident banking group) while the second group (Group 2) is comprised of banks focused on servicing foreign customers with non-resident deposits exceeding 20% in the total deposit base (non-resident banking group). The breakdown of individual banks into resident (1) or non-resident (2) banks can be seen in Table 1.

Table 1

**Breakdown of Latvian banks into resident (1) and non-resident (2) banking groups
2012-2018**

	2012	2013	2014	2015	2016	2017	2018
ABLV Bank*	2	2	2	2	2	2	-
Baltic International Bank	2	2	2	2	2	2	2
BlueOrange Bank	2	2	2	2	2	2	2
Citadele banka	2	2	2	2	2	2	1
Expobank	2	2	2	2	2	2	2
LPB Bank	2	2	2	2	2	2	2
Luminor Bank AS **	1	1	1	1	1	1	1
Meridian Trade Bank***	2	2	2	2	2	2	2
PNB Banka ****	2	2	2	2	2	2	2
PrivatBank	2	2	2	2	2	2	2

Continued on the next page

Table 1 (continued)

Reģionālā investīciju banka	2	2	2	2	2	2	2
Rietumu Banka	2	2	2	2	2	2	2
Rīgensis Banka	2	2	2	2	2	2	2
SEB banka	1	1	1	1	1	1	1
Signet Bank AS *****	-	-	2	2	2	2	2
Swedbank	1	1	1	1	1	1	1
Trasta Komerbanka *****	2	2	2	2	-	-	-

* The bank's self-liquidation commenced in 2018; ** Established in 2017 by the merging of DNB Bank and the Latvian branch of Nordea Bank, until then – DNB Bank; ***until 2014 – SMP Bank; **** until 2017 – Norvik Bank; ***** established in 2013, until 2017 – Bank M2M Europe; ***** The bank's operations were suspended in 2016.

(Source: compiled by the authors)

Dynamics of total deposits and capital adequacy ratio (CAR) as well as return on equity (ROE) in Latvian banks have been monitored before and during financial reform implementation and analysis has been made for resident and non-resident banks in particular.

RESULTS AND DISCUSSION

Deposit dynamics in Latvian banks during the period of 2014-2019

The results obtained show (see Figure 3) that in the period of 2015-2019, the amount of total deposits in the whole banking sector fell by 31% (from 22.6 billion EUR to 15.7 billion EUR), while the dynamics of resident and non-resident deposits were completely the opposite: non-resident deposits fell by 74% (from 12.1 billion to 3.2 billion EUR), but resident deposits grew by 17% (from 10.5 billion EUR to 12.4 billion EUR).

The structure of deposits in the whole Latvian banking sector fundamentally changed: the share of non-resident deposits decreased more than 3 times (from 54% to 17%) and consequently, the share of resident deposits increased 2 times (from 46% to 83%).

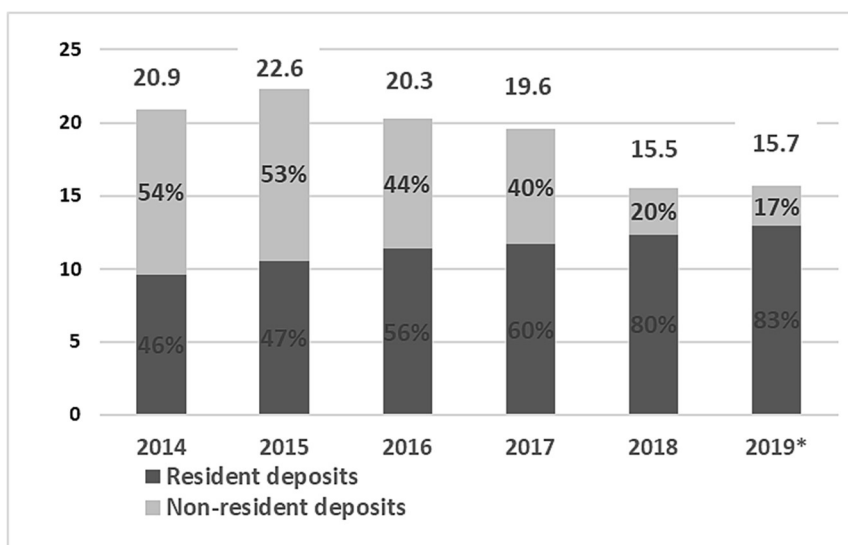


Figure 3 Structure of deposits attracted by Latvian monetary financial institutions, 2014-2019 (EUR billion) (Bank of Latvia, 2014-2019)

(compiled by the authors)

The sharpest drop in total deposits (21%) was observed in 2018, partly due to the termination of ABLV Bank's activities (see Figure 4).

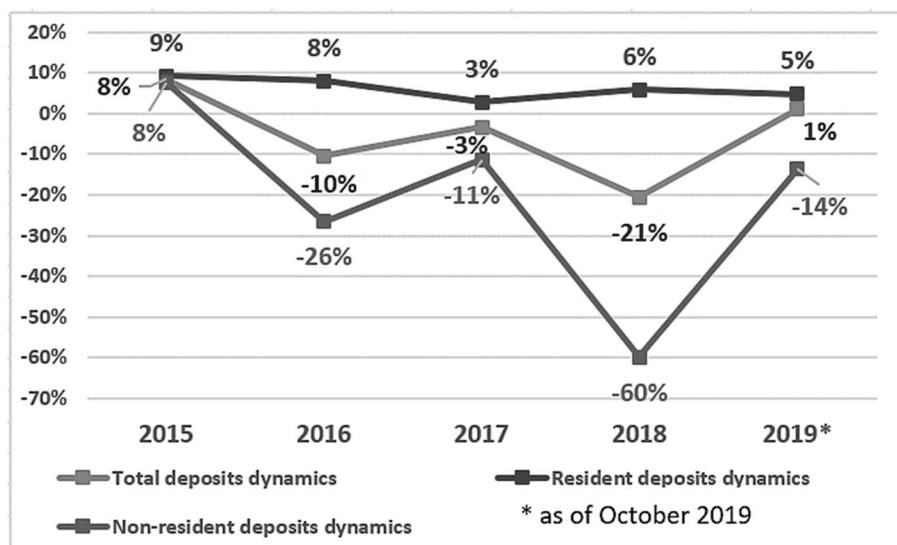


Figure 4 Dynamics of deposits attracted by Latvian monetary financial institutions, 2015-2019 (%) (Bank of Latvia, 2014-2019) (compiled by the authors)

As a result of the financial sector reform, with the significant decline in the total amount of deposits (comprising mainly those of non-residents), the Latvian banking sector's total assets have been decreasing since 2016 (see Figure 5).

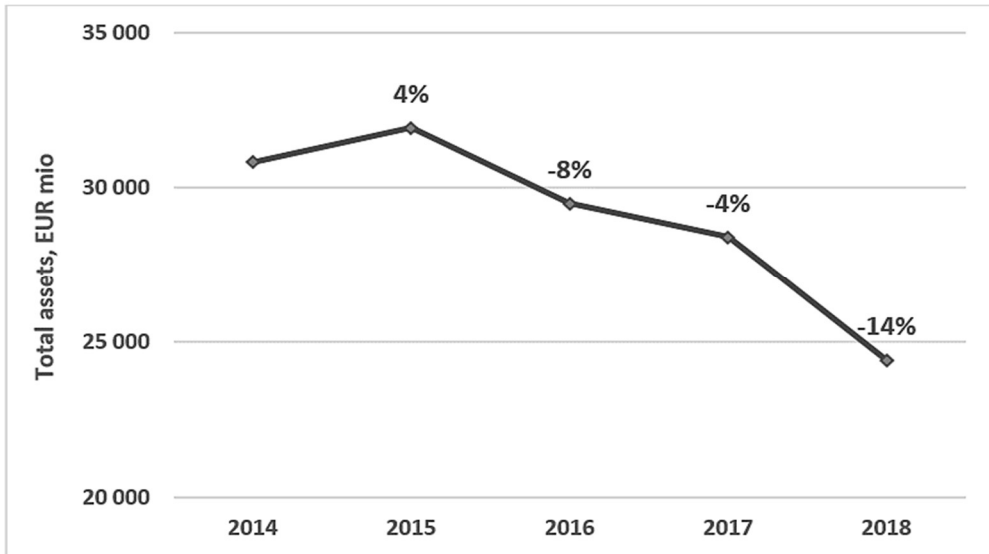


Figure 5 Dynamics of the total gross assets of the banking sector, 2014-2018 (EUR million, %) (Finance Latvia Association, 2012-2018; Rietumu Bank JSC, 2019)

(compiled by the authors)

Comparing the dynamics of total deposits and total assets in both banking groups (see Figure 6), we can see that the financial sector reform, which started in 2016, had a completely opposite impact on resident and non-resident banks: a significant decrease in total deposits and total assets in the non-resident banking group (of 12% (2016) and 28.7 % (2018)) and consequent increase in the resident bank group (of 2.2% (2017) and of 6.4 % (2018)).

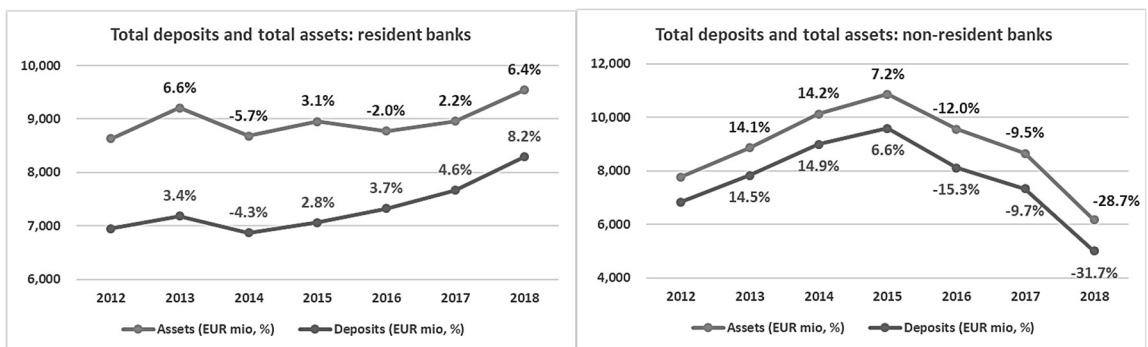


Figure 6 Dynamics of total deposits and total assets of resident banks and non-resident banks, 2012-2018 (EUR million, %) (Financial and Capital Market Commission, 2012-2018) (compiled by the authors)

It is important to clarify whether the effect of the shrinking non-resident deposits in the two traditional Latvian banking groups (the resident and non-resident banks) has been similar or different. The information compiled by the FCMC (see Figure 7) clearly shows that the rapid decline in non-resident deposits has taken place only in the non-resident bank group, while non-resident deposits did not decrease in the resident bank group.

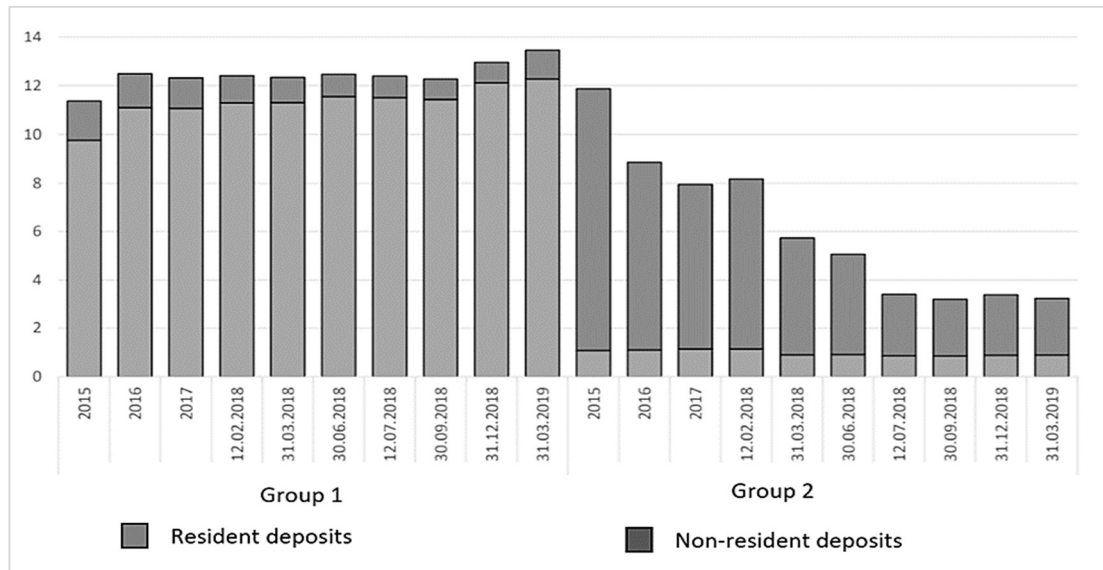


Figure 7 Dynamics of resident and non-resident deposits in the resident and non-resident banking groups (EUR billion) (Financial and Capital Market Commission, 2019)

The share of non-resident deposits in resident banks had already been below the limit of 20% prior to the commencement of the reform. The fact that with the reinforcement of the reform (including AML/CTPF measures, the prohibition to cooperate with shell companies) the volume of non-resident deposits in the resident banking group has not changed significantly may lead to speculation that the “quality” of foreign customers in resident banks could have been higher than in non-resident banks. However, such statistics are not publicly available, and further investigation is needed to prove it.

CAR dynamics of Latvian banks in the period of 2012-2018

The average capital adequacy ratio (CAR) of the whole Latvian banking system during the period from 2012 to 2018 significantly exceeded the minimum capital requirement of 8% set by the Basel III regulation and the FCMC, while the minimum capital requirement together with the capital maintenance reserve of 2.5% was introduced by the FCMC in accordance with Basel III and the EU capital regulation (see Figure 8).

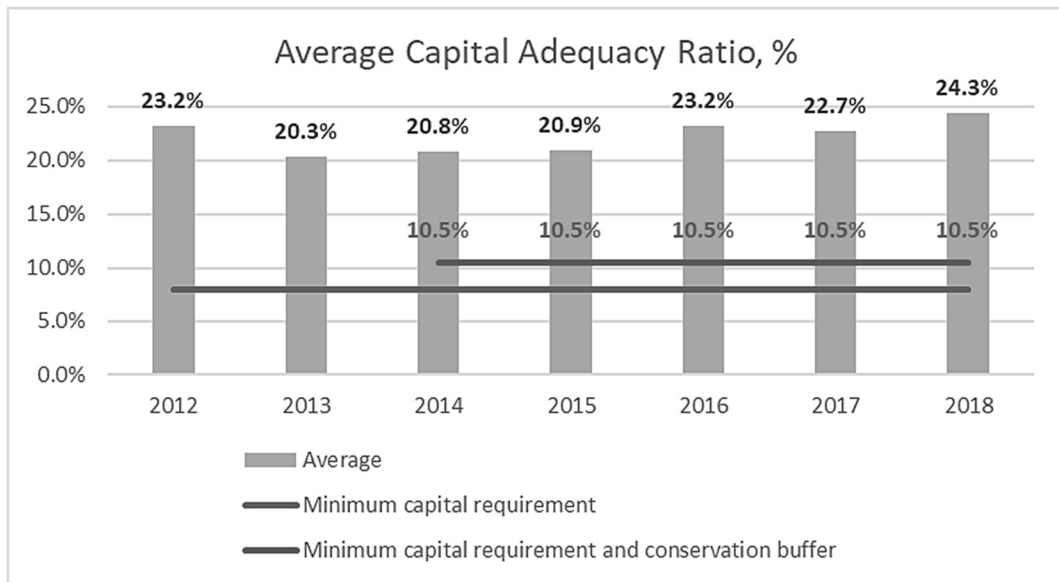


Figure 8 Average CAR value in the whole Latvian banking sector (Financial and Capital Market Commission, 2012-2018) (compiled by the authors)

However, CAR dynamics in resident and non-resident banks in Latvia before and during the financial reform showed a different pattern.

CAR values of the resident banking group varied from 12.5% (2012) to 39.3% (2015) (see Figure 9), but even the minimum CAR value was at least 4.5 percentage points above the minimum capital requirement (8%).

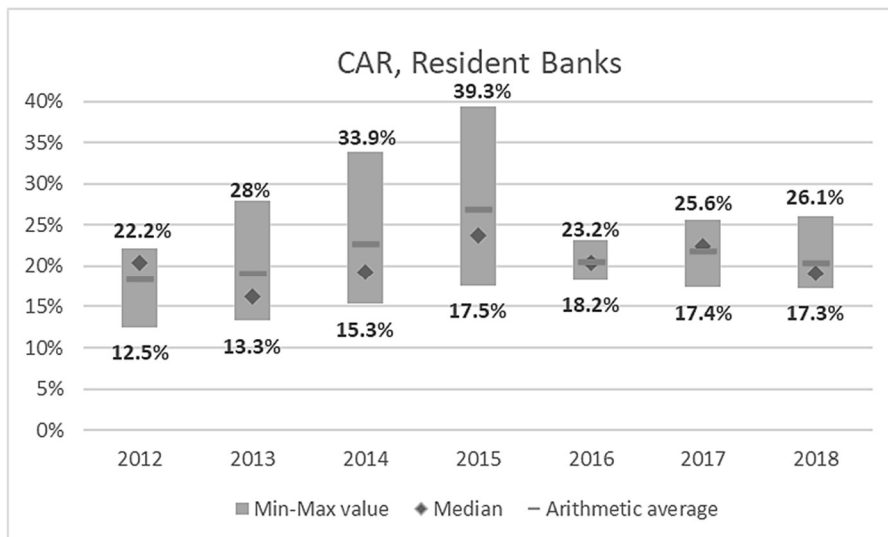


Figure 9 CAR values of resident banks (Financial and Capital Market Commission, 2012-2018) (compiled by the authors)

CAR values of the resident banking group consequently increased from 22.2% (2012) to 39.3% (2015) but then experienced a sharp drop in 2016¹ and later increased slightly.

During the entire period (2012-2018), CAR values of resident banks were always above the minimum CAR required by the FCMC and even the minimum CAR values of particular resident banks were 4.5 percentage points above the minimum required CAR (8%).

CAR values of the non-resident banking group for the same period of 2012-2018 were subject to greater divergence and more often approached the minimum capital requirement. In the years 2012-2015 and 2018 their CAR values were even below the required 10.5% (see Figure 10) (an indicator which includes the minimum capital requirement of 8% and the capital maintenance reserve of 2.5%).

¹ The sharp drop in CAR in 2016 was not caused by reform implementation but by a one-off decision from Swedbank to lower its capital (Swedbank JSC, 2017).

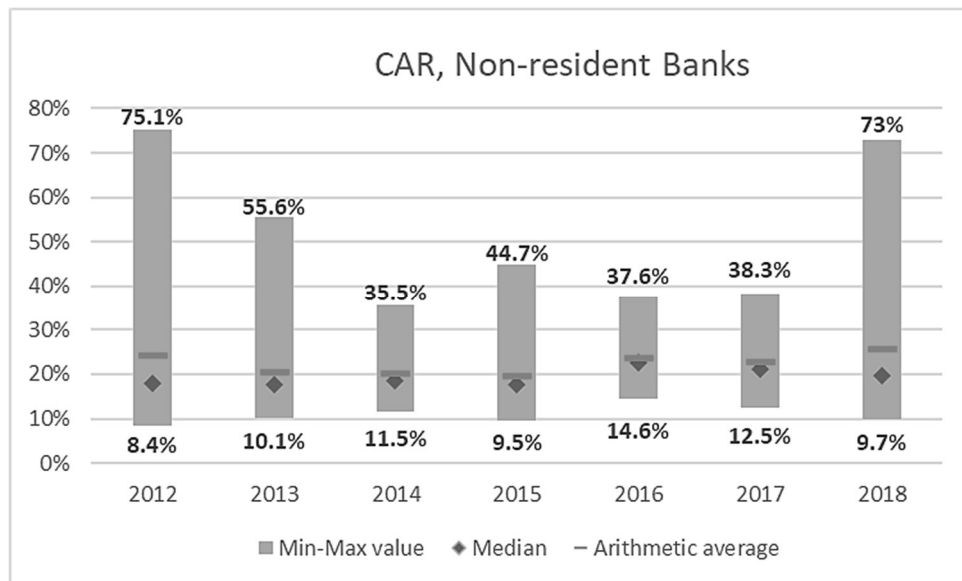


Figure 10 CAR values of non-resident banks in Latvia (2012-2018) (Financial and Capital Market Commission, 2012-2018) (compiled by the authors)

The results obtained demonstrate that during the period of reform implementation, CAR values of all resident banks were always over the required minimum level of 10.5% and were characterized by less dispersion and higher stability, which was mainly the result of their high level of capitalization, choice of conservative capital instruments and transparent capital structure, stable profitability, and significant excess of interest income over commission income.

CAR values of non-resident banks during the same period were more widely dispersed and for some banks the capital level even before and during the years of financial reform was below the minimum capital requirement, which could be explained by the use of Tier 2 capital instruments by non-resident banks, raising additional capital (incl. subordinated bonds and subordinated loans).

Differences obtained in CAR values and the dynamics of the two banking groups demonstrate that the more volatile non-resident bank business model is more exposed to the impact of financial sector reform than the resident bank model.

ROE dynamics of Latvian banks in the period of 2012-2018

The average ROE of the whole Latvian banking sector during the period of 2013-2018 was stable, varying between 13.8% and 15.3% (see Figure 11).

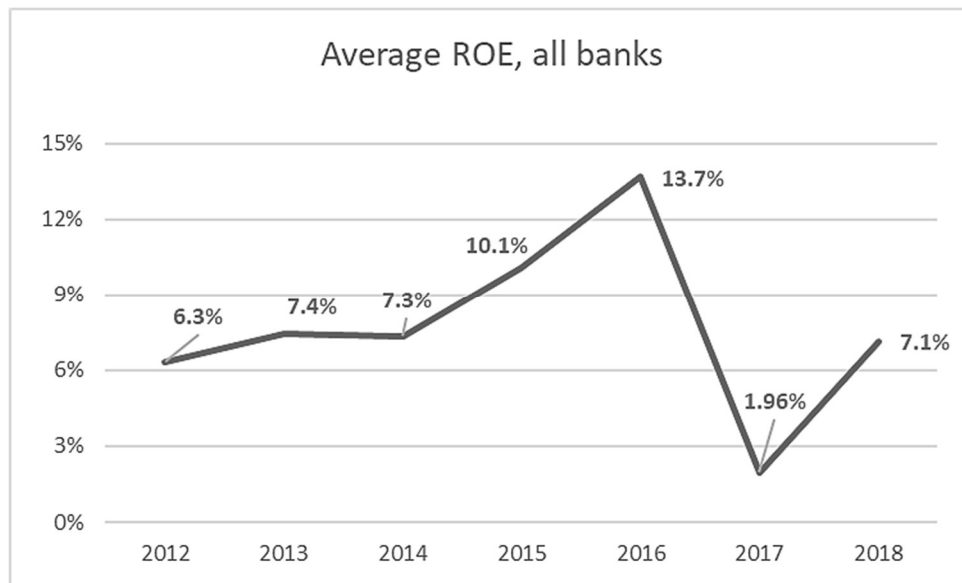


Figure 11 Average ROE value in the whole Latvian banking sector (2012-2018) (Financial and Capital Market Commission, 2012-2018) (compiled by the authors)

At the same time, ROE values and their dynamics showed different patterns in resident and non-resident banks.

The average ROE for resident banks during the period of 2012-2018 was more stable: the arithmetic average value of ROE ranged from 7% in 2013 to 12% in 2018 and was almost always positive in all the years considered.² (Figure 12)

² The exception is the operating result of Luminor bank in 2017, which is mainly related to the merger of DNB bank and the Latvian branch of Nordea Bank AB, which had an impact on the financial results of the combined bank due to one-time costs, incl. from investments in property and impairment losses (Luminor bank JSC, 2018).

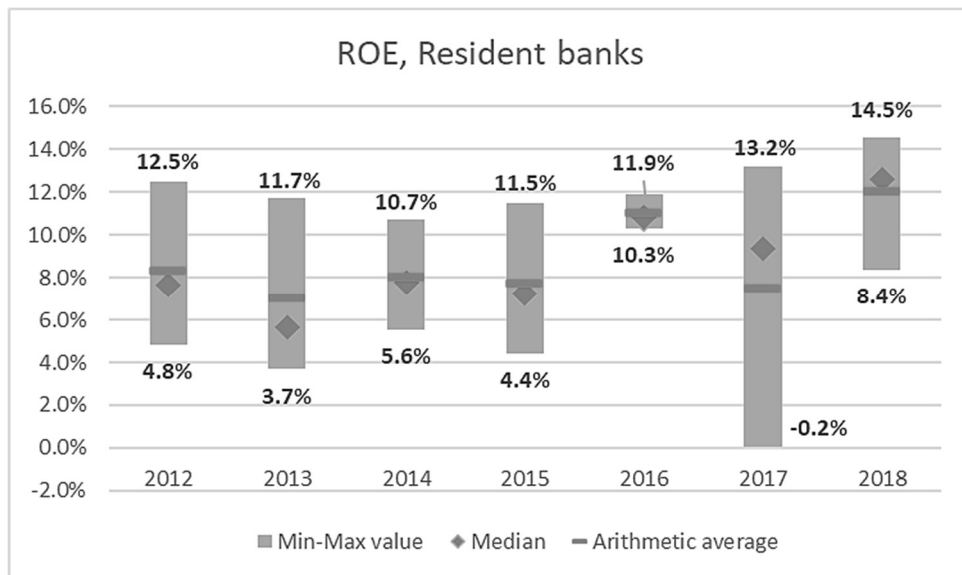


Figure 12 ROE values of the resident bank group (Financial and Capital Market Commission, 2012-2018) (compiled by the authors)

The ROE values of non-resident banks were much more dispersed, ranging from -43.6% in 2013 to +42.8% in 2016 (see Figure 13).

Positive ROE values for all non-resident banks in Latvia are observed only in 2016.

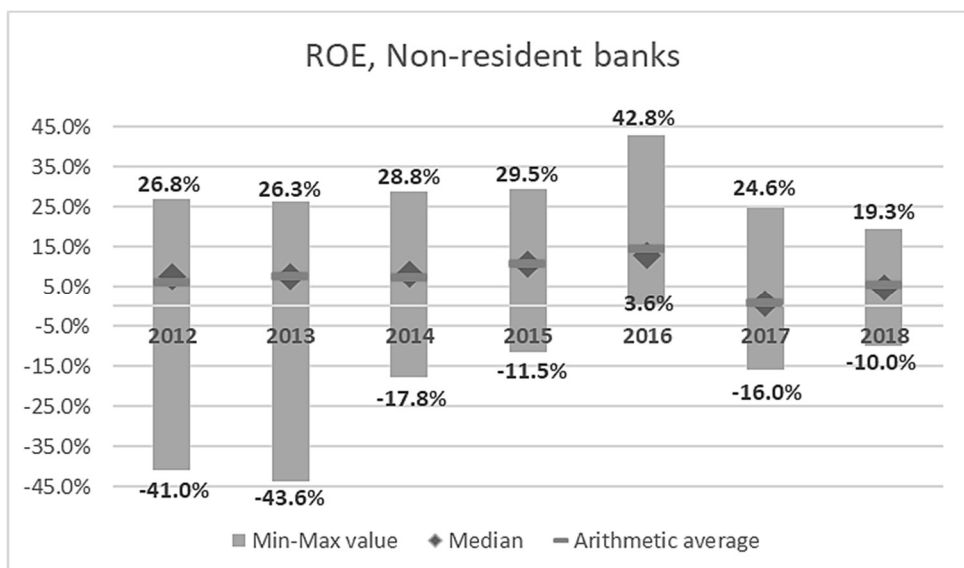


Figure 13 ROE values of the non-resident bank group (Financial and Capital Market Commission, 2012-2018) (compiled by the authors)

The results obtained show that the ROE values of non-resident banks, similarly as CAR, are more widely dispersed in comparison to resident banks in Latvia, with some non-resident banks constantly demonstrating significant losses in the period of 2012-2018. The only year when all non-resident banks have positive ROE is 2016 – the starting year of financial reform.

Both performance parameters demonstrate the higher volatility of non-resident banking business, which for some non-resident banks is under threat of non-compliance with regulatory requirements.

Impact of total deposit dynamics on resident and non-resident bank profit during the period of 2012-2018

If we look simultaneously at the dynamics of total deposits and profits before taxes in banks during the period of 2012-2018 and compare the patterns for resident and non-resident banks, we come to two different results (see Figure 14).

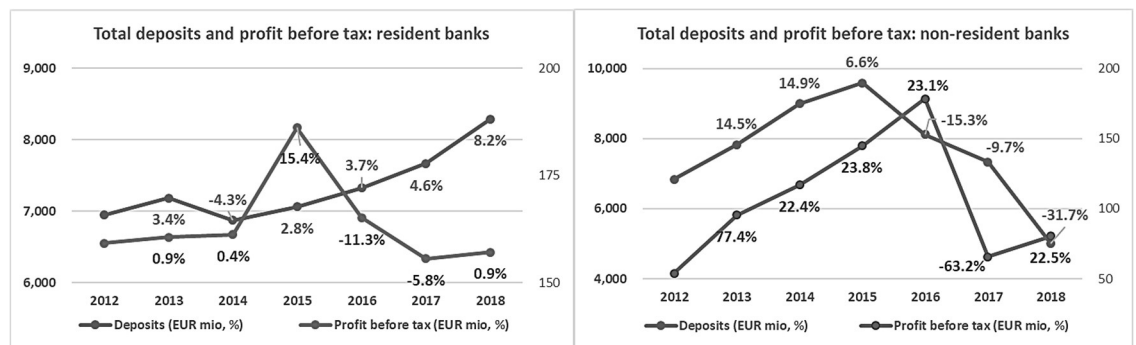


Figure 14 Dynamics of total deposits and profit before tax of resident and non-resident banks, 2012-2018 (EUR million, %) (Financial and Capital Market Commission, 2012-2018) (compiled by the authors)

For resident banks, with the increase in total deposits, profit before taxes did not change very significantly (with the exception of a sharp peak in 2015).³

For the non-resident bank group, profit before taxes experienced a much steeper increase in the period before the start of financial reform, and that correlates with an increase in total deposits, but with the first year of reform implementation, both total deposits and

³ A one-off increase in profit in 2015, which exceeded EUR 40 million and affected the entire resident group, was held by Swedbank. In 2016, Swedbank's profit before tax fell by more than EUR 40 million because no more income from loan repayments was received, and the previously created loan provisions were not released (Swedbank JSC, 2016).

profits began to decrease sharply. The dynamics of profit decrease in 2017 were 10 times faster (63.2 % in 2017) than in resident banks.

If we look at the bank income structure, both the net interest income and net commission income of non-resident banks declined with the outflow of foreign depositors (see Figure 15), but commission income and total profit before tax continued to grow in 2016 and fell with a one-year offset only in 2017. The increase in commission income in 2016, as the deposit portfolio shrank by 15.3%, can be explained by the fact that banks charged high commissions when transferring large cash flows away from the Latvian banking system to foreign customers.

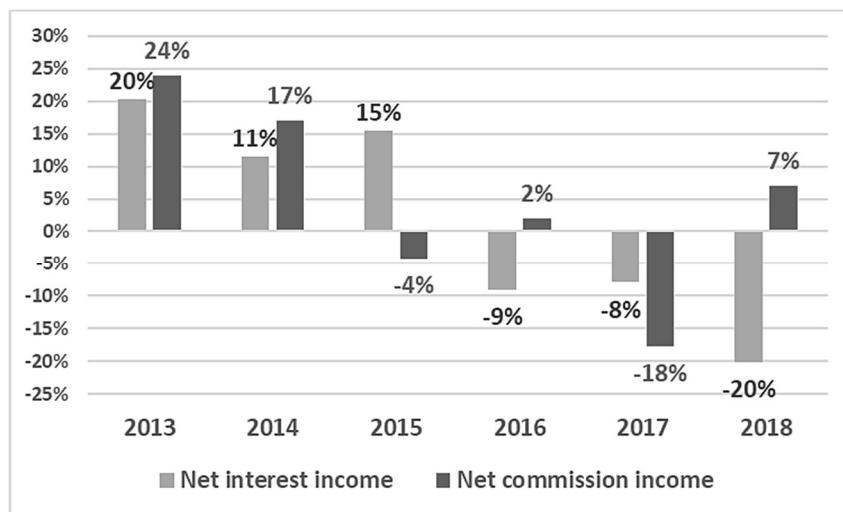


Figure 15 Dynamics of net interest income and net commission income of non-resident banks, 2013-2018 (%) (Financial and Capital Market Commission, 2012-2018)
(compiled by the authors)

The interesting fact is that the non-resident banking group's performance started to recover in 2018 (see Figure 15). Although one year is too short a period of time to draw conclusions, one can note that the positive dynamics coincided with the application of new business strategies by non-resident banks agreed with the FCMC and may be related to the fact that, in general, non-resident banks were starting to adjust to the new market situation.

Our suggestion is that survival and further successful performance of non-resident banks will be essentially determined by refocusing their business strategies in order to maintain and improve their profitability, by developing credit services for local and EU-resident businesses and households, while not fully ceasing to dispose of non-resident deposits.

Non-resident banks should also develop co-operation with other market players by offering syndicated loans to share credit risk and attract high-quality customers and should provide alternative lending products that generate high commission income to offset the

commission income that has been previously generated by serving high-risk non-resident client transactions.

CONCLUSIONS

1. The historically formed two banking groups in Latvia (resident and non-resident banks) demonstrated different performance patterns during the period of 2012-2018: CAR and ROE parameters for non-resident banks were much more dispersed and sometimes approached critical values, which has clearly demonstrated the volatility and riskiness of the non-resident banking business model in Latvia.
2. Therefore, the implementation of the Latvian financial sector reform initiated by the Latvian government and the regulator in 2016 aimed at improving the reputation of the Latvian financial sector and combating ML/TPF has caused a significant outflow of deposits and significantly lowers the performance only of non-resident banks in Latvia.
3. The implementation of the Latvian financial sector reform had a minimal impact on resident bank performance in Latvia.
4. The partial “recovery” of non-resident bank performance at the next stage of financial reform (after 2017) could be an indication that non-resident banks were demonstrating some adaptation to the new business environment without having significant amounts of non-resident deposit inflows.
5. Our suggestion is that survival and further successful performance of non-resident banks in Latvia will be essentially determined by refocusing their business strategies in order to maintain and improve their profitability, by developing credit services for local and EU-resident businesses and households, while not fully ceasing to dispose of non-resident deposits.

REFERENCES

1. Bank of Latvia (2014-2019), *Statistics, Data, MFI balances and monetary statistics: 03 MFI (with the exception of Bank of Latvia) attracted deposits* (data starting from December 2014), available at: <https://www.bank.lv/statistika/dati-statistika/mfi-bilances-un-monetara-statistika-k> (accessed 22 November 2019).
2. Bank of Latvia (2019), *Financial Stability Report, 2018*, p. 33, available at: https://www.bank.lv/images/stories/pielikumi/publikacijas/FSP_2018.pdf (accessed 13 October 2019).
3. Basel Committee on Banking Supervision (2011), *Basel III: A global regulatory framework for more resilient banks and banking systems*, available at: <https://www.bis.org/publ/bcbs189.pdf> (accessed 25 July 2019).
4. Casu, B., Girardone, C. and Molyneux, P. (2006), *Introduction to Banking*, Pearson Education Limited, London.
5. Diamond, D. W., Rajan, R. G. (2000), "A Theory of Bank Capital", *The Journal of Finance*, Vol. 55, No. 6, pp. 2431-2465, available at: <https://faculty.chicagobooth.edu/douglas.diamond/research/papers/bankcapital.pdf> (accessed 5 August 2019).
6. Djalilov, K., Piesse, J. (2016), "Determinants of Bank Profitability in Transition Countries: What Matters Most?", *Research in International Business and Finance*, Vol. 38(C), pp. 69-82, available at: http://eprints.bournemouth.ac.uk/23537/1/Paper%202016_w_authors_final-3.pdf (accessed 19 August 2019).
7. European Central Bank (2010), *Beyond ROE – How to measure bank performance. Appendix to the report on EU banking structures, September 2010*, available at: <https://www.ecb.europa.eu/pub/pdf/other/beyondroehowtomeasurebankperformance201009en.pdf> (accessed 21 October 2019).
8. Finance Latvia Association (2012-2018), *Data: Industry Data*, available at: <https://www.financelatvia.eu/nozares-dati/> (accessed 9 August 2019).
9. Financial and Capital Market Commission (2012-2018), *Statistics, Credit Institutions, Quarterly Reports*, available at: <https://www.fktk.lv/statistika/kreditiestades/ceturksnaparskati/> (accessed 22 September 2019).
10. Financial and Capital Market Commission (2019), *Change management in Latvian Financial Sector 2016-2019: Review of essential events and statistics*, available at: https://www.fktk.lv/wp-content/uploads/2019/06/PREZ_Bankusektora_transform%C4%81cija_2016-2019_saites.pdf (accessed 9 August 2019).

11. Fraisse, H., Lé, M. and Thesmar, D. (2017), “The real effects of bank capital requirements”, *European Systemic Risk Board, Working Paper Series*, No. 47, pp. 1-43, available at: <https://www.esrb.europa.eu/pub/pdf/wp/esrbwp47.en.pdf> (accessed 15 August 2019).
12. Hakenes, H., Schnabel, I. (2011), “Bank Size and Risk-Taking under Basel II”, *Journal of Banking and Finance*, Vol. 35, No. 6, pp. 1436-1449, available at: <http://ssrn.com/abstract=700581> (accessed 9 August 2019).
13. Haufler, A., Maier, U. (2016), *Regulatory competition in capital standards with selection effects among banks. Munich Discussion Paper No. 2016-5*. Department of Economics, University of Munich, available at: <https://epub.ub.uni-muenchen.de/27700> (accessed 25 August 2019).
14. Howarth, D., Quaglia, L. (2013), “Banking on Stability: The political economy of new capital requirements in the European Union”, *Journal of European Integration*, Vol. 35, No. 3, pp. 333-346, available at: <https://orbilu.uni.lu/bitstream/10993/4555/3/Howarth%20and%20Quaglia%20for%20JEI%20author%20postprint.pdf> (accessed 27 July 2019).
15. Kashyap, A. K., Stein, J. C. (2004), “Cyclical implications of the Basel II capital standards”, *Economic Perspectives*, 1Q, pp. 18-31, available at: <https://scholar.harvard.edu/files/stein/files/cyclical.pdf> (accessed 24 August 2019).
16. Luminor bank JSC (2018), *Consolidated and bank’s annual report for the year ended on 31 December 2017*, available at: <https://www.luminor.lt/sites/default/files/documents/luminor-lv-annual-report-2017-lv.pdf> (accessed 22 November 2019).
17. Moody’s Analytics (2013), *Basel III Capital and Liquidity Standards - FAQs*, available at: <https://www.moodyanalytics.com/-/media/article/2013/2013-18-10-basel-iii-capital-and-liquidity-standards-faq.pdf> (accessed 17 August 2019).
18. Repullo, R., Suarez, J. (2013), “The procyclical effects of bank capital regulation”, *EconPapers, Review of Financial Studies*, Vol. 26, No. 2, pp. 452-490, available at: <https://www.cemfi.es/~suarez/repullo-suarez09.pdf> (accessed 5 August 2019).
19. Rietumu bank JSC (2019), *Annual report 2018*, available at <https://www.rietumu.lv/documents/latvian/ar/ar2018.pdf> (accessed 22 November 2019).
20. Swedbank JSC (2016), *Consolidated and bank’s financial report for the year 2015*, available at: https://www.swedbank.lv/static/pdf/reports/annual/swedbank_gada_finansu_parskats_2015_LAT.pdf (accessed 18 January 2019).

21. Swedbank JSC (2017), *Consolidated and bank's financial report for the year 2016*, available at:
https://www.swedbank.lv/static/pdf/reports/annual/swedbank_gada_finansu_parskats_2016_LAT.pdf (accessed 18 November 2019).