ISSN 1429-2939

4(69) 2017

BEZPIECZNY BANK

BFG

BANK GUARANTEE FUND

SAFE BANK is a journal published by the Bank Guarantee Fund since 1997. It is devoted to issues of financial stability, with a particular emphasis on the banking system.

All articles published in "SAFE BANK" are reviewed.

All articles present the opinions of the authors and should not be construed to be an official position of BFG.

PUBLISHER:

Bank Guarantee Fund
ul. Ks. Ignacego Jana Skorupki 4
00-546 Warszawa

SECRETARY:

Ewa Teleżyńska, Małgorzata Polak
Telephone: 22 583 08 78, 22 583 05 74
e-mail: ewa.telezynska@bfg.pl; malgorzata.polak@bfg.pl

www.bfg.pl

DOM WYDAWNICZY ELIPSA

Typesetting and printing by:
Dom Wydawniczy ELIPSA
ul. Inflancka 15/198, 00-189 Warszawa
tel./fax 22 635 03 01, 22 635 17 85
e-mail: elipsa@elipsa.pl, www.elipsa.pl

DOI: 10.26354/bb.1.4.69.2017

Safe Bank
4(69)/2017

Problems and Opinions

Karol Strzeliński[*]

RISK MANAGEMENT AND PROCYCLICALITY IN BANKS. SOME OBSERVATIONS FROM EU BANKING SECTOR SURVEY[**]

1. INTRODUCTION

Last financial crises brought doubts regarding efficiency of existing solutions in the field of capital adequacy to ensure the safety of the worldwide banking system, and induced a "regulatory tsunami" – launched a number of initiatives among various international bodies such as the Basel Committee on Banking Supervision, the European Commission and the European Banking Authority (EBA, formerly CEBS) to supplement or modify existing regulations to prevent similar crisis in the future. Among shortcomings of the regulations and supervision then in force one can distinguish procyclicality of capital adequacy regime, microprudential approach to supervision and microprudential nature of regulations. To remedy these drawbacks international prudential standards (so called Basel regulations) have been modified and supplied with elements aimed to strengthen bank capital base and bank liquidity position as well as reduce excessive risk taking and cyclicality of credit granting. In European Union (EU) these modifications have been finally connected with "single rule book" concept[1] in order to prevent regulatory arbitrage among

[*] Karol Strzeliński works at Faculty of Economic Sciences of the University of Warsaw.

[**] The study was financed by the National Science Centre (NCN); Grant No. 2012/07/N/HS4/02671.

[1] While Basel prudential standards and directives implementing them to EU law before 2014 (*Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions*, European Parliament;

various European jurisdictions and to facilitate creation of single EU financial market. In this paper procyclicality issue and some solutions to deal with it are only tackled. The term procyclicality, in context of banking regulation, describes a situation where interaction between financial sector and real economy reinforces each other increasing business cycle fluctuations and financial instability[2]. The basis for this phenomenon is close connection among the presence of financial market, availability of credit and economic growth. Such a relationship indicates for example Levine and Zervos[3], Koivu[4] or Demetriades and Hussein[5]. Last financial crisis clearly showed this kind of mechanism in practice when many financial institutions, mostly banks, facing troubles with reconstruction of own funds and fulfilling regulatory requirements (capital adequacy ratios) were forced to deleverage and limit credit granting (credit crunch). This move, in turn, induced decrease of economic activity and further decrease of economic growth.

Literature indicates several sources of procyclicality and many of them are closely interlinked with each other. Probably the most common are:

- construction of capital adequacy regime, variable risk perception and variable risk appetite,
- information asymmetry and insufficient level of control (both on ownership and customer side),
- interconnectedness of financial institutions, and their herding behaviour leading to firesale and abrupt fall of asset prices.

The philosophy of capital adequacy regime is procyclical by nature – the higher the risk of particular exposure the higher capital requirements should be and it is harder, ceteris paribus, to maintain similar capital adequacy ratio, but risk perception and risk appetite also vary in procyclical manner. Bankers have the higher risk appetite and during prosperity period they perceive risk as lower

---

Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions, European Parliament) assumed minimum level of harmonization of the rules among different jurisdictions, new EU law force full harmonization of most rules and introduce them using directly applicable Regulation of The European Parliament and Of The Council (*Regulation (EU) No 575/2013 of The European Parliament and Of The Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012*, European Parliament).

2 *Addressing financial system procyclicality: a possible framework. Note for the FSF Working Group on Market and Institutional Resilience*, Bank for International Settlements 2008, p. 1.

3 R. Levine, S. Zervos, *Stock Markets, Banks, and Economic Growth*, American Economic Review 1998.

4 T. Koivu, *Do efficient banking sectors accelerate economic growth in transition countries?*, The Bank of Finland Institute for Economies in Transition 2002.

5 P.O. Demetriades, K.A. Hussein, *Does financial development cause economic growth? Time-series evidence from 16 countries*, Journal of Development Economics 1996, 51(2), 387–411.

than it actually is and they take excessive risk. This mechanism became even more evident a few years before the onset of the financial crisis after introduction of so called Basel II banking capital regulations. New standards linked more closely the capital requirements with riskiness of particular activities of banks, especially various types of assets and off-balance sheet items. The improved risk measurement helped with daily risk management in banks, but simultaneously it increased influence of current macroeconomic situation on particular market on bank capital requirement. Additionally, Basel II allowed to use more advanced capital requirements calculation methods based on statistical models[6], which are said to be more procyclical than a standardized method, that is more close to previous capital adequacy regime – Basel I[7]. Higher capital requirements for riskier activities are intended to limit excessive risk taking and provide enough capital for potential losses. However, during economic prosperity period, optimism among risk dissidents raised, increasing risk appetite and risk tolerance in banks which resulted in eased criteria and conditions of credit granting. This led to excessive risk taking but simultaneously capital and liquidity buffers were not rising enough for potential trend reversal despite the fact it was cheaper than in downturn period. Excessive risk taking by bankers was also possible because of information asymmetry between banks and their customers and shareholders. Bankers did not bear direct responsibility for their decisions, did not risk their own money and were concentrating on achieving short-term goals. Depositors did not know the real level of risk their funds were exposed to and did not move to less risky institutions. Shareholders also rarely knew the real level of risk taken by bank managements and did not appeal these managers from the post. Even rules set in the field of market discipline, which were a part of Basel II regulations (pillar 3), were not able to improve this situation.

Capital requirements and market discipline did not limit excessive risk taking and was not able to internalize external costs from the crisis induced by regulated institutions. The assumption made by capital adequacy originators, in which the whole system will be safe if the safety of each individual institution is guaranteed, turned out to be false[8]. At the beginning of last financial crisis individual banks and other financial market participant, wanting to protect themselves against losses or deleverage in order to maintain capital adequacy ratio, started selling assets considered as risky. Since significant number of market participants behaved in

---

6 Internal Rating Based Approach (IRB) for calculation of capital requirement for credit risk.

7 E. Jokivuolle, I. Kiema, T. Vesala, *Credit allocation, capital requirements and procyclicality*, Bank of Finland Research Discussion Paper 2009 No. 23/2009, 1–43; C. Goodhart, B. Hofmann, M. Segoviano, *Bank Regulation and Macroeconomic Fluctuations*, Oxford Review of Economic Policy 2004, 20 (4), 591–615.

8 A. Persaud, *Macro-Prudential Regulation Fixing Fundamental Market (and Regulatory) Failures, Crisis Response Note number 6*, July, World Bank 2009.

the same manner they induced the fire-sale and brought danger on every market participant. Decreased asset price started a spiral of price reductions, which ended with liquidity and capital problems of these institutions.

Since the crisis procyclicality issue has been recognized as important one more and more initiatives to reduce it are taken. Generally applicable banking capital adequacy regulations have been changed (Basel III[9] or CRDIV/CRR regulatory package[10] in EU) and these changes enabled authorities in every country to conduct macro-prudential policy and implement tools directly countercyclical such as countercyclical capital buffers. Other new tools in macroprudential arsenal are the leverage ratio limit, the possibility to increase risk weights for exposures posing systemic risk (like in standardized approach possibility to increase risk weights for exposures secured by mortgages on immovable property in order to prevent asset bubble on real estate market) or to use other non-harmonized measures like tools based on limits on Loan-to-Value (LtV)[11] ratio or Debt-to-Income (DtI)[12] ratio to prevent systemic risk. Some researchers[13] and international organisations[14] consider also adjusting these tools anticyclical to supplement countercyclical

---

9 Basel III is a comprehensive set of reforms of Basel Committee on Banking Supervision standards regarding banks' capital adequacy, in force in those days, which aim is to strengthen the regulation, supervision and risk management of the banking sector. Presently Basel III regulatory framework among other thing consists of *Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework – Comprehensive Version*, Bank for International Settlements, Basel Committee on Banking Supervision 2006; *Revisions to the Basel II market risk framework*, Bank for International Settlements, Basel Committee on Banking Supervision 2009; *Basel III: A global regulatory framework for more resilient banks and banking systems*, Bank for International Settlements, Basel Committee on Banking Supervision 2011; *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, Bank for International Settlements, Basel Committee on Banking Supervision 2013; *Basel III: the net stable funding ratio*, Bank for International Settlements, Basel Committee on Banking Supervision 2014.

10 The package consist of: *Directive 2013/36/EU Of The European Parliament and of The Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC* and *Regulation (EU) No 575/2013 of The European Parliament and Of The Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012*, and it implements Basel III rules into EU law.

11 LtV – the ratio of the value of loan outstanding to current value of property on which the loan was secured.

12 DtI – the ratio of expenses related to the operation of credit obligations and/or other liabilities to income of the debtor.

13 See e.g. D. Igan, H. Kang, *Do Loan-to-Value and Debt-to-Income Limits Work? Evidence from Korea*, IMF Working Paper 2011.

14 See e.g. *Recommendation Of The European Systemic Risk Board of 4 April 2013 on intermediate objectives and instruments of macro-prudential policy (ESRB/2013/1)*, European Systemic Risk Board.

buffer. Obviously, the question arises whether they constitute the most appropriate solution to the procyclicality problem. This research focuses only on anticyclical use of tools based on LtV and DtI.

General motivation to conduct the research, which is the topic of this paper, is widespread uncertainty regarding use of proposed macroprudential tools and work carried by central banks or macroprudential supervisory bodies analysing transmission mechanisms of all prudential regulations on financial stability. There is still small experience with the use of macroprudential tools over the world and most of the tools regulators have experience with, have been primary used for microprudential purpose. Since their use was rather not coordinated with monetary policy, it might have entailed loss in efficiency of monetary policy or weaken economic growth. Particular aim of this research is to give some insight on the issue of procyclicality of banking activity stemming from Basel banking regulations and banks' management practices. This research tries to verify whether the Basel banking regulation procyclicality issue is a common problem among EU banks and whether it applies to all portfolios. Therefore, it analyses influence of prudential regulations regarding capital requirements and capital adequacy on the credit granting since their first formation and implementation– whether they are in fact the source of procyclicality and make credit granting fall during recession periods. This is also an occasion to verify whether more advanced methods of calculation of capital requirements are equally procyclical as the standardized method[15] – standardized approach under Basel II regime or method of calculation of capital requirement for credit risk from Basel I. Finally, the author wants to check whether application of efficient anticyclical tools based on LtV or DtI limits is always possible or whether it requires additional supporting actions. Testing this involves determining jurisdictions, time periods and credit segments where such regulatory limits were in force and whether banks used then own limits regarding credit granting (LtV, DtI and other own limits) more stringent than supervisory ones.

In order to answer those questions an attempt of survey research among individual banks from EU was taken. Questions in the survey tried to investigate presence of regulatory limits as well as bank's own limits based on LtV, DtI or other limits regarding credit granting (e.g. maximum maturity, liquidity standards) in different periods of time. The survey asked also about the method used by bank in calculation of capital requirement for credit risk and the use

[15] Standardized methods are not free from procyclicality problem because external ratings assigned by External Credit Assessment Institutions (ECAI), that are used in standardized approach to risk weighting for capital requirement purpose, can behave procyclically (J.D. Amato, C.H. Furfine, *Are credit ratings procyclical?*, BIS Working Papers 2003, No. 129, Bank for International Settlements), and accounting rules cause cyclical behavior of bank balance sheet and regulatory capital.

of statistical methods in its credit granting process. Finally, the survey tried to determine influence of the abovementioned limits, changes in bank's capital position and other bank's characteristics on changes in credit supply in different period of time.

The author decided to conduct the survey because data at individual bank level, covering simultaneously regulatory constraints and bank's own credit policy constraints, are unavailable. Most papers with empirical studies on procyclicality issue focus on regulatory side only. They base their analysis on information about presence of certain regulatory constraints or values of general indices of banking supervision stringency and ignore procyclical changes of banks' risk appetites and risk tolerances. Even if there are some papers trying to determine cyclicality of credit granting studying changes of banks' internal decisions regarding risk appetite and risk tolerance, they are based on information from central banks' bank lending surveys. The range of information from these surveys that can be useful in analysis of changes of risk appetites in banks' credit portfolios is limited and the history of these surveys in Europe is relatively short. What is more, information on LtV and DtI limits became the subject of research in recent years and mostly among regulators, central bankers or policymakers (e.g. European Commission) but they focus mostly on international experience of using regulatory limits or analyse actual values of LtV or DtI ratios in particular portfolios of banks under their supervision.

Because the final number of survey participants was very low performance of meaningful econometric analysis was not possible and the author decided to conduct a kind of a case study analysis. However due to confidentiality obligations presentation of results may differ from typical case study analyses. It is because the author cannot always present exact number of banks with particular characteristics (e.g. country of origin connected with relative asset size and/or method of calculation of capital requirement). This also means that a reader has to be cautious while drawing more general conclusions from this research. Nevertheless, this paper can be considered as a presentation of the research methodology and a signpost showing areas worth further research.

The rest of this paper is organized as follows. Section 2 presents main trends in empirical research on Basel banking regulation procyclicality issue with brief literature review. It also explores some shortcomings of using some of these approaches. Section 3 describes the author's survey research, including motivation behind its every question. Section 4 contains results of the survey and attempts of their interpretation. Section 5 summarizes the author's work and *submits proposals of research modifications* that could be performed by the central banks or bank supervisory authorities.

2. EMPIRICAL RESEARCHES ON PROCYCLICALITY OF BASEL BANKING REGULATIONS

There are several major trends in empirical research on capital adequacy procyclicality issue. In particular, one can distinguish three groups of papers:

- papers using the calibrated general equilibrium model or dynamic stochastic general equilibrium model with financial sector where the capital adequacy procyclicality mechanism is mimicked and its mitigation using anticyclical capital buffer or other tools is tested;
- papers with econometric models (often panel models) examining relationship between credit growth or lending and deposit spreads and various bank balance sheet data, credit portfolio quality indicators (e.g. nonperforming loans ratio), indicators of business cycle phase or gdp growth, indices of stringency of banking regulations and supervision or indicators based on the results from bank lending surveys;
- official reports prepared by bank supervisory authorities based on bank level data presenting effects of supervisory actions like imposition of regulatory limits on LtV or DtI that bank must comply with while granting new credits, or examining changes in capital requirements for credit risk, components taking part in their calculation and credit growth in various segments of the credit market.

As a great example of the first group of papers, one can indicate papers by Repullo and Suarez[16] or Clerc et al.[17] In the first paper Repullo and Suarez[18] present dynamic equilibrium model developed and calibrated (based on data from US banks) focusing on microprudential role of capital requirements and capital adequacy regime and their procyclical effects on bank credit supply. In this model we have banks granting credits, their investors – a source of additional equity capital – and enterprises that need a credit to realize their investment projects. In this setup different capital regulation regimes are compared – Basel I, Basel II and a hypothetical one that maximizes the measure of social welfare. Authors show that Basel II regime is more procyclical than its predecessor, but makes banks safer since it reduces banks probabilities of failure. They also try to prove that for high values of social cost from bank failure, introduction of Basel III capital adequacy regime may be a good solution, with higher but less cyclically-varying

---

16 Repullo R., Suarez J., *The procyclical effects of bank capital regulation*, CEMFI Working Paper 2012, No. 1202.

17 L. Clerc, A. Derviz, C. Mendicino, S. Moyen, K. Nikolov, L. Stracca, J. Suarez, A.P. Vardoulakis, *Capital Regulation in a Macroeconomic Model with Three Layers of Default*, Banque de France Working Paper 2014, No. 533.

18 R. Repullo, J. Suarez, *The procyclical effects…*, *op. cit.*

capital requirements. The next paper presents dynamic general equilibrium model not calibrated to any specific country, but more sophisticated than many models previously designed and better reflecting some mechanisms behind banking activity, which allows to consider it as a workhorse for future studies on macroprudential solutions. It contains intermediation chain linking depositors – households – with borrowers – households and enterprises – via banks that are subject to capital adequacy regulation, and allows for explicit default in every sector included in the model. In other such models the default option is ruled out in the optimum. Some results presented in this paper show that lower leverage and a larger cost of equity funding in the short run, make banks less fragile, but, too high levels of capital requirements may unduly restrict credit availability. All of the abovementioned papers focus on selected macroprudential issues and do not take into account some elements of complex procyclicality mechanism as well as specificity of prudential regulations and supervisory actions (like imposing additional regulatory measures), which differ in various countries and individual bank lending policies that vary dependent, inter alia, on competition level, business cycle or segment of the credit market. Another group of papers is partly free of these disadvantages but these papers have their own drawbacks.

Most papers involving econometric analysis on procyclicality issue focus on regulatory side. They base their analysis on information about presence of certain regulatory constraints or values of general indices of banking supervision stringency and ignore procyclical changes of banks' risk appetites and risk tolerances. Many of them are based on the survey research conducted under the auspices of the World Bank by Barth, Caprio, Levine[19] who conducted several times[20] the research survey among bank supervisory bodies in countries around the globe and create database which is still unique source of comparable data on some aspects of banking activities and on how banks are regulated and supervised around the world[21]. This database covers many aspects of banking including: capital requirements, activity restrictions, loan classification and requirements provisioning troubled bank resolution actions, and the quality of supervisory personnel and their actions. Unfortunately, in case of some papers analysing procyclicality of banking activity, the use of these pieces of data may constitute an abuse. Barth, Caprio and

[19] J. Barth, G. Caprio, R. Levine, *The regulation and supervision of banks around the world – a new database*, Vol. 1, 2001.

[20] J. Barth, G. Caprio, R. Levine, *The regulation…*, *op. cit.*; J. Barth, G. Caprio, R. Levine, *Rethinking Bank Regulation: Till Angels Govern*, Cambridge University Press, New York 2006; J. Barth, G. Caprio, R. Levine, *Bank Regulations Are Changing: For Better or Worse*, World Bank 2008; J. Barth, G. Caprio, R. Levine, *The Evolution and Impact of Bank Regulations*, World Bank 2012.

[21] 2012 edition of this survey covers information from 143 jurisdictions.

Levine[22] provide readers with general indices of the regulatory restrictiveness or supervisory power[23], but these measures do not have much in common with capital adequacy mechanisms *i.e.* there is no measure like restrictiveness of rules regarding capital requirements calculation behind those indices. What is more, their database in many aspects contains only information on legal possibilities of actions of financial supervision authorities and not on the real scale of their use. It also ignores supervisory requirements being the soft law in the form of recommendations or industry standards. An example of paper abusing these data might be the one by Olszak et al.[24] where authors try to determine whether cyclicality of loan loss provisions and income smoothing through loan loss provisions contribute to procyclical impact of capital ratio on credit growth in banks in the EU. For this purpose, they use financial data on individual banks of the EU from Bankscope database, stringency indices from Barth, Caprio and Levine[25] and estimate panel model. They claim that more stringent regulations and supervision reduce the magnitude of negative effect of capital ratio on bank lending. What is more, their capital ratio represents rather reversed traditional leverage ratio[26], which does not have much in common with procyclical capital adequacy ratios. Another paper using almost the same set of data is one by Fonseca et al.[27] In their research the authors created a panel model to inspect influence of the capital buffer – the excess over minimum regulatory capital – on lending and deposits rate spreads. Results of their analysis show that well-capitalized banks are less constrained by capital requirements, have lower interest spreads on their loans and lower interest

---

22 J. Barth, G. Caprio, R. Levine, *Bank Regulation and Supervision in 180 Countries from 1999 to 2011*, World Bank 2013.

23 These indices are: Index of restrictiveness in permitting banks to engage in non-bank activities such as insurance, investment banking and real estate; Index of the stringency of bank capital regulations measuring categorized amount of capital banks must hold; Index of official supervisory power measuring the degree to which supervisor has the authority to take specific actions; Overall capital stringency categorizing information whether the capital requirement reflects certain risk elements and deducts certain market value losses from capital before minimum capital adequacy is determined (see J. Barth, G. Caprio, R. Levine, *Bank Regulation…*, *op. cit.* for more details).

24 M. Olszak, M. Pipień, S. Roszkowska, I. Kowalska, *The effects of capital on bank lending of EU large banks – The role of procyclicality, income smoothing, regulations and supervision,* paper presented at NBP's Economic Institute seminar on 24 February 2015.

25 J. Barth, G. Caprio, R. Levine, *Rethinking Bank Regulation…*, *op. cit.*

26 It differs substantially from the leverage ratio defined in CRDIV/CRR regulatory package. The former is based on the exposure measure which includes among other thing off-balance sheet items.

27 A.R. Fonseca, F. González, L. Pereira da Silva, *Cyclical Effects of Bank Capital Buffers with Imperfect Credit Markets: international evidence*, Banco Central do Brasil Working Paper Series 2010, No. 216.

spreads on deposits they offer. They also put a dummy variables in the model to separate period of time with different capital adequacy regimes. Their analysis, though, do not provide statistically significant differences in procyclicality between Basel I and Basel II. However, their analysis does not take into account any proxies for changes in demand for credit or changes in bank lending policies.

Papers trying to determine cyclicality of credit granting studying changes of banks' internal decisions regarding risk appetite and risk tolerance are based on information from central banks' bank lending surveys – the source of information of which main goal is to cognize banks' opinion on changes of trends in credit standards, conditions and terms and also opinion on changes in demand for credit. An example of such papers can be the one by Blaes[28], who analysed slowdown in bank lending to non-financial corporations in Germany during recent financial crisis. He used data on individual bank level from the survey and combined them with data on loan quantities and prices. His findings confirm the link of credit supply factors with slowdown in lending during crisis. Another example of a paper using bank lending survey results in explaining procyclicality is the one by Labonne and Lamé[29], where they use dataset for the French banking sector combining confidential bank-level bank lending survey answers with the discretionary capital requirements set by the supervisory authority (pillar 2). They found that on average, more capital favours credit growth, but the regulatory capital elasticity of lending depends on the severity of the supervisory capital constraint and more constrained banks (capital requirement higher than supervisory minimum) tend to have a credit growth less sensitive to the capital ratio. But this effect weakens close to the supervisory minimum capital requirement. Despite the fact that bank lending surveys are conducted in every EU country and questions' coverage is more or less standardized, their usage in assessing bank capital adequacy procyclicality seems limited. Their results are publicly available only in aggregate form and in most cases as weighted net percentage[30] only. This makes almost impossible for researchers out of central banks to conduct such analysis and to cover different countries in one analysis. Additionally, weights used for this aggregation of answers – bank's share in outstanding amount of loans in particular segment of the credit market – may have few in common with actual size of credit granted

---

[28] B. Blaes, *Bank-related loan supply factors during the crisis: an analysis based on the German bank lending surv*ey, Discussion Paper Series 1: Economic Studies No 31/2011, Deutsche Bundesbank.

[29] C. Labonne, G. Lamé, *Credit Growth and Bank Capital Requirements: Binding or Not?*, Banque de France Working Papers 2014.

[30] Weighted net percentage (tightened minus eased or reverse), based on the share of each bank in the total loan outstanding amount of the banks in the bank lending survey sample. See J. Berg, A. Rixtel, A. Ferrando, G. Bondt, S. Scopel, *The Bank Lending Survey for The Euro Area*, European Central Bank Occasional Paper Series No. 23 / February 2005., p. 26–27.

in accordance with the credit policy from this particular period. Instead of outstanding amount of loans, the use of the share in flows of credits granted in particular period would be desired. What is more, for some EU countries time series of data from a bank lending survey is limited to the last few years[31]. The content of the questions also does not meet all the needs. There is no information regarding method of calculation of capital requirements used by bank. Results contain only general information on changes of costs related to bank's capital position, but this position can be influenced either by the composition of bank's credit portfolio and changes in exposures value or method of calculation of capital requirements used by a particular bank. Based on data from bank lending surveys it is also not possible to derive more detailed findings regarding existing liquidity constraints or availability of various categories of funding (like households deposits, operations in the wholesale interbank market, equity or debt instruments issuance, loans from the parent company). Finally, information regarding the use of LtV limit for other categories of credit than credit for the house purchase is practically not available and information on DtI limits is not available at all.

Still negligible presence of LtV and DtI limits in bank lending surveys can partly be explained by the fact that these limits became the subject of intense research in recent years and the scope of bank lending surveys do not change that fast. However, more and more articles on these limits nowadays may influence content of the future surveys. An example of a paper investigating use of LtV and DTI regulations in a particular country can be the one by Igan and Kang[32], presenting Korean experiences. Korean authorities imposed the first LtV regulation in 2002 and the first DtI regulations in 2005. Both limits were differentiated based upon the housing prices, their geographical location, loan type and the characteristics of the borrowers and they were adjusted frequently in a broadly counter-cyclical manner. Igan and Kang prove that imposing those limits had material impact on stopping house prices appreciation in Korea and advocate including them in macroprudential toolkit. Also Barth, Caprio and Levine[33] in the last edition of their survey, tackled elements of macroprudetnial policy and included a question about the usage of countercyclical LtV ratios for the purpose of such policy. But simultaneously situations where these tools were being used initially for microprudential purpose, in the form of static limits[34], were omitted in this survey. In many cases supervisory authorities have advantages over other researchers.

---

31 Among these countries: Cyprus since 4Q2008, Denmark since 2Q2008, Czech Republic since 2Q2012, Estonia since 2Q2011, Romania 3Q2009.

32 D. Igan, H. Kang, *Do Loan-to-Value…*, *op. cit.*

33 J. Barth, G. Caprio, R. Levine, *Bank Regulation…*, *op. cit.*.

34 In fact in some jurisdictions these limits were changed several times e.g. Poland.

For instance, they have access to data from obligatory prudential reporting of individual banks or can easily conduct a survey among banks as a part of broader supervisory actions. *Report on the pro-cyclicality of capital requirements under the Internal Ratings Based Approach, prepared by European Banking Authority*[35]. It presents the results of empirical analyses on sixty individual banks from twelve countries. Data is available in a Basel II portfolio breakdown[36] on a semi-annual basis covering period from the second half of 2008 till the second half of 2012. This analysis reveals some statistically significant negative correlations between a total capital requirement as well as requirements for individual types of risk (market, credit and operational risk) and macroeconomic environment but other evidence on procyclicality of capital requirements turn out to be weak. Authors have found some evidence that capital requirements change in cyclical manner in corporate and retail portfolios, but this cyclicality is mitigated to a large extent at bank level due to changes in composition of bank overall credit portfolio. Data reveal shifts towards portfolios with lower risk profiles, as exposures in retail and sovereign portfolios have increased while there has been a decline in exposures in financial institutions and corporate portfolios. The drawbacks of this analysis is that it does not assess whether portfolio reallocations have caused undesired restrictions for some borrowers and short data history which additionally does not cover periods before the financial crisis. During crisis behavior of banks could additionally change through government interventions (loans, guarantees or acquisition by the state). Next drawback is the number of banks, which is relatively small, and the fact that it includes only banks using IRB Approach. Authors of this report claim also that for better assessment of procyclicality issue more granular data, on the level of individual exposure, is necessary. Saurina and Trucharte[37] used more granular data in their analysis. They used data on individual mortgage loans from the Spanish Central Credit Register[38], developed a probability of default model and calculated capital requirements using different approaches: point in time, through the cycle, averages along the cycle and corrected for the cycle. They show how sensitive to the risk measurement methodology can be the minimum regulatory capital. They argue, however, that the procyclicality of capital adequacy mechanism depends on the way internal rating systems are implemented and their outputs are utilized.

---

35 *Report on the pro-cyclicality of capital requirements under the Internal Ratings Based Approach*, European Banking Authority 2013.

36 Prudential regulation risk types and exposure classes.

37 J. Saurina, C. Trucharte, *An assessment of Basel II procyclicality in mortgage portfolios*, Banco de España Working Paper 2007.

38 https://www.bde.es/bde/en/secciones/servicios/Particulares_y_e/Central_de_Infor/Central_de_Info_04db72d6c1fd821.html

Because most of the drawbacks mentioned in this section are actual even for researchers from central banks or bank supervisory authorities, one possible solution to fill some gaps is to conduct appropriate research survey among individual banks from different jurisdictions. Such survey should analyze simultaneously trends in credit demand and credit supply together with deep look into various credit supply factors including method used for calculation of capital requirement for credit risk, bank capital position (excess on regulatory minimum) and presence of regulatory limits as well as bank's own limits based on LtV, DtI or other limits regarding credit granting. Next sections are devoted to author's attempt to conduct and utilize such a survey.

3. DESIGN OF AUTHOR'S SURVEY

Shortcomings of existing sources of information regarding bank risk management practices and credit policies pushed the author to develop and conduct his own survey research among banks across EU. The author's intention was to determine the impact of banking prudential regulations regarding capital requirements and capital adequacy on credit granting – whether they are in fact procyclical – and to investigate the possibility of applying countercyclical solutions such as countercyclical adjusted limits on LtV ratio and limits on DtI ratio to conduct macroprudential economic policy. Simultaneously, we wanted to verify whether more advanced methods of calculation of capital requirement were equally procyclical as the standardized ones.

The survey was addressed to banks in the EU that were subject to the CRD regulations[39] since this guaranteed that banks in the sample were subject to more or less uniform rules on capital adequacy[40]. Thirteen out of sixteen questions in the survey were asked in four variants similarly as central banks do in their bank lending surveys, broken into four segments:

---

[39] By the end of 2013 set of legal acts introducing so-called Basel II rules (*Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework – Comprehensive Version*, 2006) in UE – *Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions* and *Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions*, from the beginning of 2014 rules of CRDIV/CRR package – *Directive 2013/36/EU Of The European Parliament and of The Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC* and *Regulation (EU) No 575/2013 of The European Parliament and Of The Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012*.

[40] Full harmonization was introduced in 2014 together with CRDIV/CRR regulatory package.

- ❖ consumer credit,
- ❖ loans to households for house purchase,
- ❖ short-term loans to enterprises,
- ❖ long-term loans to enterprises.

In contrast to central banks' surveys, which are cyclical and conducted every quarter, this survey was retrospective and it repeated a set of questions for four consecutive periods:

1) prior to the introduction of Basel II regulation (CAD[41], before CRD, until the end of 2006),
2) since the introduction of Basel II (CRD) to the beginning of the financial crisis (second half of 2008),
3) since the beginning of the financial crisis until the end of 2013,
4) prospects from the beginning of 2014 for the period of the next four years (since CRDIV/CRR package entered into force and until the end of most of the transitional periods in this regulation).

Basically these periods reflect major changes in the regulatory regime, but also pre and post crisis periods of Basel II regime. The reason for additional separation of post crisis Basel II period is the fact that the European Parliament and the Council updated some areas of banking prudential regulations in the EU shortly after beginning of the crisis as a response to it[42].

First question referred to the country where a bank-respondent was incorporated and it was possible to choose from 28 countries that were the EU members during

---

41 Set of legal acts implementing so-called Basel I rules (*Basel Committee: International convergence of capital measurement and capital standards*, 1988) in UE; set consists of: *Council Directive 93/6/EEC of 15 March 1993 on the capital adequacy of investments firms and credit institutions* and *Directive 2000/12/EC of the European Parliament and of the Council of 20 March 2000 relating to the taking up and pursuit of the business of credit institutions*.

42 These updates are called CRD II – *Commission Directive 2009/27/EC of 7 April 2009 amending certain Annexes to Directive 2006/49/EC of the European Parliament and of the Council as regards technical provisions concerning risk management*, *Commission Directive 2009/83/EC of 27 July 2009 amending certain Annexes to Directive 2006/48/EC of the European Parliament and of the Council as regards technical provisions concerning risk management*, *Directive 2009/111/EC of the European Parliament and of the Council of 16 September 2009 amending Directives 2006/48/EC, 2006/49/EC and 2007/64/EC as regards banks affiliated to central institutions, certain own funds items, large exposures, supervisory arrangements, and crisis management*; aimed at improving the management of large exposures, liquidity risk, risk of securitised products and improving the quality of banks' capital – and CRD III – *Directive 2010/76/EU of the European Parliament and of the Council of 24 November 2010 amending Directives 2006/48/EC and 2006/49/EC as regards capital requirements for the trading book and for re-securitisations, and the supervisory review of remuneration policies*; improvement of capital requirements for the trading book and for resecuritisations and introduction of bank obligations to implement remuneration policies among managers to promote sound risk management in long term perspective.

time period when the survey was conducted. Information regarding country of incorporation (according to the existing European law most of the activity should be carried out there) can be useful to capture country specific features, like trends in gross domestic product growth or specific non harmonised banking supervision approaches, that are not directly included in a survey.

The second question was intended to assign proxy for the scale of bank activity – the value of assets at the end of 2012, in millions of euros[43] – into one of the three intervals: below EUR 2276.45 million, between EUR 2276.45 million and EUR 227645.33 million; above EUR 227645.33 million. These thresholds corresponds to ECB Consolidated Banking Data (CBD)[44] criteria for division of banks into three size groups – small, medium-sized and large – but here it was calculated using non-consolidated bank assets. The reason for dividing banks into small, medium and large, using the absolute value was to allow further comparison of obtained results keeping anonymity of answers.

The third question in the survey investigated bank's opinion on the dominant trend in his relative share in newly granted loans in particular segment of his domestic credit market – whether it was relatively high, relatively low or equal to zero – if bank was not engaged in a particular segment of the credit market. Answers to this question were used to facilitate crosscheck of "no answer" option in other questions, whether a bank was not active in particular segment of credit market or did not want to give an answer.

Aim of another question was to assess the dominant tendency in changes of the demand for credit – whether it was decreasing, rising or at the similar level for most of the time. Questions regarding demand for credit were important to disentangle credit supply effects from demand-related effects. Since these changes in demand for credit could have been influenced by the existence of special public aid for some borrowers (to stimulate the economic growth in certain sectors of the economy or in order to combat unemployment by facilitating access to credit in certain sectors of economy), a dedicated question was also placed in the survey. There was also one supplementary question on bank's opinion whether the existence of such a program had material impact on its volume of lending.

Next two questions were devoted to methods of calculation of capital requirement for credit risk and the use of advanced statistical methods for credit granting process purpose. The first question took part in assessment whether more advanced methods of calculation of capital requirements are equally procyclical as standardized methods – standardized approach under Basel II regime or method of calculation of capital requirement for credit risk in Basel I. It might be

[43] For countries outside the euro zone based on the exchange rate of their central bank on 31.12.2012.

[44] https://www.ecb.europa.eu/stats/money/consolidated/html/index.en.html.

truth that in case of many banks using more advanced methods – their models' parameters are appropriately stable through the economic cycle and their capital requirements for credit risk are not more procyclical than requirements from standardized method. Importance of parameters stability through the cycle was highlighted in Catarineu-Rabell, Jackson, Tsomocos[45] and Altman, Resti, Sironi[46]. Since regulatory available methods of calculation of capital requirement for credit risk changed with introduction of Basel II rules, answer in the first of these two questions, differ slightly in the first period from those for next periods. For this first period respondents were given a chance to choose answer that their method of calculation of capital requirement for credit risk was in large part consistent with the Basel I framework or substantially different from the Basel I framework and more conservative. For the next periods respondents could have chosen whether they use standardized approach, which often is considered to be similar in many respects to the Basel I framework[47] [48], and Internal Rating Based Approach (IRB), which is more advanced and based on bank's own estimates of borrower's probability of default. The use of IRB for capital requirement purpose requires supervisory approval and bank is obliged to use this framework in its whole activity (for most of its portfolios), including credit granting process and provisioning. Since using advanced methods solely in these last two areas of bank activity does not require supervisory approval and can have significant influence on credit supply, we decided to include a question whether bank uses so-called advanced methods (internal ratings system, credit scoring etc.) in its credit decisions only.

The next group of questions was devoted strictly to LtV, DtI and other regulatory limits on granting credits (other than capital requirements or LtV, DtI limits) including liquidity standards. Some researchers[49] and EU official bodies responsible for financial market and banks oversight[50] claim that limits on LtV, limits on DtI and liquidity standards may become part of macroprudential tools arsenal.

---

45 E. Catarineu-Rabell, P. Jackson, D.P. Tsomocos, *Procyclicality and the new Basel Accord – banks' choice of loan rating system*, Bank of England, London 2003.

46 E.I. Altman, A. Resti, A. Sironi, *The link between default and recovery rates: effects on the procyclicality of regulatory capital ratios*, BIS Working Papers 2002, No. 113, Bank for International Settlements.

47 C. Goodhart, B. Hofmann, M. Segoviano, *Bank Regulation…*, *op. cit.*

48 Basel I framework of calculation of capital requirement for credit risk was based on appropriate classification of borrower or his credit protection supplier to one of the groups of counterparties with assigned constant risk weights. Standardized approach in Basel II differs from the method used in Basel I regime. In standardized approach in Basel II borrower's credit is assigned to risk exposure class based on the counterparty and purpose of the credit and credit risk protection variant, each risk class possess his own gradation of risk weights, generally there are more risk weights and they are higher than in Basel I framework, and for some exposure classes these risk weights depend on rating from external credit assessment institutions.

49 See e.g. D. Igan, H. Kang, *Do Loan-to-Value…*, *op. cit.*

50 See *Recommendation Of The European Systemic Risk Board of 4 April 2013…*, *op. cit.*

However, anticyclical adjustments of these limits as a part of macroprudential policy may encounter asymmetric response because bank's own limits may remain stricter than regulatory ones in the downturn period[51]. In the author's opinion anticyclical adjusting of regulatory limits solely may be inadequate since the lack of appropriate incentives may result in a situation in which banks will keep their own limits on more stringent levels than desired by prudential authorities and as a consequence will reduce credit granting. Regulators or central banks have limited capabilities to influence banks to loosen their credit standards. In such situation using countercyclical adjustments of LtV or DtI limits may be ineffective. Therefore, in the next three questions the author tried to examine to what extent banks used their own limits on LtV, DtI or other limits, like liquidity standards or maximum term of the loan, stricter than regulatory ones and in what periods they used them. The survey asked also for banks' opinion whether the abovementioned limits should be constant or countercyclically adjusted.

In the next set of questions the author focused on analysing the existence of procyclicality issue. Since correlations between changes of credit supply and changes in capital adequacy ratio or the excess of capital over the capital requirement, are not sufficient evidence of procyclicality of capital adequacy regime, banks were asked to mark how their credit supply behaved in response to change of predetermined factors (if particular situation/factor occurred). In case of each factor two variants of its change were available – increase/improvement and decrease/slowdown – as well as "not applicable" option, in order to include all possibilities that bank might have been exposed to. This set of questions, created special credit supply reaction matrix. The list of factors included: changes in capital requirement for credit risk, changes in the capital adequacy ratio, changes of quality of credit portfolio, changes of economic growth (including tendencies being a result of situation in particular industries), changes in borrower's insolvency risk (probability of default), changes in the availability of financing using interbank market and changes in the availability of financing using issuance of securities, changes of income due to changes in pressure on lending margins, changes of LtV limits set by supervisory authority, changes of DtI limits set by a supervisory authority, changes of other limits set by a supervisory authority, changes of bank's own LtV limits and changes of bank's own DtI limits. The matrix includes also reaction of credit supply to changes in demand for loans or credit lines since the observed changes of credit supply (stock of newly granted credits) represents equilibrium values. This was to distinguish between demand and supply factors affecting credit supply.

Last question in the survey was devoted to the bank asset-liability management and financing strategy – the way a bank finances both loans already granted

[51] This problem can also occur while using counter-cyclical capital buffer.

and those being newly granted. The author decided to look for credit granting constraints stemming from financing strategy because financial crisis had revealed its importance and the need to introduce minimal standards in liquidity management in banks that assure them stable sources of funding, especially in the situation of abrupt retreat from an interbank market. Answers in this last question were intended to allow determining the outline of the bank's loans financing strategies during our predefined periods of time. Respondents were to choose to what extent ("to high extent"; "to low extent"; "to similar extent as the others") they used every source from the list: household deposits, operations in the wholesale interbank market, loans from the parent company, issuance of debt securities and/or issuance of equity.

4. FINDINGS FROM THE SURVEY

The research was conducted between May and August 2014. The sample of institutions invited to participate in the survey counts for 6248 institutions from the list of banks included in the EBA Credit Institutions Register[52]. However, 40 letters with invitation have never reached the addressees because of liquidation of an institution, merger processes, bankruptcy and liquidation or nationalization. The survey was anonymous and in electronic form, placed on the web server belonging to a trusted public organization. The response rate to the survey was lower than 1%[53] with rather small coverage within countries[54] made results unrepresentative. But the number of surveys, allowing for full analysis that had been planned, was even smaller. Many survey forms were incomplete. It is because in order to provide enough flexibility to keep anonymity, respondents did not have to fill in all questions and there was optional default answer: "no answer" in every question. Additionally, for most of the questions answer "not applicable" was also available to provide flexibility for respondents that did not operate in every period in every segment of the credit market, or they did not encounter some factors affecting credit supply or credit demand (restriction/limit). In fact, from the correspondence with some respondents, it turned out that they classified their activity as the wealth management, private equity or generally as investment

[52] Data on CRD credit institutions gathered from EBA Credit Institutions Register at the end of December 2013, https://eportal.eba.europa.eu/cir/.

[53] This could be partly caused by the fact that the survey form for the respondents outside Poland was prepared only in English.

[54] Number of answers received from every country in the sample was substantially smaller than number of all banks in that country and the lack of exact size of the asset make it impossible to check real credit market coverage.

banking and claimed that they did not conduct ordinary credit activity[55]. It was not possible to filter out such institutions from EBA Credit Institution Register and include only banks involved in traditional banking activity. Therefore, the actual number of usable surveys (covering at least for one credit segment and one period, at least information on country of incorporation, the method of calculation of capital requirement for credit risk, presence of any information on LtV or DtI limits or some information on credit supply reaction including demand) was equal to 22 and all the results in this paper concern answers from these respondents. Despite the low response rate the author decided to summarize the survey and made an attempt to interpret it in order to prove usefulness of this kind of research methodology. However, it has to be stressed that findings from this research survey are limited to the sample of banks that decided to take part in it and should be treated with caution while formulating any general conclusions on the banks in the European Union. Some results were intentionally presented in this article in a very general form without showing their interaction with others, in order to prevent identification of the respondents.

Most answers were received from Poland (63.6%), the rest came from: Greece (9.1%), Belgium (4.5%), Finland (4.5%), Germany (4.5%), Italy (4.5%), Malta (4.5%) and Portugal (4.5%). 63.6% of these banks marked their scale of activity (assets value) at the end of 2012 below EUR 2276.45 million, 27.3% of them indicated that their assets were between EUR 2276.45 million and EUR 227645.33 million, and the rest of respondents left this question unanswered. Most participants – between 68.2%–81.8% (dependent on the segment of credit market and period) – assessed their share in newly granted loans as relatively low. Only between 9.1%–18.2% of the respondents indicated that they had relatively high share in newly granted loans in particular segments of their domestic credit market.

Most of participants i.e. 77.3%–86.4% (dependent on the segment of the credit market) assessed that the demand for credit in every segment in the period before introduction of Basel II and in the period before crisis, was rising or staying at the similar level for most of the time. In the period since the beginning of financial crisis, but before introduction of CRDIV/CRR package, this proportion decreased and ranged between 63.6%–77.3%. For the period after introduction of CRDIV/CRR most respondents – between 77.3%–90.9% (dependent on the segment of credit market) declared rise or the same level of demand for credit. In case of some countries this demand might have been positively affected by presence of special state sponsored programs which covered the part of borrower's burden of the debt obligation or provided a surety or guarantee for a loan in the bank. Number of respondents declaring presence of such programs increased since the beginning of the financial

[55] Though investment activity for client's account often involve granting credit limit to this client.

crisis. Most of these programs related to loans for house purchase and loans for enterprises. During first two periods, such programs were present in Greece, Poland[56] and Portugal. In the next period such programs were present additionally in Italy, and in the last years (since 2014) Malta decided on this kind of stimulus. Most respondents, among those who declared that their government conducted such a program, claimed that these programs had an impact on their volume of lending.

Regarding the calculation method of capital requirement for a credit risk, for the period before Basel II, 81.8%–90.9% of respondents (dependent on the segment of credit market) used the method in large part consistent with Basel I framework. The rest of them marked "no answer" or "not applicable" option. In the next two periods, only respondents from Belgium and Finland indicated use of more advanced method of calculation of capital requirement (IRB). Since the beginning of 2014 number of banks using IRB increased substantially – some banks from Greece, Italy and Poland moved from a standardized approach to an advanced method. Turning to the IRB method among these banks might have been dictated by increased capital needs after introduction of stricter definition of regulatory capital[57] as well as desire of better risk and resource management to speed up their business development. The survey did not investigate motivation behind such change in these banks and it is doubtful that anyone would have answered direct question on the main reason of moving to the IRB method, differently than pointing the need of a better risk and resource management. It can be also a coincidence that more banks moved to the IRB method recently, because building the so called IRB system and obtaining permission from supervisory authority for using it for capital requirement purpose is a long process[58] and on that year might have simply reached its end. Worth noticing is the fact that among participants, the IRB method was used mostly in an enterprise credit segment. For this segment moving from the standardized approach to IRB is probably most beneficial in terms of cost of regulatory capital and implementation costs. For instance, in the Standardized Approach exposures from larger enterprises without external rating that cannot be classified as retail exposures, receive risk weight 100% while the same exposure under IRB can receive smaller risk weight reduced by tens of percentage points. In the same time, loans for house

---

[56] In Poland program helping with house purchase "Rodzina na Swoim" was available between September 2006 and December 2012. A few banks in Poland indicated also presence of public aid in consumer credit segment. This could result from misunderstanding since banks could have classified special credits for students, offered with the help of the state, as such special program.

[57] See *Regulation (EU) No 575/2013…*, *op. cit.*, p. 36–64.

[58] Involve possession of appropriate time series covering between five to seven years and rebuild of some business process.

purchase, that in the Standardized Approach are frequently classified to the class of exposures secured on immovable property (mortgage loans) can receive 35% risk weight if certain conditions are met, or 75% risk weight if it can be classified as a retail exposure[59]. Most respondents denied using internal ratings systems or credit scoring in their credit decisions independently from capital requirements purpose. Those who did not have the IRB system were granting a credit based on calculation of creditworthiness of the borrower, availability of the collateral or based on external scoring from a credit register[60]. However, the number of banks using advanced methods in credit decisions was on average two times larger than those using it for the capital requirement purpose and their number was increasing every period. Based on these we can conclude that advanced methods in capital requirements calculations and credit granting process are becoming increasingly popular and investigation of procyclicality stemming from these methods is worth the effort.

LtV limits set by supervisory authorities also gain popularity. Results of the survey indicate that in the period before introduction of Basel II these limits were present only in Poland[61], but in the following periods number of countries using them increased. After introduction of Basel II, till begin of the financial crisis, such limits were introduced in Germany and Greece and since 2014 also in Finland in the segment of loans for house purchase. In case of DtI limits set by supervisory authority, evolution of their utilization was similar. The only difference was introduction of such limit in 2014 in Portugal for short term loans for enterprises. Generally DtI limits were more frequently adopted to households, both consumer credits or loans for house purchase. Simultaneously, other supervisory constraints on credit granting (e.g. maximum term of the loan, liquidity standards) in the periods before financial crisis, were present in Poland, Italy and Portugal and after financial crisis additionally in Belgium in case of short term loans for enterprises. This growth of popularity of regulatory limits on LtV and DtI after financial crisis, might have been influenced by ESRB recommendations[62] and the entry into force of CRDIV/CRR package. In case of bank's own LtV limits one can also find growth in their utilization after financial crisis. 22.7%–27.3% of respondents (dependent on the segment of the credit market) used such limits (stricter than those imposed by the supervisory authority or if regulatory limits were not imposed at all) during Basel I period. These banks come from: Greece, Italy, Malta, Poland

---

59 For more see articles 123–125 of *Regulation (EU) No 575/2013…*, *op. cit.*

60 For example in Poland Biuro Informacji Kredytowej (Credit Information Bureau) https://en.bik.pl/.

61 In Poland constant LtV limit was initially put in place in order to stop fast growth of loans for house purchase denominated in foreign currency.

62 *Recommendation Of The European Systemic Risk Board of 4 April 2013…*, *op. cit.*

and Portugal. Since then in every subsequent period number of banks using own LtV limit was growing though number of countries stayed stable. After the financial crisis the growth of number of banks using such limits was higher and the number of respondents using them ranged between 36.4%–45.5%. What is more, after introduction of the CRDIV/CRR package larger proportion of banks uses such limits in parallel to regulatory ones. In the same time, bank's own DtI limits were less popular than LtV limits and were mostly used in: Poland, Greece, Finland, Italy and Portugal. After the financial crisis the growth of proportion of banks using such limits took place and the number of respondents using them ranged between 36.4%–45.5% (dependent on the segment of credit market). These limits were used more frequently in case of households. After crisis also more respondents used these limits in parallel to regulatory ones. Similar tendency can be observed in case of other bank's own limits. For the period after crisis more respondents declared to use such limits than in earlier periods. In general, the use of other own limits after crisis declared 27.3%–31.8% of respondents and they came from: Malta, Portugal, Poland, Finland (loans for house purchase and long term loans for enterprises), Belgium (short term loans for enterprises only) and Italy. A few banks from those using other own limits, used fields for additional explanations in the survey and shared more information regarding their limits. They claimed to use limits for the acceptable forms of collateral, limits for total exposure on the group of related entities, limits for investing into a single financial instrument, limits for exposures from individual industries, from the same region or in the same sector of the economy, maximum duration of credit, estimate of customer's ability to amortize the debt, taking into account available income and assets. The above mentioned answers regarding bank's own LtV and DtI limits may indicate procyclical reaction of banks after the crisis. What is more, relatively large proportion of banks using limits stricter than regulatory ones may indicate that the anticyclical adjustments of regulatory limits on LtV, DtI or other limits, considered as element of macroprudential policy, may be ineffective. In order to confirm that increased number of respondents declaring use of LtV or DtI limits diminished lending, we looked into our survey at the answers regarding reaction of credit supply due to changes in bank's own LtV limits or bank's own DtI limit. For the period of time of Basel II regime before financial crisis only two respondents from different countries declared diminishing lending in portfolios where they tightened limits on LtV. One of these respondents diminished also lending through tightening DtI limit. Between 2008 and 2014 number of respondents whose lending was sensitive to changes in their own LtV limits grew to three but in the next period this number went back to previous value. The reason for this was most probably connected with simultaneous tightening of regulatory LtV limit in this particular country.

The opinions on the way of adjusting regulatory limits, in order to minimize procyclicality, varied among respondents. In the opinion of 36.4%–50% of respondents (dependent on the segment of the credit market) LtV limits should be adjusted countercyclicaly, 27.3%–31.8% of respondents claimed that such limit should be constant and 4.5%–13.6% indicated other way of adjusting. If we look at DtI limit we can see that 36.4%–50% of respondents (dependent on the segment) claimed that it should be adjusted countercyclicaly, 18.2%–27.3% claimed that such limit should be constant and 4.5%–13.6% indicated other way of adjusting. Opinion that liquidity standards should be adjusted countercyclically was supported by 36.4%–40.9% of respondents (dependent on the segment), 36.4% claimed that these standards should be constant and up to 9.1% indicated other way of adjusting. Some of the respondents that advocate adjusting above-mentioned limits, proposed to adjust them individually for every bank according to its profile, scale of business activity and its own historical data in this matter or in accordance with business activity and collateral value.

However, it is the capital adequacy regime with capital ratios and capital requirements that are considered as a main source of procyclicality in banking regulations. In order to verify this, we looked into the answers to our survey regarding reaction of credit supply due to changes in capital requirements for credit risk and capital adequacy ratio. Results indicate that during period before Basel II 50%–59% of respondents (dependent on the segment of the credit market) were insensitive for changes of capital requirement for credit risk and 41%–50% of respondents (dependent on the segment of the credit market) were insensitive to capital adequacy ratio. During period after introduction of Basel II till the crisis 45%–50% of respondents (dependent on the segment of the credit market) were insensitive to changes of capital requirement for credit risk and 36%–41% of respondents (dependent on the segment of the credit market) were insensitive for capital adequacy ratio. This moderate increase of sensitivity of lending for changes in capital adequacy ratio in the period after introduction of Basel II rules was probably the result of growth of overall capital requirement due to inclusion of capital requirement for operational risk. During period after beginning of crisis till the end of 2013, 41%–59% of respondents (dependent on the segment of the credit market) were insensitive to changes of capital requirement for credit risk and 36%–50% of respondents (dependent on the segment of the credit market) were insensitive tp capital adequacy ratio. Finally, in the period beginning in 2014 (after CRDIV/CRR package entered into force) 36%–55% of respondents (dependent on the segment of the credit market) were insensitive to changes of capital requirement for credit risk and 27%–45% of respondents (dependent on the segment of the credit market) were insensitive to capital adequacy ratio. This moderate increase of sensitivity of lending for changes in capital adequacy

ratio in the period after introduction of CRDIV/CRR package could be the result of harmonization of definition of regulatory capital (some capital instruments were excluded) and introduction of three capital ratios[63] instead of one. However, this insensitiveness was not linear since in some periods and particular credit segments different number of banks was insensitive to increase and decrease of capital requirements and the same behaviour could be seen for capital adequacy ratio. Generally, in the periods after introduction of Basel II more banks were sensitive for changes in capital adequacy ratio and increase of capital requirements or decrease of the level of regulatory capital was increasing probability of decrease of credit supply. Unfortunately, in case of some respondents results might seem counterintuitive since the increase of capital adequacy ratio caused decrease of credit supply. In some of these banks, simultaneous comparison of changes in all their credit portfolios revealed changes in the composition of the whole credit portfolio and the decline in one segment was accompanied by an increase in the level of loans belonging to other credit segments, probably more profitable.

In some banks using IRB decrease of lending due to increase of capital requirement for credit risk and simultaneous decrease of capital adequacy ratio were observed. However, this phenomenon was not seen more frequently than in banks using standardized method for similar segment of credit market. This could have led us to the conclusion that banks using IRB are equally procyclical as those using the standardized method only but evidences in this matter are rather vague. The sample of banks is unbalanced – there is more banks and more portfolios where standardized method was used. Some IRB respondents' lending was insensitive to changes in capital requirement for credit risk and changes of capital ratios. Some of them did not reveal their reaction for changes in capital requirement and capital ratios. What is more, banks might have use IRB only to small portion of portfolio and marked answer regarding use of the IRB method while for the rest of portfolio still might have used the standardized method. This is possible within every credit segments from our survey and this may have influenced obtained results. The elimination of such drawback seems hardly possible in our research setup.

Another threat to banking system that may affect lending is connected with bank liquidity. Therefore, strategies of financing loans have been investigated. It turned out that for every period over 80% of respondents indicated that they used, to large extent, household deposits,, to finance loans and only 5% of respondents used, to large extent, operations in the wholesale interbank market for this purpose. . In the period before introduction of Basel II, for a half of respondents declaring financing loans to large extent using household deposits, it was the only source of funding. In the next periods this concentration was slightly smaller – 44.4%, and it reached the lowest level during period since the beginning of the financial

[63] See Article 92 of *Regulation (EU) No 575/2013…*, *op. cit.*

crisis until the end of 2013 – 33.3%. Loans from the parent company were used in high extent only by 5% of respondents and only in the period since the beginning of the financial crisis (the second half of 2008) until the end of 2013. 68%–82% of respondents (depending on the period) did not use loans from the parent company, 68%–73% of them (depending on the period) did not use issuance of debt securities and 55%–68% of them (depending on the period) did not use issuance of equity. Since household deposits are considered as a stable source of funding with low outflow factors under Basel III liquidity regulations[64], our respondents might have been considered as liquidity stable, and liquidity factors rather did not harm lending in our sample. However, if we look into our matrix of lending reactions and analyse reaction on changes in issuance of securities or the so called availability of interbank market, one can see three countries where some respondents after 2008 were sensitive to such changes. For respondents from two of these countries the IRB method was a dominant method of calculation of capital requirements (in terms of answers from the survey). Unfortunately, based on our research survey we are not able to distinguish which factor could prevail – decreasing capital ratio due to rising capital requirement or some liquidity constraints. These respondents also declared diminishing lending connected with tightening of LtV and DtI limits and diminishing of demand for loans in segments where limits were imposed. Further research on this topic should better differentiate to what extent each of these factors influence lending.

5. CONCLUSION

The aim of this paper was to give some insight on the issue of procyclicality of banking activity stemming from Basel banking regulations and banks' management practices, and on the risk of ineffectiveness of some macroprudential tools. The author tried to investigate the impact of banking prudential regulations regarding capital requirement for credit risk and capital adequacy ratio on credit supply, since their formation and implementation. If the procyclicality of banking regulation occurs one should observe decrease of credit supply caused by squeezed excess of regulatory capital over minimum regulatory capital ratio being consequence of either growth of capital requirement or decrease of regulatory capital. Simple analysis of results of conducted survey may indicate potential procyclicality problem among some banks that decided to take part in the survey. In some segments of the credit market from period to period number of banks whose credit supply was insensitive to changes in capital adequacy ratio was decreasing. What is more, analysis of the

[64] *Basel III: The Liquidity Coverage Ratio…*, *op. cit.*

bank credit portfolio does not indicate that changes in banks' business mix and reallocation towards less risky portfolios (to benefit from lower capital charges similarly as presented in EBA report[65]) was a common phenomenon. Conducted survey was also occasion to check whether advanced methods of calculation of capital requirements are more procyclical than standardized approach. Among respondents there were banks using the IRB method and diminishing lending together with increase of capital requirement for credit risk and decrease of capital ratio. Unfortunately, small number of respondents and some lack of answers make results in this matter inconclusive. Additionally, it turned out that our research methodology may lack precision since banks might have use IRB only to small portion of portfolio and still marked answer regarding the use of the IRB method while the substantial part of portfolio still would have been under influence of the standardized method. There was also a problem with disentangling prevailing factor influencing credit supply in some IRB banks since they also pointed on some liquidity constraints as a factor decreasing lending. Therefore, we cannot reject hypothesis that advanced methods of calculation of capital requirement are equally procyclical as standardized methods. However, this requires re-examination since a number of banks using advanced methods of calculation of capital requirements is rising and it may seriously change cyclical characteristics of credit aggregates in some countries. In particular it may intensify procyclicality problem.

Another goal of this research was to investigate the possibility of applying in effective manner countercyclical solutions like countercyclical adjusted limits on LtV, DtI or other limits, like liquidity standards or the maximum term of the loan. There is risk that anticyclical adjusting of regulatory limits without creation of appropriate incentives may result in situation in which banks will keep their own limits more stringent than desired by macroprudential authorities and as a consequence credit granting will be reduced. Answers regarding presence of bank's own LtV limits[66] and presence of bank's own DtI limits indicate that number of banks using these limits is growing after onset of financial crisis and the problem with countercyclical adjustment of such regulatory limits may be material. Answers for questions regarding lending reaction do not indicate that bank's own limits already increased procyclicality but in some jurisdictions they could have been overridden by stricter regulatory limits. The hypothesis that application of efficient anticyclical tools based on LtV or DtI is always possible without the need of any supporting actions cannot be unambiguously rejected but further observation of functioning both regulatory and banks' own limits in banking sector is needed. This would also help to choose proper way of adjusting

---

65 *Report on the pro-cyclicality of capital requirements…*, *op. cit.*

66 Banks use also this kind of limit as a covenant limiting adverse selection among borrowers.

regulatory limits. An opinion whether these limits should be adjusted somehow through the cycle is supported by most of the respondents. Gathered international experience on the use of supervisory LtV limits and DtI limits concerns mostly the use of constant LtV limits and constant DtI limits. Constant LtV ratio limit seems efficient only in preventing excessive credit granting leading to bubble on particular market (e.g. real estate). DtI limit may be useful to prevent situation where credits are granted to people or companies who cannot afford them. However, these experiences of the use of LtV ratio limits or DtI ratio limits are rather short and hardly cover the full phase of the cycle on credit market and full phase of the business cycle. What is more, experiences from different countries must be analysed carefully to isolate effects of the use of LtV or DtI limits from other country specific characteristics of banking sector and economy. Chance to fulfil this stipulation might have been the attempt of econometric analysis of the influence of predefined credit supply factors on probability of decreasing credit supply in particular segment of credit market. However, small number of respondents connected with a lot of missing data in individual questions influenced heavily econometric analysis (common problem – collinearity or perfect prediction) forced the author to resign from this step.

As mentioned above, the research hypotheses cannot be clearly verified due to very small response rate to the survey. There are many potential causes why so small number of banks took part in the survey. One of the reasons might have been the fact that the survey was too time consuming and banks did not see any value added for themselves from filling the survey. Small response rate might have resulted also from a lot of merger processes, bankruptcy and liquidation or nationalisation. Another reason could have been lack of confidence to provide anonymity. The author of the research could neither use the trusted third party to assure that filling in the survey is in 100% anonymous nor used direct interviews since these would be very time consuming and costly processes. Instead, the author provided potential participants with a brief description of mechanisms responsible for keeping anonymity, placed the survey in the certified domain and provided a set of information that allow to confirm who is responsible for the survey and for what purpose it is conducted. An effect of this lack of confidence to provide anonymity, or time-consuming filling-in the survey could have been heightened by the Asset Quality Review (AQR)[67] and EU-wide stress testing exercise[68] that were conducted nearly simultaneously with the survey (November 2013 – October 2014). AQR was a wide inspection of the credit portfolios quality and of adequacy of provisions in EU banks, before

[67] https://www.bankingsupervision.europa.eu/banking/comprehensive/2014/html/index.en.html
[68] http://www.eba.europa.eu/risk-analysis-and-data/eu-wide-stress-testing/2014

the Single Supervisory Mechanism[69] becomes fully operational. Managers of many institutions included in AQR might have been afraid to reveal that their credit granting practices were too loose in the past (credits granted to substandard borrowers and too small provisions relative to their quality) or they did not use recommended supervisory limits. Additionally, information in EBA Credit Institutions Register could have been out of date and for some countries it was highly incomplete (addresses were often missing and the author needed to find ones himself). Therefore, a number of respondents could have been affected negatively.

The proposed research methodology, though not very successful in the author's own research, may prove to be useful for international organisations like the World Bank or the International Monetary Fund, authorities responsible for macroprudential policy or central banks cooperating in various research initiatives on macroprudential issues. International Banking Research Network[70] can be indicated as such initiative. In this initiative its participants conduct research using their national micro-level banking data and unified research methodology that allows further international comparison of obtained results. It is also a simple remedy to obey problems stemming from statistical confidentiality in attempt to conduct international research based on micro-level data that are not publicly available. Additionally, a central bank or a national financial supervision authority, having access to confidential bank-level data on credit flows and capital adequacy ratios or bank specific supervisory requirements[71] or capital requirements add-ons from pillar 2[72], are able to more precisely assess the influence of capital requirements and capital adequacy ratios on lending growth. Adding to this information on changes of bank credit policy, its risk appetite and demand for

---

69 New system of banking supervision in Europe, comprising the ECB and the national supervisory authorities of the participating countries (all euro area countries and volunteers from EU); SSM conducts direct supervision on the significant banks of the participating countries; it is one of the two pillars of EU banking union (To see more visit: https://www.bankingsupervision.europa.eu/home/html/index.en.html).

70 http://www.ny.frb.org/IBRN/index.html

71 For example Polish Financial Supervision Authority in 2015 required nonsystemically important banks to maintain capital ratios far above regulatory minimums (CET1 capital ratio >= 9%, Total capital ratio >= 12,5%) and scores from Supervisory Review and Evaluation Process above certain levels if they would like to be allowed to pay dividend up to 100% of profit earned in 2014 (*Stanowisko KNF w sprawie polityki dywidendowej instytucji finansowych* http://www.knf.gov.pl/Images/KNF_polityka_dywidendowa_2_12_2014_tcm75-39873.pdf, PFSA).

72 Banking supervisory authorities are allowed to impose additional capital requirements under Supervisory Review and Evaluation Process. See articles 97–98 and 104 of the *Directive 2013/36/EU Of The European Parliament and of The Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC*, European Parliament.

credit, one can receive complete set of information needed to asses Basel banking regulation procyclicality. The article by Labonne and Lamé[73] supports accuracy of such approach. What is more, the research survey that could be carried out by a central bank or a banking supervisory authority could be much shorter since there is no need to question an institution on their scale of activity or whether they were subject to supervisory limits. Probably in most cases it would be also possible to derive changes in demand for credit from the results of ordinary bank lending surveys. One more advantage of conducting such research by a central bank or a bank supervisory authority is the possibility to exert, even informally, influence on banks to fill in the survey. Conducting such a research on an international scale, based on coordinated methodology, may bring answers on the real scale of procyclicality of Basel banking regulations and indicate the most efficient ways of mitigating it.

Abstract

This article brings up the issue of procyclicality of banking activity stemming, among other things, from Basel II banking regulations and banks' management practices. It also tries to examine the applicability of tools aimed to limit excessive credit granting (limits on LtV, DtI) as potential macroprudential solutions. It explores dominant trends in empirical studies on the issue of Basel banking regulation procyclicality and some of their shortcomings, including data used. To remedy these drawbacks and lack of some information, which seem crucial from the author's point of view, the research survey is proposed. This article describes construction of the survey and comments on some results obtained from the survey conducted among banks from the European Union. The author attempted to verify, among other things, whether advanced methods used in calculation of capital requirements or in credit granting process, increase probability of decreasing credit supply. It was also investigated whether banks had their own limits on credit granting that were stricter than regulatory ones and thereby anticyclical use of such limits may be limited. However, the results obtained by the author do not allow to verify them in statistically significant manner and should not be used in formulating more general proposals. Further research using the proposed methodology should be conducted under auspices of respected international organisation like World Bank, national supervisory bodies or national central banks.

Key words: capital requirement, procyclicality, bank lending survey, countercyclical buffer, macroprudential supervision

[73] C. Labonne, G. Lamé, *Credit Growth and Bank Capital Requirements…*, *op. cit.*

References

Altman E.I., Resti A., Sironi A., *The link between default and recovery rates: effects on the procyclicality of regulatory capital ratios*, BIS Working Papers 2002, No. 113, Bank for International Settlements.

Amato J.D., Furfine C.H., *Are credit ratings procyclical?*, BIS Working Papers 2003, No. 129, Bank for International Settlements.

Barth J., Caprio G., Levine R., *Bank Regulation and Supervision: What Works Best?*, NBER Working Paper 2001, No. 9323.

Barth J., Caprio G., Levine R., *The regulation and supervision of banks around the world – a new database*, 2001, Vol. 1.

Barth J., Caprio G., Levine R., *Rethinking Bank Regulations: Till Angels Govern*, World Bank 2006.

Barth J., Caprio G., Levine R., *Bank Regulations Are Changing: For Better or Worse*, World Bank 2008.

Barth J., Caprio G., Levine R., *The Evolution and Impact of Bank Regulations,* World Bank 2012.

Barth J., Caprio G., Levine R., *Bank Regulation and Supervision in 180 Countries from 1999 to 2011*, World Bank 2013.

Berg J., Rixtel A., Ferrando A., Bondt G., Scopel S., *The Bank Lending Survey for The Euro Area*, European Central Bank Occasional Paper Series No. 23 / February 2005.

Blaes B., *Bank-related loan supply factors during the crisis: an analysis based on the German bank lending surv*ey, Discussion Paper Series 1: Economic Studies No. 31/2011, Deutsche Bundesbank.

Catarineu-Rabell E., Jackson P., Tsomocos D.P., *Procyclicality and the new Basel Accord – banks' choice of loan rating system*, Bank of England, London 2003.

Clerc L., Derviz A., Mendicino C., Moyen S., Nikolov K., Stracca L., Suarez J., Vardoulakis A.P., *Capital Regulation in a Macroeconomic Model with Three Layers of Default*, Banque de France Working Paper 2014, No. 533.

Demetriades P.O., Hussein K.A., *Does financial development cause economic growth? Time-series evidence from 16 countries*, Journal of Development Economics 1996, 51(2), 387–411.

Fonseca A.R., González F., Pereira da Silva L., *Cyclical Effects of Bank Capital Buffers with Imperfect Credit Markets: international evidence*, Banco Central do Brasil Working Paper Series 2010, No. 216.

Goodhart C., Hofmann B., Segoviano M., *Bank Regulation and Macroeconomic Fluctuations*, Oxford Review of Economic Policy 2004, 20 (4), 591–615.

Igan D., Kang H., *Do Loan-to-Value and Debt-to-Income Limits Work? Evidence from Korea*, IMF Working Paper 2011.

Jokivuolle E., Kiema I., Vesala T., *Credit allocation, capital requirements and procyclicality*, Bank of Finland Research Discussion Paper 2009, No. 23/2009, 1–43.

Koivu T., *Do efficient banking sectors accelerate economic growth in transition countries?*, The Bank of Finland Institute for Economies in Transition 2002.

Labonne C., Lamé G. (2014), *Credit Growth and Bank Capital Requirements: Binding or Not?*, Banque de France Working Papers 2014.

Levine R., Zervos S., *Stock Markets, Banks, and Economic Growth*, American Economic Review 1998.

Olszak M., Pipień M., Roszkowska S., Kowalska I., *The effects of capital on bank lending of EU large banks – The role of procyclicality, income smoothing, regulations and supervision,* paper presented at NBP's Economic Institute seminar on 24 February 2015.

Persaud A., *Macro-Prudential Regulation Fixing Fundamental Market (and Regulatory) Failures, Crisis Response Note number 6*, July, World Bank 2009.

Repullo R., Suarez J., *The procyclical effects of bank capital regulation*, CEMFI Working Paper 2012, No. 1202.

Saurina J., Trucharte C., *An assessment of Basel II procyclicality in mortgage portfolios*, Banco de España Working Paper 2007.

Strzeliński K., *Problem procykliczności bazylejskich regulacji bankowych i próby jego rozwiązania – przegląd literatury*, Bank i Kredyt, Vol. 43 (5), 67–88, Warsaw 2012.

Regulations and other official documents

Addressing financial system procyclicality: a possible framework. Note for the FSF Working Group on Market and Institutional Resilience, Bank for International Settlements 2008.

Basel Committee: International convergence of capital measurement and capital standards, Bank for International Settlements, Basel Committee on Banking Supervision 1988.

Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework – Comprehensive Version, Bank for International Settlements, Basel Committee on Banking Supervision 2006.

Basel III: A global regulatory framework for more resilient banks and banking systems, Bank for International Settlements, Basel Committee on Banking Supervision 2011.

Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools, Bank for International Settlements, Basel Committee on Banking Supervision 2013.

Basel III: The net stable funding ratio, Bank for International Settlements, Basel Committee on Banking Supervision 2014.

Commission Directive 2009/27/EC of 7 April 2009 amending certain Annexes to Directive 2006/49/EC of the European Parliament and of the Council as regards technical provisions concerning risk management, European Commission.

Commission Directive 2009/83/EC of 27 July 2009 amending certain Annexes to Directive 2006/48/EC of the European Parliament and of the Council as regards technical provisions concerning risk management, European Commission.

Council Directive 93/6/EEC of 15 March 1993 on the capital adequacy of investments firms and credit institutions, European Parliament.

Directive 2000/12/EC of the European Parliament and of the Council of 20 March 2000 relating to the taking up and pursuit of the business of credit institutions, European Parliament.

Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions, European Parliament.

Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions, European Parliament.

Directive 2009/111/EC of the European Parliament and of the Council of 16 September 2009 amending Directives 2006/48/EC, 2006/49/EC and 2007/64/EC as regards banks affiliated to central institutions, certain own funds items, large exposures, supervisory arrangements, and crisis management, European Parliament.

Directive 2010/76/EU of the European Parliament and of the Council of 24 November 2010 amending Directives 2006/48/EC and 2006/49/EC as regards capital requirements for the trading book and for re-securitisations, and the supervisory review of remuneration policies, European Parliament.

Directive 2013/36/EU Of The European Parliament and of The Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC, European Parliament.

Recommendation Of The European Systemic Risk Board of 4 April 2013 on intermediate objectives and instruments of macro-prudential policy (ESRB/2013/1), European Systemic Risk Board.

Recommendation Of The European Systemic Risk Board of 18 June 2014 on guidance for setting countercyclical buffer rates (ESRB/2014/1), European Systemic Risk Board.

Regulation (EU) No 575/2013 of The European Parliament and Of The Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, European Parliament.

Report on the pro-cyclicality of capital requirements under the Internal Ratings Based Approach, European Banking Authority 2013.

Revisions to the Basel II market risk framework, Bank for International Settlements, Basel Committee on Banking Supervision 2009.

Stanowisko KNF w sprawie polityki dywidendowej instytucji finansowych http://www.knf.gov.pl/Images/KNF_polityka_dywidendowa_2_12_2014_tcm75-39873.pdf, PFSA.

The Euro Area Bank Lending Survey, editions from April 2003 till October 2014 https://www.ecb.europa.eu/stats/money/surveys/lend/html/index.en.html, ECB.

APPENDIX

Survey pattern with complete list of possible answers

General questions **1.**	**Country of incorporation/ country where the seat is placed**		1 – Austria; 2 – Belgium; 3 – Bulgaria; 4 – Croatia; 5 – Cyprus; 6 – Czech Republic; 7 – Denmark; 8 – Estonia; 9 – Finland; 10 – France; 11 – Greece, 12 – Spain, 13 – Netherlands; 14 – Ireland; 15 – Lithuania; 16 – Luxembourg; 17 – Latvia; 18 – Malta; 19 – Germany; 20 – Poland; 21 – Portugal; 22 – Romania; 23 – Slovakia; 24 – Slovenia; 25 – Sweden; 26 – Hungary; 27 – United Kingdom; 28 – Italy; NA – no answer	
2.	**Approximate scale of activity – the value of assets at the end of 2012, in millions of euro (for non-eurozone countries based on the exchange rate of the central bank on 31.12.2012)?**		1 – below EUR 2276.45 million, 2 – between EUR 2276.45 million and EUR 227645.33 million; 3 – above EUR 227645.33 million; NA – no answer	
Questions about changes of trends in predefined periods	Loans to households		Loans or credit lines to enterprises	
	Consumer credit	Loans for house purchase	Short-term loans	Long-term loans
3.	**Relative share in newly granted loans in the particular segment of the domestic credit market (the dominant trend)?**			
Before Basel II (CAD, before CRD)	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer
Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer
Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer	2 – relatively high; 1 – relatively low; 0 – zero; NA – no answer

4.	Loans to households		Loans or credit lines to enterprises	
	Consumer credit	Loans for house purchase	Short-term loans	Long-term loans
	Changes in the demand for credit (the dominant trend)?			
Before Basel II (CAD, before CRD)	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer
Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer
Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer	NA' – not applicable; 2 – most of the time rising; 0 – most of the time decreasing; 1 – most of the time at the similar level; NA – no answer
fields for additional explanations/ remarks -->				

	Loans to households		Loans or credit lines to enterprises	
	Consumer credit	Loans for house purchase	Short-term loans	Long-term loans
5.	**Did/Does/Will government or central bank conduct any special program to stimulate the economic growth in certain segment or in order to combat unemployment (protection of existing jobs) by facilitating access to credit in certain sectors of economy / for specific purposes (e.g. programs in which the state budget covers part of the burden of the debt obligation of the borrower or the ones in which the state budget provides surety / guarantee for a loan in the bank)?**			
Before Basel II (CAD, before CRD)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
fields for additional explanations/ remarks -->				
5.1.	**If the answer for Question no. 5 is YES, please express Your opinion whether this had/has/will have an impact on the volume of lending?**			
Before Basel II (CAD, before CRD)	1 – yes; 0 – no; NA – no answer	1 – yes; 0 – no; NA – no answer	1 – yes; 0 – no; NA – no answer	1 – yes; 0 – no; NA – no answer
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	1 – yes; 0 – no; NA – no answer	1 – yes; 0 – no; NA – no answer	1 – yes; 0 – no; NA – no answer	1 – yes; 0 – no; NA – no answer
Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	1 – yes; 0 – no; NA – no answer	1 – yes; 0 – no; NA – no answer	1 – yes; 0 – no; NA – no answer	1 – yes; 0 – no; NA – no answer

Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	1 – yes; 0 – no; NA – no answer	1 – yes; 0 – no; NA – no answer	1 – yes; 0 – no; NA – no answer	1 – yes; 0 – no; NA – no answer
fields for additional explanations/ remarks -->				
	Loans to households		Loans or credit lines to enterprises	
	Consumer credit	Loans for house purchase	Short-term loans	Long-term loans
6.	**What method of calculation of capital requirement for credit risk did/does/will your bank use for most of particular period?**			
Before Basel II (CAD, before CRD)	NA' – not applicable; 0 – method in large part consistent with Basel I framework; 1 – method substantially different from Basel I framework; NA – no answer	NA' – not applicable; 0 – method in large part consistent with Basel I framework; 1 – method substantially different from Basel I framework; NA – no answer	NA' – not applicable; 0 – method in large part consistent with Basel I framework; 1 – method substantially different from Basel I framework; NA – no answer	NA' – not applicable; 0 – method in large part consistent with Basel I framework; 1 – method substantially different from Basel I framework; NA – no answer
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (answer second half of 2008)	NA' – not applicable; 0 – Standardised Approach; 1 – Internal Rating Based Approach (IRB); NA – no answer	NA' – not applicable; 0 – Standardised Approach; 1 – Internal Rating Based Approach (IRB); NA – no answer	NA' – not applicable; 0 – Standardised Approach; 1 – Internal Rating Based Approach (IRB); NA – no answer	NA' – not applicable; 0 – Standardised Approach; 1 – Internal Rating Based Approach (IRB); NA – no answer
Since the beginning of the financial crisis (answer second half of 2008) until the end of 2013	NA' – not applicable; 0 – Standardised Approach; 1 – Internal Rating Based Approach (IRB); NA – no answer	NA' – not applicable; 0 – Standardised Approach; 1 – Internal Rating Based Approach (IRB); NA – no answer	NA' – not applicable; 0 – Standardised Approach; 1 – Internal Rating Based Approach (IRB); NA – no answer	NA' – not applicable; 0 – Standardised Approach; 1 – Internal Rating Based Approach (IRB); NA – no answer

Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	NA' – not applicable; 0 – Standardised Approach; 1 – Internal Rating Based Approach (IRB); NA – no answer	NA' – not applicable; 0 – Standardised Approach; 1 – Internal Rating Based Approach (IRB); NA – no answer	NA' – not applicable; 0 – Standardised Approach; 1 – Internal Rating Based Approach (IRB); NA – no answer	NA' – not applicable; 0 – Standardised Approach; 1 – Internal Rating Based Approach (IRB); NA – no answer
fields for additional explanations				
	Loans to households		Loans or credit lines to enterprises	
	Consumer credit	Loans for house purchase	Short-term loans	Long-term loans
7.	**Did/Does/Will your bank use so-called advanced methods (internal ratings system, credit scoring etc.) in its credit decisions (under Basel II regime bank can use the internal ratings based approach (IRB) for credit decision purpose despite not having permission to use it for the purpose of calculation of capital requirements)?**			
Before Basel II (CAD, before CRD)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
fields for additional explanations, e.g. details on the method used in credit granting process -->				

	Loans to households		Loans or credit lines to enterprises	
	Consumer credit	Loans for house purchase	Short-term loans	Long-term loans
8.	**Did/Does/Will the supervisory authority impose particular LtV limit?**			
Before Basel II (CAD, before CRD)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
fields for additional explanations, e.g. construction of the limit and types and characteristics of exposures it is applied to -->				
	Loans to households		Loans or credit lines to enterprises	
	Consumer credit	Loans for house purchase	Short-term loans	Long-term loans
9.	**Did/Does/Will the supervisory authority impose a particular DtI limit?**			
Before Basel II (CAD, before CRD)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer

Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
fields for additional explanations, e.g. construction of the limit and types and characteristics of exposures it is applied to -->				
10.	Loans to households		Loans or credit lines to enterprises	
	Consumer credit	Loans for house purchase	Short-term loans	Long-term loans
	Did/Does/Will the supervisory authority impose other particular constraints on granting credits (e.g. maximum term of the loan, liquidity standards)?			
Before Basel II (CAD, before CRD)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Prospects for the period after the introduction of CRDIV / CRR (from the begining of 2014)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
fields for additional explanations, e.g. construction of the limit/s and types and characteristics of exposures it is/ they are applied to -->				

	Loans to households		Loans or credit lines to enterprises	
	Consumer credit	Loans for house purchase	Short-term loans	Long-term loans
11.	**Did/Does/Will bank use LtV limits other than those imposed by the supervisory authority?**			
Before Basel II (CAD, before CRD)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
fields for additional explanations, e.g. regulatory limit should be less restrictive -->				
	Loans to households		Loans or credit lines to enterprises	
	Consumer credit	Loans for house purchase	Short-term loans	Long-term loans
12.	**Did/Does/Will bank use DtI limits other than those imposed by the supervisory authority?**			
Before Basel II (CAD, before CRD)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer

Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer	NA' – not applicable; 1 – yes; 0 – no; NA – no answer
fields for additional explanations, e.g. regulatory limit should be less restrictive -->				
	Loans to households		Loans or credit lines to enterprises	
	Consumer credit	Loans for house purchase	Short-term loans	Long-term loans
13.	**Did/Does/Will bank use limits regarding credit granting other than those imposed by the supervisory authority (e.g. maximum maturity, liquidity standards)?**			
Before Basel II (CAD, before CRD)	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer

Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer
Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer	NA' – not applicable; 1 – yes (please provide more details on these limits in the field for additional explanations); 0 – no; NA – no answer
fields for additional explanations, e.g. regulatory limit should be less restrictive, construction of the limit and types and characteristics of exposures it is applied to -->				

14.	Loans to households		Loans or credit lines to enterprises	
	Consumer credit	Loans for house purchase	Short-term loans	Long-term loans
	Does in your bank's opinion the limits on LtV, DtI, liquidity standards should be fixed permanently at a certain level, or should be adjusted similarly as a countercyclical capital buffer (anti-cyclically; discretionary but based on at least one quantitative criterion)?			
LtV	NA' – not applicable; 1 – constant; 2 – adjusted countercyclical; 3 – adjusted in different manner (please provide more details in the field for additional explanations); NA – no answer	NA' – not applicable; 1 – constant; 2 – adjusted countercyclical; 3 – adjusted in different manner (please provide more details in the field for additional explanations); NA – no answer	NA' – not applicable; 1 – constant; 2 – adjusted countercyclical; 3 – adjusted in different manner (please provide more details in the field for additional explanations); NA – no answer	NA' – not applicable; 1 – constant; 2 – adjusted countercyclical; 3 – adjusted in different manner (please provide more details in the field for additional explanations); NA – no answer
DtI	NA' – not applicable; 1 – constant; 2 – adjusted countercyclical; 3 – adjusted in different manner (please provide more details in the field for additional explanations); NA – no answer	NA' – not applicable; 1 – constant; 2 – adjusted countercyclical; 3 – adjusted in different manner (please provide more details in the field for additional explanations); NA – no answer	NA' – not applicable; 1 – constant; 2 – adjusted countercyclical; 3 – adjusted in different manner (please provide more details in the field for additional explanations); NA – no answer	NA' – not applicable; 1 – constant; 2 – adjusted countercyclical; 3 – adjusted in different manner (please provide more details in the field for additional explanations); NA – no answer
liquidity standards/limits	NA' – not applicable; 1 – constant; 2 – adjusted countercyclical; 3 – adjusted in different manner (please provide more details in the field for additional explanations); NA – no answer	NA' – not applicable; 1 – constant; 2 – adjusted countercyclical; 3 – adjusted in different manner (please provide more details in the field for additional explanations); NA – no answer	NA' – not applicable; 1 – constant; 2 – adjusted countercyclical; 3 – adjusted in different manner (please provide more details in the field for additional explanations); NA – no answer	NA' – not applicable; 1 – constant; 2 – adjusted countercyclical; 3 – adjusted in different manner (please provide more details in the field for additional explanations); NA – no answer
fields for additional explanations/ remarks -->				

		Loans to households				Loans or credit lines to enterprises			
		Consumer credit		Loans for house purchase		Short-term loans		Long-term loans	
		Did/Does/Will Bank decrease, increase or keep unchanged credit supply in case of (for every variant):							
	15.	increase/ improvement	(decrease/ slowdown)	increase/ improvement	(decrease/ slowdown)	increase/ improvement	(decrease/ slowdown)	increase/ improvement	(decrease/ slowdown)
Before Basel II (CAD, before CRD)	– increase (decrease) in capital requirements for credit risk	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– (decrease) increase in the capital adequacy ratio	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– improvement (decrease) of quality of credit portfolio	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– improvement (slowdown) of economic growth (including tendency being a result of a situation in particular industries, such as construction)	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer

	– increase (decrease) in the insolvency risk of the borrower (probability of default)	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) in the availability of using financing interbank market	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) in the availability of financing using: issuance of securities	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	(decrease) increase of income due to (pressure) decrease in pressure decreasing lending margins	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of LtV limits set by a supervisory authority	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer

	– increase (decrease) of DtI limits set by a supervisory authority	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of other limits set by a supervisory authority	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of own LtV limits	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of own DtI limits	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of demand for loans or credit lines	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
fields for additional explanations/ remarks -->									

		increase/ improvement	(decrease/ slowdown)	increase/ improvement	(decrease/ slowdown)	increase/ improvement	(decrease/ slowdown)	increase/ improvement	(decrease/ slowdown)
Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	– increase (decrease) in capital requirements for credit risk	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– (decrease) increase in the capital adequacy ratio	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– improvement (decrease) of quality of credit portfolio	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– improvement (slowdown) of economic growth (including tendency being a result of situation in particular industries, such as construction)	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) in the insolvency risk of the borrower (probability of default)	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer

	– increase (decrease) in the availability of financing using:interbank market	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) in the availability of financing using:issuance of securities	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– (decrease) increase of income due to (pressure) decrease in pressure decreasing lending margins	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of LtV limits set by a supervisory authority	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of DtI limits set by a supervisory authority	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer

	– increase (decrease) of other limits set by supervisory authority	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of own LtV limits	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of own DtI limits	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of demand for loans or credit lines	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
fields for additional explanations/ remarks -->									
		increase/ improvement	(decrease/ slowdown)	increase/ improvement	(decrease/ slowdown)	increase/ improvement	(decrease/ slowdown)	increase/ improvement	(decrease/ slowdown)
Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	– increase (decrease) in capital requirements for credit risk	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer

	– (decrease) increase in the capital adequacy ratio	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– improvement (decrease) of quality of credit portfolio	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– improvement (slowdown) of economic growth (including tendency being a result of a situation in particular industries, such as construction)	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) in the insolvency risk of the borrower (probability of default)	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) in the availability of financing using interbank market	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer

	– increase (decrease) in the availability of financing using issuance of securities	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	(decrease) increase of income due to (pressure) decrease in pressure decreasing lending margins	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of LtV limits set by a supervisory authority	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of DtI limits set by a supervisory authority	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of other limits set by a supervisory authority	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer

	– increase (decrease) of own LtV limits	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of own DtI limits	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of demand for loans or credit lines	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
fields for additional explanations/ remarks -->									
		increase/ improvement	(decrease/ slowdown)	increase/ improvement	(decrease/ slowdown)	increase/ improvement	(decrease/ slowdown)	increase/ improvement	(decrease/ slowdown)
Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	– increase (decrease) in capital requirements for credit risk	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– (decrease) increase in the capital adequacy ratio	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA’ – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer

	– improvement (decrease) of quality of credit portfolio	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– improvement (slowdown) of economic growth (including tendency being a result of situation in particular industries, such as construction)	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) in the insolvency risk of the borrower (probability of default)	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) in the availability of financing using:interbank market	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) in the availability of financing using:issuance of securities	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer

	(decrease) increase of income due to (pressure) decrease in pressure decreasing lending margins	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of LtV limits set by a supervisory authority	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of DtI limits set by a supervisory authority	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of other limits set by a supervisory authority	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of own LtV limits	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer

	– increase (decrease) of own DtI limits	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
	– increase (decrease) of demand for loans or credit lines	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer	NA' – not applicable; 0 – decrease/ slowdown; 2 – increase/ improvement; 1 – keep unchanged; NA – no answer
fields for additional explanations/ remarks -->									

	16.	**To what extent did/does/will Your bank finance both loans already granted and those being newly granted using:**
Before Basel II (CAD, before CRD)	household deposits?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	operations in the wholesale interbank market?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	loans from the parent company?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	issuance of debt securities?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	issuance of equity?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer

Since the introduction of Basel II (CRD) until the beginning of the financial crisis (the second half of 2008)	household deposits?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	operations in the wholesale interbank market?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	loans from the parent company?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	issuance of debt securities?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	issuance of equity?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
Since the beginning of the financial crisis (the second half of 2008) until the end of 2013	household deposits?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	operations in the wholesale interbank market?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	loans from the parent company?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	issuance of debt securities?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	issuance of equity?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
Prospects for the period after the introduction of CRDIV / CRR (from the beginning of 2014)	household deposits?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	operations in the wholesale interbank market?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	loans from the parent company?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	issuance of debt securities?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
	issuance of equity?	3 – to high extent; 1 – to low extent; 2 – to similar extent as the others; 0 – not used; NA – no answer
field for additional explanations/ remarks -->		