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Basel III

Quantitative Impact Study for Polish banking system: summary of findings

Prepared by PwC Poland
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Introduction

The Quantitative Impact Study of Basel III requirements on the Polish banking system (PLQIS) was carried out by PwC Poland under the auspices of the Polish Banks Association (*Związek Banków Polskich* – ZBP) in the period from August to November 2011, based on consolidated data of banks as at 30.06.2011. The purpose of the study was to assess in detail the impact of changes in regulatory requirements determined by the Basel Committee on Banking Supervision (the Basel Committee or BCBS) on banks operating in Poland, in respect of:

- own funds (Tier 1 and Tier 2 capital) and capital adequacy ratios as well as two types of capital buffers;
- Leverage Ratio;
- new short-term and long-term liquidity standards in the form of Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR).

This information provides a summary of key results of quantitative analysis of the impact of these changes on the Polish banking sector. Full report on the results of the study together with systemic conclusions from the analysis was published on 12 December 2011 jointly by Polish Bank Association and PwC Poland (in Polish only).

A total of 33 banks, including 23 commercial banks and 10 cooperative banks participated in the study. The PLQIS questionnaire covered banks whose total assets amounted to 57.87% of total assets of the Polish banking sector (61.09% of total assets of the commercial banks sector and 10.31% of the cooperative banks sector) as at 30.06.2011. As not all banks operating in Poland participated in the PLQIS questionnaire, it cannot be ruled out that had the remaining banks been included in the sample, the results of the study would have been affected.

When calculating supervisory capital adequacy ratios, their target level defined by the Basel Committee was adopted as the reference point. In particular, under PLQIS, all deductions were implemented as if they were applicable as at the date of the Basel III coming into effect in its final (and not transitional) form, which will actually take place at the beginning of 2019. Therefore, the results do not take into account the element of phasing-in of deductions[1], or grandfathering arrangements, unless otherwise noted. Moreover, the study results do not take into account the level of future profitability of banks and do not make any assumptions as to the banks' behaviour in response to the upcoming regulatory requirements. For this reason, the approach to PLQIS may be considered to be prudent.

[1] The Committee assumes gradual implementation of individual deductions (as a specific percentage of the value of respective items) for CET1, so that in the transitional period only part of the deductions would be applied in accordance with the applicable rules.

Results of the PLQIS study

More stringent capital requirements / capital adequacy ratios – Polish banks "on the safe side"

The study results show that as at 30.06.2011 the banking sector had a robust capital base consisting of the highest quality own funds (i.e. the best form of loss absorbing capital - Common Equity Tier 1 capital, hereinafter: CET1) and capital adequacy ratios were at a safe level. Only in the case of a few banks, the new requirements mandating holding of Capital Conservation Buffer at the level of 2.5 percentage points could result in the need to increase their own funds (Tier 1&2 capital). In particular, assuming full implementation of Basel III requirements as of the date of this study, the following changes in the banks' capital adequacy ratios would occur:

- **The average level of the capital adequacy ratio based on Common Equity Tier 1 capital (CET1)** (non-existent in the current regulations, based on common shares and retained earnings) would amount to 12.15% for all banks covered by the study before the deductions, and 11% after the deductions (a decrease of 1.15 percentage point); These results are in positive contrast to the results of the analogical study performed by CEBS (currently EBA) on a sample of banks in the EU Member States (EU-QIS) which showed that the average CET1 ratio in the group of large international banks (Group 1 banks) would fall from 10.7% to 4.9% (a decrease of 5.8 p.p.), and in the group of smaller national banks (Group 2 banks)[2] it would fall from 11.1% to 7.1% (a decrease of 4 p.p.). Such results demonstrate high quality of Common Equity Tier 1 capital of the Polish banking sector;
- **The capital adequacy ratio based on Tier 1 capital** for all banks covered by the study would decrease from 11.23% to 11.05% on an average (a decrease of 0.18 p.p.); For comparison, according to the EU-QIS study, the average Tier 1 ratio in the group of large international banks would on average decline from 10.3% to 5.6% (a decrease of 4.7 p.p.), and in the group of smaller banks, it would be down from 10.3% to 7.6% (a decrease of 2.7 p.p.);
- **The average value of the capital adequacy ratio based on own funds (Tier 1 + Tier 2 Capital)** would decline from 13.04% to 12.77% (a decrease of 0.27 p.p.); For comparison, in the EU-QIS study, the average own funds ratio in Group 1 banks would decline from 14.0% to 8.1% (a decrease of 5.9 p.p.), and in Group 2 banks it would be down from 13.1% to 10.3% (a decrease of 2.8 p.p.).

The results of the analysis show that all banks which participated in the PLQIS study would meet the regulatory requirements in respect of minimum capital adequacy ratios defined by Basel III at the level of 4.5% (CET1), 6.0% (Tier 1) and 8.0% (Tier 1 + Tier 2). After taking into account the newly adopted Capital Conservation Buffer in the amount of 2.5%, all banks in the sample would also meet the CET1 requirement at the level of minimum 7% without the need to increase their capital base.
In the case of Tier 1 capital ratio, four banks would require additional capital injection in the total amount of over PLN 147.2 million[3] (their net profit in the first half of 2011 amounted to PLN 137.1 million). In turn, one commercial bank and three cooperative banks would require increasing their capital base by a total amount of over PLN 842.4 million in order for their total capital adequacy ratio (Tier 1 + Tier 2) to reach the minimum required level of 10.5% (the net profit of these banks in the first half of 2011 amounted to PLN 922.8 million). The aforesaid amounts of capital shortfall are not significant in the scale of the system, however, in individual cases they may require specific actions to be taken in order to reinforce the capital base.

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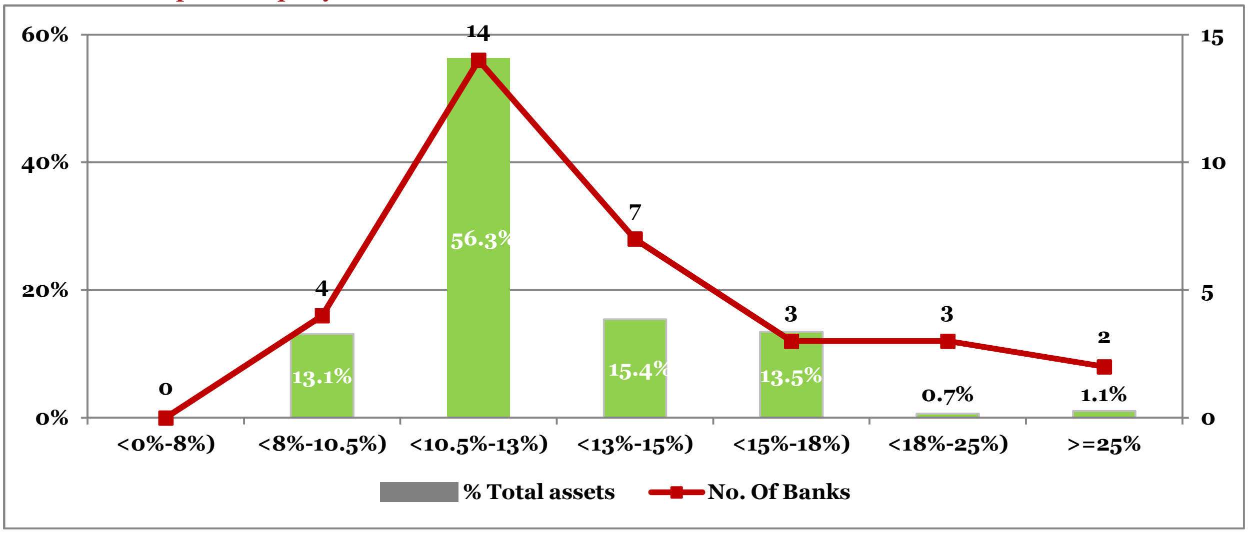
[2] In the CEBS study, the participating banks (230 in total) were divided into two groups. Large international banks are those that have Tier 1 capital in excess of €3 billion EUR, are well diversified, and are internationally active. All other banks are considered to be smaller banks.
[3] The amount of total shortfall for the entire Polish banking sector can be significantly higher due to the fact that some banks, which can potentially have capital shortfall in respect of target Basel III requirements decided not to participate in the PLQIS study.

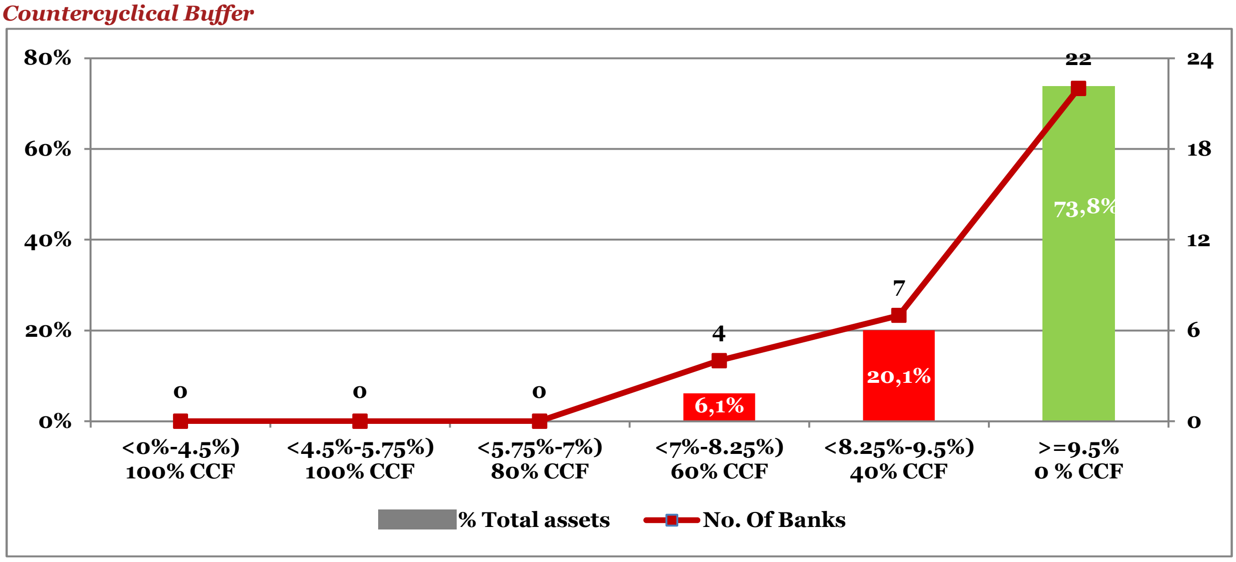
When evaluating this optimistic picture of the capital base of Polish banks it is necessary to take into account the increasing competitive pressure from global banks to demonstrate higher capital ("capital race to the top"), decision of raising the capital threshold by some national supervisors (Sweden recently, previously Switzerland) and expectations of the market, rating agencies, and EBA guidelines concerning much higher, safe level of capital (e.g. the recently recommended additional capital buffer in respect of holdings of Treasury Bonds by EU countries).
Moreover, in the perspective of several years, it is deemed necessary to take into account the fact that when the national supervisor imposes an additional Countercyclical Buffer (a maximum of 2.5%), which can occur in the event of an excess economic boom (involving excessive credit growth), and a growing speculation bubble on the, some banks, according to the status as of 30.06.2011, would experience a significant capital shortfall (assuming the maximum level of the Countercyclical Buffer and taking into account the mandatory Capital Conservation Buffer, this shortfall would amount to ca. PLN 1 billion for the entire analysed sample).

Chart 1. Total capital adequacy ratio – all banks



Source: PwC, based on questionnaires sent by banks participating in the study

Chart 2. Common Equity Tier 1 Capital Ratio and corresponding Capital Conservation Factor (CCF, expressed as a percentage of earnings) when a bank is subject to 2,5 % Capital Conservation Buffer and 2,5 % Countercyclical Buffer

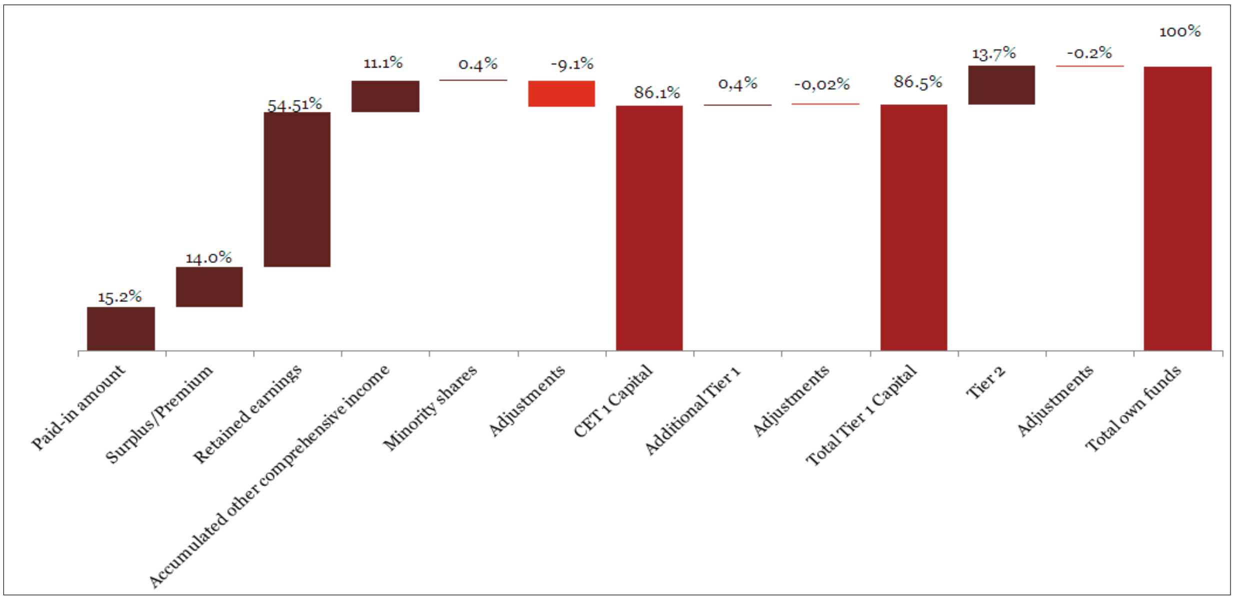


Source: PwC, based on questionnaires sent by banks participating in the study

More stringent definition of capital – the quality of capital of Polish banks is good and the capital level so far has been safe

Implementation of the new Basel III requirements and the resulting change in the definition of capital should not have a significant impact on the capital position of the Polish banking sector. It was observed that as a result of the new definition of capital, the total own funds (Tier 1 & Tier 2) decreased. The impact of deductions on average value of CET1 would be modest as CET1 would fall by 9.6% as a result of deductions. The level of Tier 1 capital and own funds (Tier1+Tier2) would also fall – by 0.8% and 1.5%, respectively. For comparison, in the EU-QIS study – in the group of large international banks, the value of CET1 capital fell by an average of 42.1%, Tier 1 capital by 33.3%, and own funds by 29.6%, and in the group of smaller banks by 33.4%, 23.3% and 18.5%, respectively. When analysing the new definition of capital, it should be taken into account that banks supplied consolidated data, and some deductions may have a larger impact on some banks' separate own funds (e.g. goodwill and share in financial institutions) and may cause significant divergences between values of equity and capital adequacy ratios on both the solo and consolidated basis.

Chart 3. Components of the capital structure according to Basel III – all banks



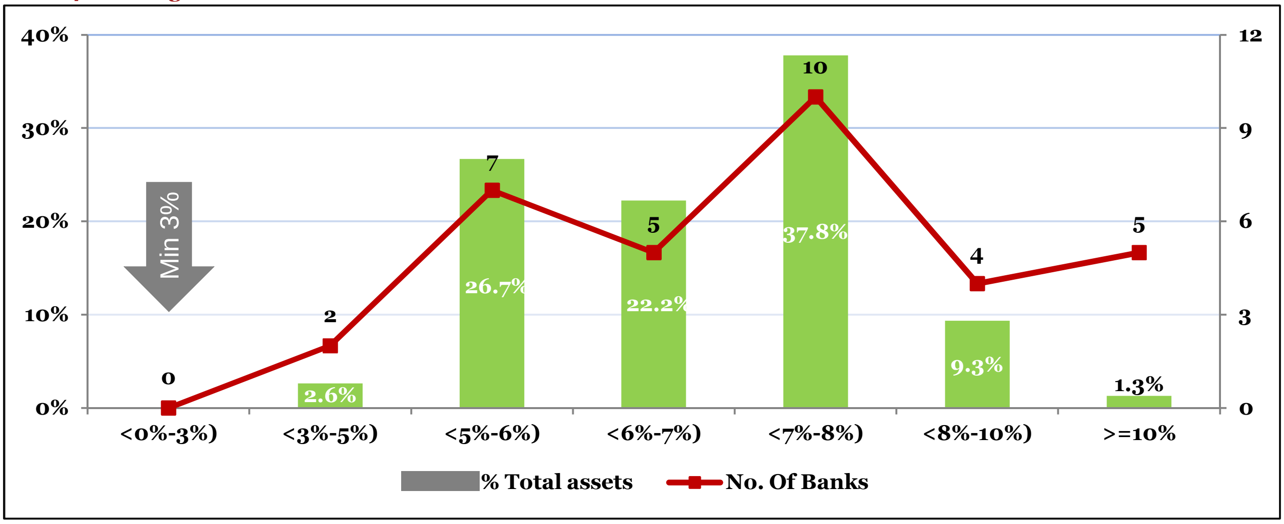
Source: PwC, based on questionnaires sent by banks participating in the study

Leverage ratios – Polish banks considerably less leveraged than EU and global banks; there is potential for development

The average Leverage Ratio for all banks participating in the PLQIS study amounted to 6,8%, which is more than twice as high as the minimum threshold set at the level of 3%. This translates into leverage of ca. 15x and means that Polish banks are much less leveraged on the average than the leverage admissible threshold set by global and European supervisors. For comparison, in the EU-QIS study, the average leverage ratio was at the level of 2.5% in Group 1 banks and 3.5% in Group 2 banks. In the Polish banking sector, this ratio is therefore at a safe level, assuming on average a ca. two times higher value than in other EU countries (which corresponds to ca. twice as low financial leverage).

In the case of some banks, the requirement to maintain the leverage ratio over the minimum level of 3% may limit their operating activities, in particular with respect to banks with a high capital adequacy ratio and a considerable portfolio of Treasury Bonds maintained in order to improve liquidity ratios.

Chart 4. Leverage ratio – all banks

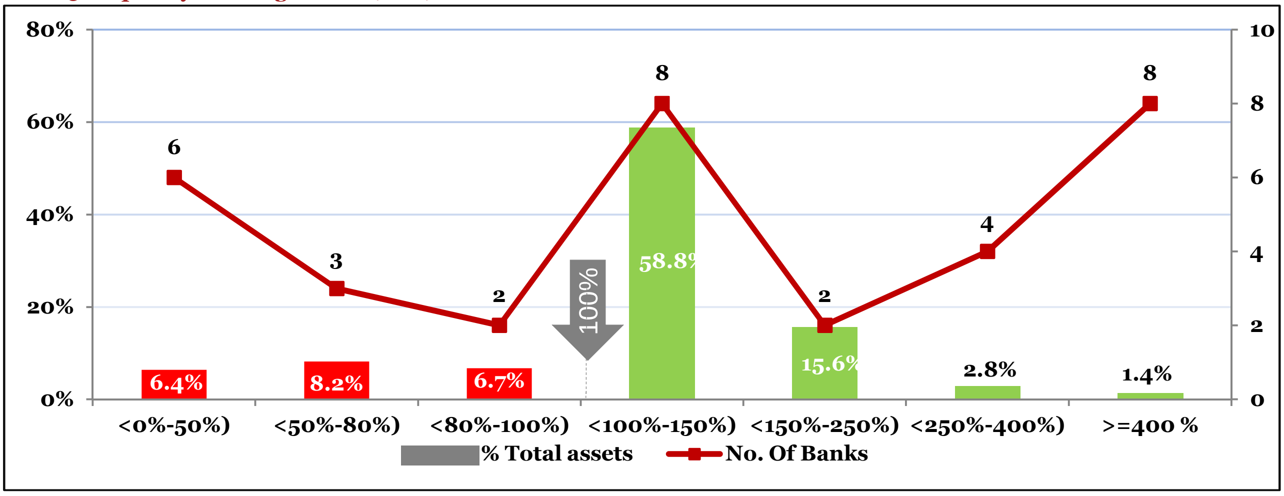


Source: PwC, based on questionnaires sent by banks participating in the study

Liquidity measures – a challenge for a considerable part of Polish banks, problems mainly with long-term liquidity (NSFR)

The average LCR ratio for the sector amounted to 128% (the minimum required value being 100%). For comparison, in the EU-QIS study – LCR amounted to 67% in the group of large international banks and 87% in the group of smaller banks. This ratio is however a challenge for part of the banks representing more than 20% of assets in the analysed sample, which may suggest that assuming that these banks comply with the liquidity standards of the Polish Financial Supervision Authority (KNF), Basel III/CRD IV requirements in respect of short-term liquidity will be generally more difficult to meet that the KNF standards.

Chart 5. Liquidity Coverage Ratio (LCR) – all banks

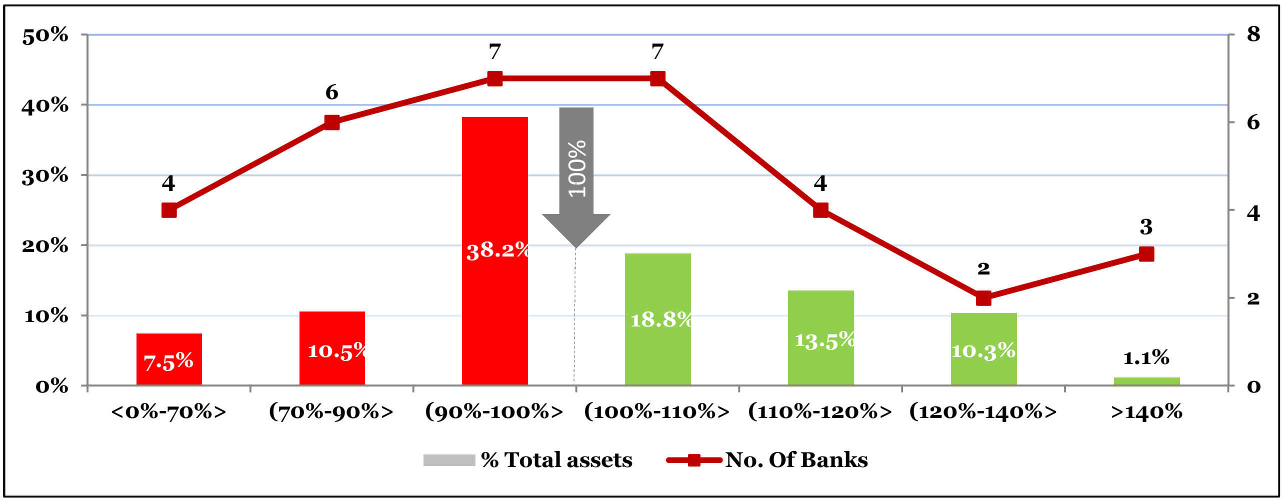


Source: PwC, based on questionnaires sent by banks participating in the study

The most serious challenge for Polish banks may turn out to be NSFR – the Net Stable Funding Ratio (i.e. with a 1-year horizon). The average value of this ratio amounted to 97% for all banks participating in the PLQIS study. However, more than 50% of the Polish banking sector (within the sample), measured by the amount of total assets, did not achieve the required NSFR level (which was above 100%). This deficit of long-term liquidity is a problem which has persisted for a few years, in particular in the context of the mortgage loan portfolio developed by

banks and the absence of a developed market for financing universal banks through issuances of long-term (secured) debt instruments similar to covered bonds, as well as the complete absence of securitization instruments in this segment. In the context of real limitation of financial support for foreign banks from their parent entities (e.g. subordinated debt), the introduction of NSFR will have far-reaching consequences.
It will be probably necessary to change the banks' balance sheet structure and adapt their business models to enable meeting the new supervisory liquidity requirements. Similarly, as a result of implementing more stringent liquidity standards, the cost of financing such banks may increase, which will translate into increased costs of loans for individual and corporate customers (in particular large enterprises), and for financial institutions, as well as the banks' withdrawing from certain business segments considered to be unprofitable.

Chart 6. NSFR – all banks



Source: PwC, based on questionnaires sent by banks participating in the study

Conclusions and systemic recommendations – summary

- The capital base of the Polish banking sector is at a good level. However, in the light of increasing market expectations as to the amount of desired bank capital, persisting lack of confidence of investors and markets, even with the current favourable level of capital, some Polish banks can be find themselves under market pressure to increase their capital base.
  An example can be the approach of rating agencies to banks which have considerable portfolios of foreign currency mortgage loans, which require a larger capital buffer due to the higher risk profile.

- Not all banks in Poland participated in the study (sample covered only banks representing 60% of the Polish banking system assets and participating on voluntary basis). Therefore, had all banks been included in the study, the general result would have been probably affected but only to a degree. However, it is not expected that the major conclusions from the study would have been materially impacted.

- The shortfall in short-term (LCR) and long-term (NSFR) liquidity can be to a considerable extent sensitive to the way the banks treat the key category of their deposits , the so-called relationship accounts which are classified as the stable source of funding. Therefore, only an in-depth analysis of the consistency of treatment of such accounts by banks in the estimation of LCR and NSFR, and respective simulations (at different levels of accounts which are deemed to be relationship accounts and therefore stable ones) would allow assessing the level of conservatism applied in estimating both ratios by banks and the size of the liquidity buffer. This means that deficit of long-term funding as measured by NSFR might be even greater under assumption that some of the deposits classified as relationship accounts will no longer be considered as such and loose favourable treatment. In effect, NSFR may prove to be lower than presented, subject to further analysis.

- It is necessary to develop the market for long-term debt securities, in particular covered bonds (which may lead to the necessity to implement potential amendments to the Act on bonds and other legislation), which would be based on robust collateral (especially real estate) valuation (appraisal) standards. This would allow closing the liquidity gap of numerous banks.

- It would also be necessary to obtain State support for developing a market for the said covered bonds, in particular in respect of stimulating the demand, i.e. a market of buyers of such bonds, including pension funds, insurance companies, etc.

- The actions promised by the Deputy Chairman of the Polish Financial Supervision Authority Wojciech Kwaśniak, namely, creating legal and regulatory conditions for further development of the banks' bond market and strengthening demand on the part of regulated entities such as insurance or investment companies for debt securities issued by banks, emphasising the need for transparency of the market for such securities, and recommending trading in debt securities secured with real estate (covered bonds) through securities exchanges (e.g. Catalyst) should also be seen as a positive factor.

- Urgent consideration should be given to implementing mechanisms which would encourage long-term savings, i.e. through tax incentives. Therefore, it would be advisable for the State to aim at replacing the existing tax on bank deposits with a system of incentives to encourage individuals to long-term forms of saving. This would certainly contribute to increasing the attractiveness of the banks' offer in respect of long-term deposits and would stabilize the banks' liquidity needs.

- The calibration of liquidity measures, which may still be included in the final works on CRD IV, should take into account the specific nature of individual types of banks, in particular that – as the study shows – the structure of liquidity ratios can be challenging for specialist (mortgage) banks and associations of cooperative banks.

- The current situation on the markets indicates the urgent need for expanding local sources of funding for banks due to the limited funding capacity of their parent entities. Financing of the banks' operations should rely more on capital obtained from the domestic market, including from non-financial entities.

- The new regulatory requirements will force some banks to change their behaviour, e.g. give up certain forms of lending business, change the structure of their assets and liabilities, change their business strategy and other actions related to managing the bank.

- The implementation of new forms of liquidity may have a considerable impact on the costs of financing, and consequently on the economy's borrowing costs.

- The specific characteristics of banks' business models and banking operations, as well as the diversity of legal statuses of banks in EU countries should be taken into account in the proposed EU regulations (CRD IV) being prepared based on Basel III. The key consideration here is to avoid "one fits all" risk and allow application of proportionality principle, otherwise certain categories of less complex banks (like cooperative banks) might be negatively affected, even by mere complexity of close to 1000 pages EU version of Basel III (combining also Basel II). Moreover, some local risks might be underestimated under maximum harmonisation principle. During negotiations on the final form of CRD IV at EU level, it is recommended that the Poland's Government emphasizes that Basel III only relates to the largest international banks, whereas the EU regulations will apply to all financial institutions located within the territory of the EU, operating on local financial markets at different stages of development. Therefore, the principle promoted by the European Commission of maximum harmonization (single rulebook, no more is required than what is mandated in EU Resolution), uniform and direct application of complex provisions of the EC Regulation (for the technical part of CRD IV which in practice represents most of the almost 1000 pages text) which is being prepared, may turn out to be an immense burden for medium and small banks and ignore local risks, and also diminish the role of national regulators which is important to address local risk. As a result, it is necessary to promote the principle of proportionality and minimum harmonization which would allow flexible, customised response of the local regulators to specific challenges of local markets and free their hands in applying sometimes more stringent provisions (divergence from the principle of maximum harmonization) to protect better safety and soundness of local banks. In broader sense, applying such a complex set of rules like CRD via EU directly applicable regulation instead of national transposition of the whole CRD package via national legal process stays in contrast with one of the fundamental EU principle, namely the principle of subsidiarity which has been part of EU legal framework from the very beginning (see Article 5 of the ECSC Treaty of 1951).

- The issue of potential application of higher capital requirements for local systemically-important financial institutions (SIFI) should be explored and clarified. The proposals presented hitherto only relate to global systemically-important institutions, although under Basel III local SIFIs might be defined as well.

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