

ORGANIZATIONAL PECULIARITIES OF BANK LIQUIDITY MANAGEMENT: INTERNATIONAL EXPERIENCE AND UKRAINIAN PRACTICE

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Abstract

Organizational component of liquidity management system is certainly formed under the influence of existing organizational structure and subordinational links between the main governance structures of the bank. Taking into account the fact that Ukrainian legislation is developing very fast in order to implement the main international principles and best practices of banking regulation. However, national regulatory framework in the sphere of corporate governance and risk management in banks is still very weak. The main aim of this paper is to highlight the organizational peculiarities of such governance structures in banks as the board of directors, board committees (which operates on the strategic level) and bank's treasury (which is involved in day-to-day management process) and compare the Ukrainian practice of functioning of these structures with foreign experience to give precise recommendations concerning the issues of development of the organizational component of bank liquidity management system in Ukraine.

Keywords: Liquidity Management, Board of Directors, Board Committees, Treasury, Administrative Channel

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1 Introduction

Liquidity, or the ability to fund increases in assets and meet obligations as they come due, is crucial to the ongoing viability of any banking organisation. Therefore, managing liquidity is among the most important activities conducted by banks. The formality and sophistication of the process used to manage liquidity depends on the size and sophistication of the bank, as well as the nature and complexity of its activities (Basel Committee, 2000).

Each bank should have a management structure in place to execute effectively the liquidity strategy. This structure should include the ongoing involvement of members of senior management. Senior management must ensure that liquidity is effectively managed, and that appropriate policies and procedures are established to control and limit liquidity risk.

Efficient transmission of impulses through administrative and informational channels of liquidity management implies that clear and logical organizational infrastructure, based on subordinate relationships between internal stakeholders, exists in bank. Noteworthy is the fact that the system of bank liquidity does not exist apart from bank management system, so the subordinate relationships are formed primarily as a basis for management of the bank as a whole and at the same time serve as a basis for the

development of information and organizational infrastructure for the management of its liquidity.

2 Literature review

Because of the critical importance of liquidity management to the viability of any bank, the board should approve the bank's strategy for managing liquidity risk, significant policies that govern or influence the bank's liquidity risk, policies and procedures that identify lines of authority and responsibility for managing liquidity exposures. The board of directors should ensure that senior management provides clear guidance on the level of acceptable liquidity risk in order to comply with the bank's liquidity strategy. The performance of the board activity depends on its organizational peculiarities, so make managerial decisions in liquidity management the most effective its necessary to identify the ways for improving the practice of the board functioning.

Boards of directors are a crucial part of the corporate structure. They are link between the people who provide capital (the shareholders) and the people who use that capital to create value (the managers). The board's primary role is to monitor management on behalf of the shareholders (Kostyuk, 2003).

Currently three models of the board of directors are actively used in the world practice of banking

management. These are unitary, two-tier and combined models. Existence of this diversity is determined by a number of economic, social, legal features and historical conditions of particular countries. Depending on the chosen model relationship between stakeholders and the degree of information disclosure may vary, but the most significant differences are observed in matters of subordination, accountability and duties of top management. The mechanism of managerial impulses transmission that concern liquidity management issues depends on implemented model of the board as well.

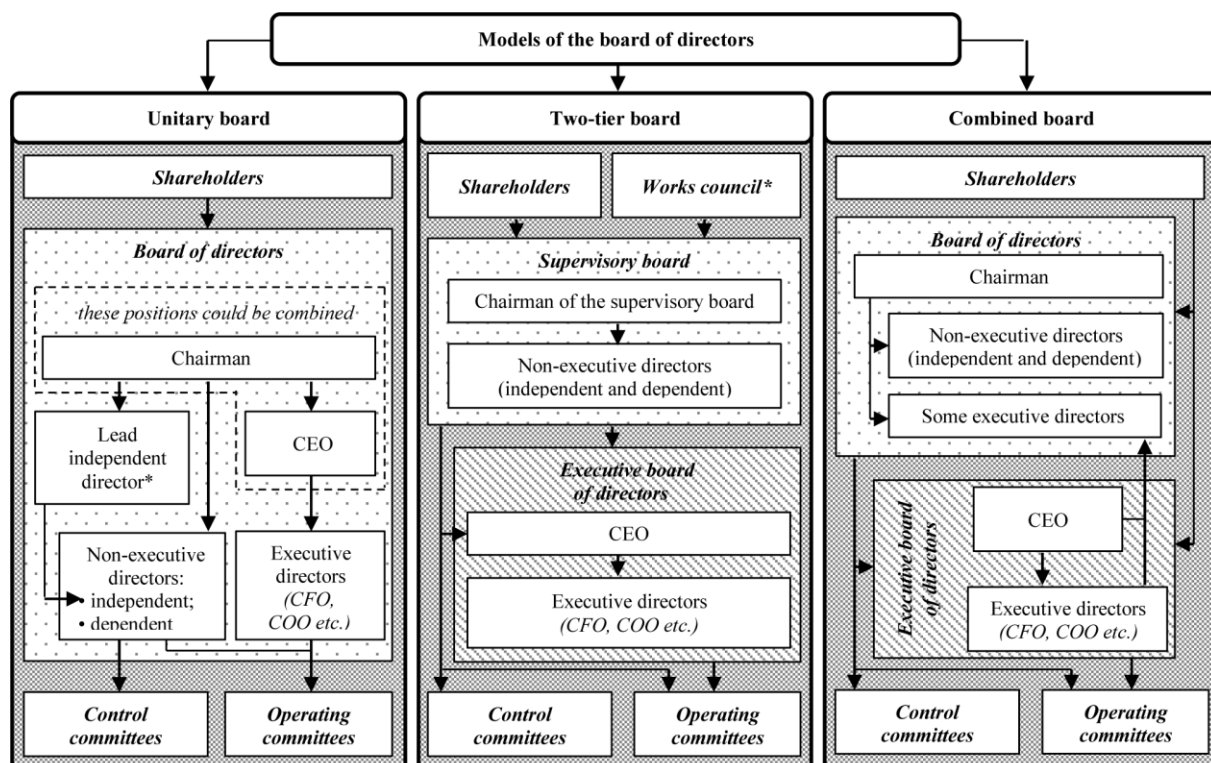
Two-tier model assumes the existence of two boards (supervisory board and executive board) in bank. Taking into account specificity of the executive board, the presence of bank's shareholders is possible only in the supervisory board. It is caused by the existence of information asymmetry, which interferes coordination between the two boards and creates

significant problems for investors in obtaining systematic and meaningful information about bank. Therefore, the two-tier model cannot guarantee protection of investor's rights, even if they are allowed to delegate their representatives to the board.

The main feature of the second model is that all decisions, including strategic ones, are made within a single unitary board composed of both executive and non-executive directors.

Combined model is the least common in the world and its structure is similar to the two-tier board, but its essential feature is the simultaneous participation of some members of the executive board in the board of non-executive directors. On the one hand, it improves information sharing, on the other hand, provides high quality strategic control. The hierarchy of relationships between governance structures within each model is represented on Figure 1.

Figure 1. Models of the board of directors and its influence on the peculiarities of administrative channels of liquidity management (strategic level)



*absence or presence of these positions depends on the legislative base of the country where bank operates

These models have their own unique characteristics, advantages and disadvantages, so it generates debates regarding effectiveness of each of them. Thus, D. Higgs (2002) suggests that the rate of reaction on changes in an external environment and adoption of administrative decisions are important strategic characteristics for the unitary board model. Consideration of procedural issues of international management for the two-tier model is under the responsibility of supervisory board, which consists of

shareholder and representatives of workforce who are often incompetent in issues of governance, and it significantly inhibits this process. At the same time the unitary model predicts an existence of the board of directors, which aims to facilitate the dynamic adaptation of the bank to rapidly changing business conditions. In fact supervisory board often fails to adopt important decisions. In countries where this model is widely used attention is paid not exactly to progressive ideas, but to the implementation of all the

bureaucratic requirements for its filing and registration.

Ukrainian academic G. Stern (2009) among main advantages of unitary model identifies the fact that features of corporate ownership in the countries that use it do not predict existence of dominant shareholders, whose shares would exceed 3-5% of the share capital. Thus, it is much easier for shareholders of companies with unitary board to decide to sale shares. It also gives an impetus to the development of stock markets. For two-tier model such decision can lead to large damages from changes of share's market value.

L. Dovgan, E. Pastukhova and L. Savchuk (2007) also expressed their thoughts on this issue. Academics emphasize that the companies with unitary board model often have not only the individual but also institutional investors. Sometimes they have significant stakes, but mostly do not seek to representation in the board of directors, and therefore do not provide the rule of their interests.

Researches of S. Kong (2008) showed that unitary model has an advantage over the two-tier one at least in two reasons. On the one hand it provides simplifying of communication channels between all management levels, what increases the bargaining power and accelerates the process of decision-making. On the other hand unitary model enables to provide informational transparency in companies at the stock market and in the process of competition that can effectively attract investors. Although it's worth noting that the debt capital's cost (an amount of paid dividends) for such model usually exceeds the corresponding figure in companies of Continental Europe.

S. Jacoby (2007) in his writings determined that providing employees with the right to participate in corporate management can increase their willingness to invest their own financial and intellectual resources in this company and contributes to more rapid implementation of their ideas regarding improving performance. All this enable bank to reduce current expenditures. Z. Ping (2011) also emphasizes that unitary model is prone to protect and even lobbying the interests of shareholders, and two-tier model of, in its turn, protects interests of employees, managers and other stakeholders. A clear separation of management and control functions allows companies to provide a high level of stability, monitor the level of their competitiveness and efficiency, and focus on long-term investment goals.

Some researches do not specify that an international business practice of banks in part of delegation of candidates to the supervisory board is a characteristic only for departments that are based in the native country. At the same time large European banks operate in several recipient countries due to an expanded branch network. For example, over 74% of German bank's assets are concentrated outside the country. This fact distorts the idea of protection the

stakeholder's rights through participation in this structure.

M. Spisto (2005) notes that two-tier model is quite effective in decision-making process. It is preconditioned by the fact that managers of all organizational structures participate in making decisions. There are also stable relations and regular exchange of relevant information between managers at the meetings of the board, which occur more often than in a unitary model. Academic underlines that combination of executive and supervisory functions in one government structure that is typical for a unitary model negatively effects on liability of directors, increasing the chances of abuse from the side of the executives. It often leads to conflicts of interest between managers and shareholders. At the same time author does not consider how to solve outlined problems by an introduction of independent experts to the board of directors.

S. Lutz (2007) notes that two-tier model predicts not only a high concentration of ownership, but also cross-shareholdings and cross-management. It protects the company from hostile takeovers and reduces the role of market valuation of the firm in corporate policy. Paying a due attention to issues of corporate governance in Germany, where described model is historically influenced by evolution of the legal framework for banking regulation, the author did not consider the problem of efficiency of two-tier board in countries with a low concentration of ownership.

It can be concluded that the possibility of introducing a particular model of the board of directors depends on the legislation of the country of bank's origin, but the issue of choosing the most effective model in countries where such legal restrictions don't exist, still remains urgent.

3 Strategic level of liquidity management (board of directors and its committees)

According to current legislation board of directors in Ukrainian banks must operate under a two-tier model, which determines the specific administrative and information channels of influence on liquidity. A significant drawback of Ukrainian corporate governance practices is unclear understanding of independent directorship: Article 39 of Banks and Banking Act states that "the supervisory board should be elected from the shareholders or their representatives". Taking into account the fact that the level of ownership concentration in our country is still high, the idea of independence is illusive.

In addition, national legislation does not provide for the participation of works council in the formation of the supervisory board, so the impact of this group of stakeholders on the liquidity of the bank through the administrative channel is limited.

Committees of the bank are also corporate governance structures involved in the implementation

of strategic and tactical objectives. According to foreign business practices control committees whose members are elected from the representatives of the supervisory board or non-executive directors, and operational committees, whose composition may include both executive and non-executive directors are formed in banks. List of main supervisory

committees of bank is determined by the influence of administrative features (their functions are highlighted in Table 1). It should be noted that the list of operational committees and division of responsibilities between them is not uniform and depends primarily on the size of the bank, its specific activity, legislation etc.

Table 1. Main functions of the board committees of the bank

Committee	Functions
Audit committee	<p>The audit committee shall review and assess and recommend any actions to be taken by the board regarding the design and operation of the internal risk management and control systems of the bank, including compliance with relevant legislation and regulation and the operation of codes of conduct.</p> <p>The audit committee shall prepare all decisions or other actions of the board with respect to the appointment, performance, functioning and dismissal of the external auditor and make recommendations with respect thereto to the board.</p> <p>The audit committee shall review and assess and recommend any action to be taken by the board regarding the bank's compliance with recommendations and observations of the external auditor, insofar accepted.</p> <p>The audit committee shall see to it that the bank establishes procedures for the receipt, retention and treatment of complaints received by the bank regarding accounting, internal accounting controls or auditing matters, and the confidential submission by employees of concerns regarding questionable accounting or auditing matters.</p>
Risk committee	<p>In connection with the foregoing, the risk committee shall review and assess and recommend any actions to be taken by the board regarding:</p> <ul style="list-style-type: none"> - the methodologies used in establishing the risk appetite of the bank, including risk asset ratios, limits on exposures and concentrations, leverage and capital ratios and stress and scenario testing; - taking into account the macroeconomic and financial environment: the current and forward-looking risk exposures resulting from the business strategies and plans of the bank; its current and future risk appetite and risk strategy, including capital and liquidity management strategy and the implementation of that strategy; and its management of risk; - the design and operation of the risk management framework and internal control systems of the bank, including procedures for monitoring large exposures or risk types whose relevance may become of critical importance; procedures in place for compliance with bank policies; the standing and resourcing, including qualifications, experience and remuneration, of the risk management function ; - the bank's public disclosures on risk and risk management.
Remuneration committee	<p>In connection with the foregoing, the remuneration committee shall review and assess and recommend any actions to be taken by the board regarding:</p> <ul style="list-style-type: none"> - the design and the implementation, both prospective and retrospective, of any stock-based compensation programs: at least annually but in any event upon a material change thereof; - the concrete terms and conditions of employment, including the remuneration, of the members of the board: when applicable; - the remuneration of senior management in control functions; - the performance targets to be set for the board members, as well as the performance of the board as a whole and compliance by board members with their performance targets.
Nomination committee	<p>The duties and responsibilities of the nomination committee shall more specifically include the making of recommendations to the board regarding:</p> <ul style="list-style-type: none"> - the nomination for appointment or reappointment of members of the board, consistent with criteria established in the board profile and any succession plan; - the individual profile for the appointment of new board members and the profile for the appointment of a chairman; - the appointment of a CEO, CFO, CRO, and board committee members; - the dismissal and retirement of members of the board; - the succession planning for the CEO and board (including in a crisis scenario) and management development principles. <p>In connection with the foregoing, the nomination committee shall at least annually review and assess and recommend any actions to be taken by the board of directors regarding:</p> <ul style="list-style-type: none"> - the management-development status, succession plans for key positions on the board as well as general talent readiness of the organization; - the board profile and rotation plan.

Source: official websites of European banks (ING, Swedbank, UBS, RBS, BNP Paribas)

The national practice of forming bank committees today differs significantly from international experience. Banks and Banking Act regulates obligatory establishment of such operating committees of the board as credit committee, asset liability committee and tariff committee, but current legislation does not put forward any requirements to

the creation and functioning of the committees of the supervisory board. At the same time, foreign practice of forming committees implies the existence of the bank supervisory committees created by the supervisory board or formed from a number of non-executive directors, while the establishment of operational committees and division of

responsibilities between them is not strictly regulated because their list and powers depend on characteristics of a particular bank and its needs. It can be stated that in order to improve the quality of corporate governance Ukrainian banks are gradually adopting experience of forming of supervisory board committees (Table A.1), but this trend is irregular posed the problem of conflict of interest as a result of functions concentration in one structure.

Kostyuk (2005) concludes that committees of the supervisory board are demanded more by foreign institutional shareholders. Thanks to this, boards are multi-role performers, i.e. strategy, control and advice.

Ukrainian practice of creating operating committees of the board is formed under the influence of global trends (Table A.2): on the one hand, some committees must be formed obligatory, but most Ukrainian banks form additional committee which are responsible for the particular spheres of bank activity, taking into account the specifics of business.

4 The role of CRO in risk management process

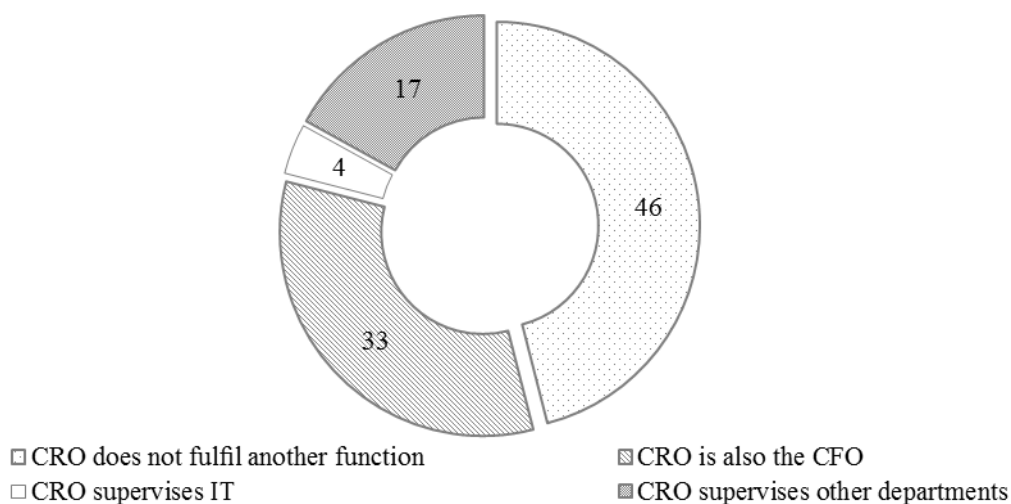
According to Principles for enhancing corporate governance (Basel Committee, 2010) large banks and internationally active banks, and others depending on their risk profile and local governance requirements, should have an independent senior executive with distinct responsibility for the risk management function and the institution's comprehensive risk management framework across the entire

organisation. This executive is commonly referred to as the chief risk officer (CRO). Since some banks may have an officer who fulfils the function of a CRO but has a different title, reference in this guidance to the CRO is intended to incorporate equivalent positions. Whatever the title, at least in large banks, the role of the CRO should be distinct from other executive functions and business line responsibilities, and there generally should be no "dual hatting" (ie the chief operating officer, CFO or other senior management should not also serve as the CRO).

Formal reporting lines may vary across banks, but regardless of these reporting lines, the independence of the CRO is paramount. While the CRO may report to the CEO or other senior management, the CRO should also report and have direct access to the board and its risk committee without impediment. Interaction between the CRO and the board should occur regularly and be documented adequately. Non-executive board members should have the right to meet regularly - in the absence of senior management - with the CRO.

In accordance with the results of the research "The Evolving Role of CROs – challenges and opportunities" (KPMG, 2012) the rise in the significance of risks in the financial sector is demonstrated by the fact that 46% of the CRO fulfil no other function within their organisation. This trend is influenced by economies of scale: at large institutions the CRO is not responsible for any other field in 71% of the cases, while this proportion is merely 33% for small institutions (Figure 2).

Figure 2. The functions of CRO in bank



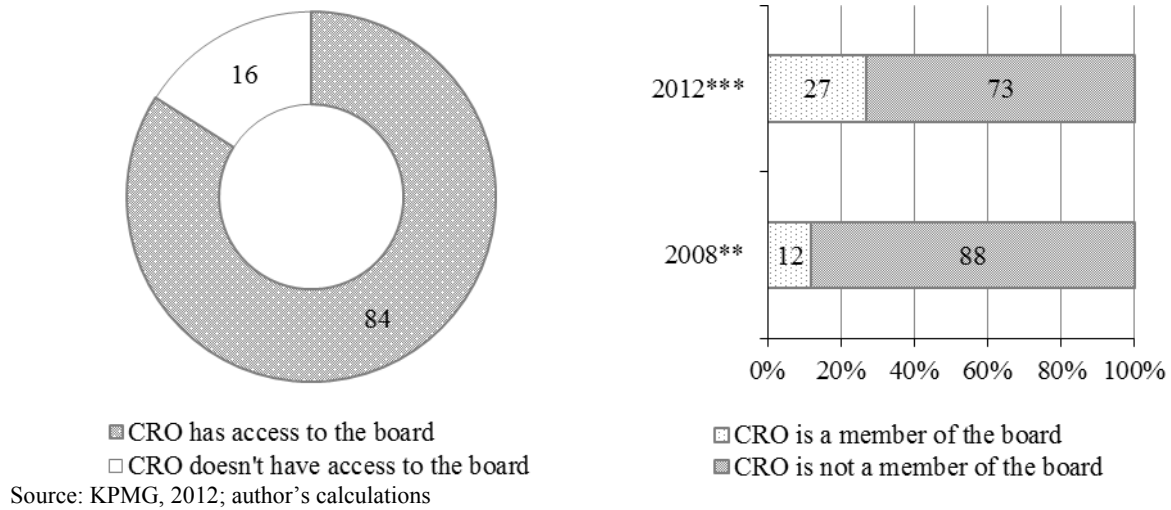
Source: KPMG, 2012

The role of chief risk officer (CRO) has been put under a microscope to understand methods and key success factors that can enhance the role. Organizations now, more than ever before, are appointing CROs to improve their risk function and better manage potential risks that could impede their

strategy. To achieve that, the CRO must be placed in a position that is fundamental as well as instrumental in the decision-making and strategy-setting process. To fulfill its functions the most effectively CRO should have direct access to the board, but according to

figure 3 the access to the board was available for most CROs even before crisis.

Figure 3. The interconnectedness between CRO and the board



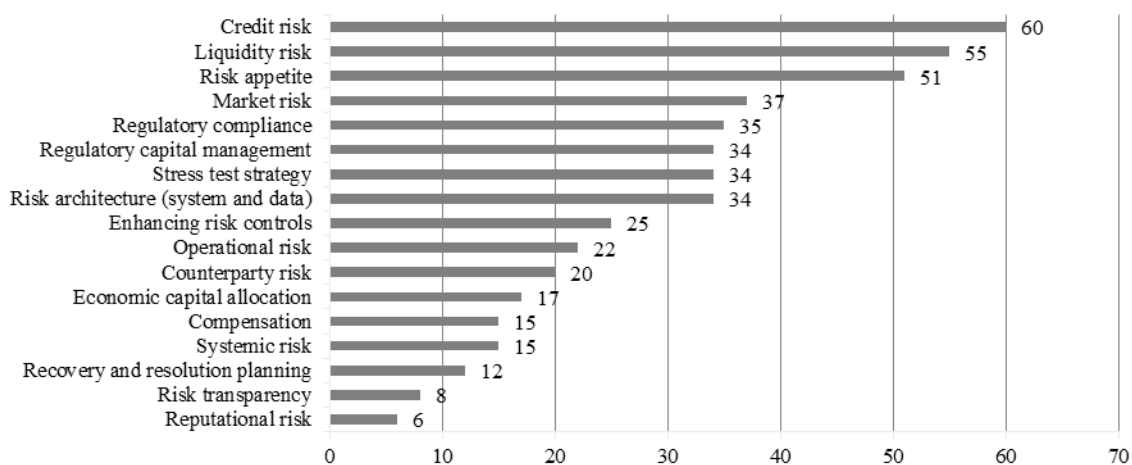
The problem is that CRO should not only inform the board about risk management issues, but also be a member the board to have more influence on the strategy of financial institution.

While risk committees are not new for major banks, in many cases they have focused primarily on credit, market and liquidity risks. The rules proposed by the Federal Reserve may broaden those risk committees' responsibilities to include oversight of the entire risk management program, which includes broad risks such as operational, reputational and strategic risks. The proposed rules do not allow board risk committees to be housed within another board committee; the committees must report directly to the

board and must receive and review regular reports from the chief risk officer (CRO).

While CRO in foreign banks is actively involved in risk management process, there are no regulatory requirements for this position in Ukraine, so to improve management system it's necessary to define functions, responsibilities and reporting lines for CRO in Ukraine. It will also positively influence the process of liquidity management as according to the research "Progress in Financial Services Risk Management: a Survey of Major Financial Institutions" (Ernst&Young, 2012) CROs in most banks are responsible for managing this type of risk (Figure 4).

Figure 4. Top issues requiring most CRO attention



5 Bank's treasury and its role in day-to-day liquidity management

Liquidity management functions at the operational level are fulfilled by bank treasury or departments that

carry out the operation. It should be noted that legislative acts of the NBU do not define the term "treasury" and do not make demands on concentration of its functions within individual business units, but the absence of such authority is justified only when

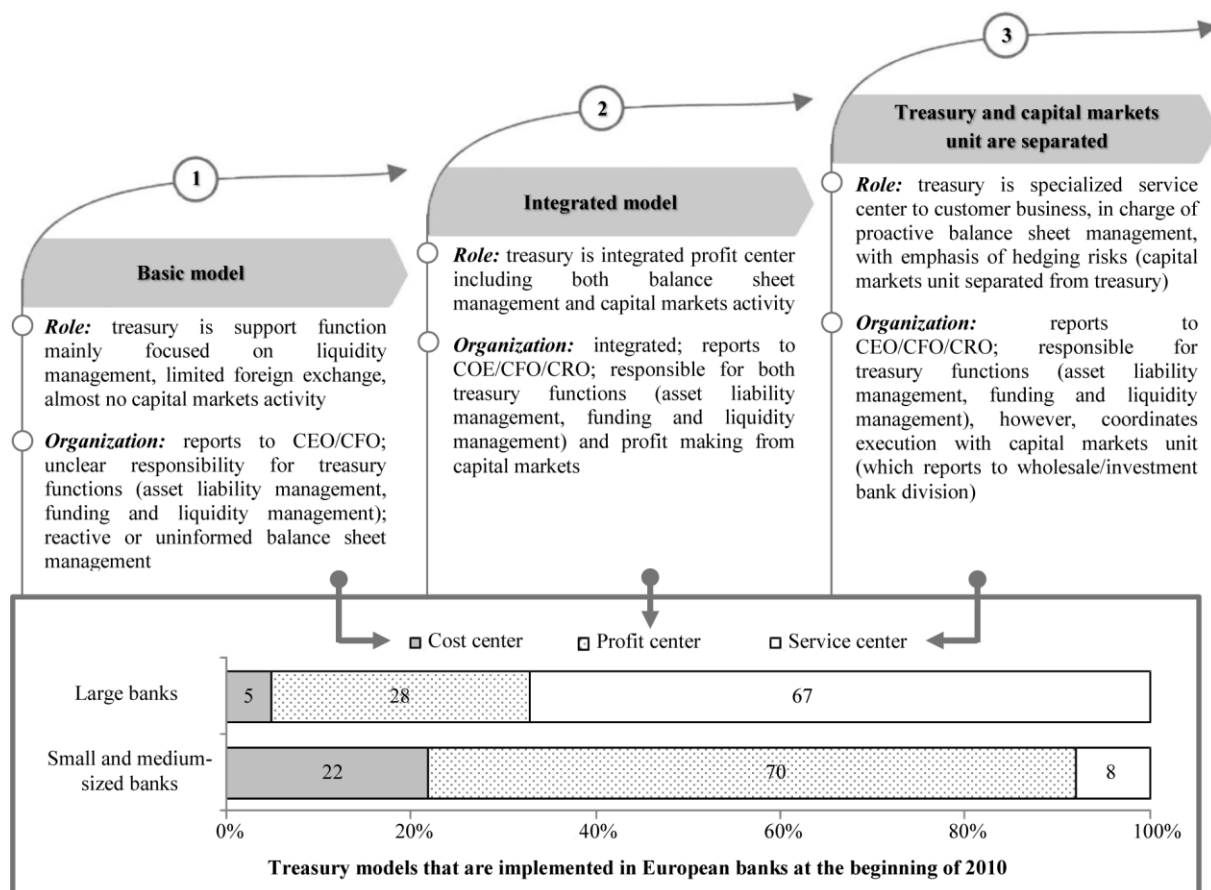
the scope and list of transactions is minimal and the bank has no open positions or they are controlled by senior management. Thus, treasury functions in small banks are delegated to other executives by the following lines:

- resource allocation, interest rate policy, investment objects - senior management of the bank;
- transactions in the foreign exchange market, and reporting on the state of open currency positions - department of serving customer conversion and foreign exchange cash transactions;
- transactions in the stock and money markets - department which carries out bank and legal entities depositary transactions, and securities transactions.
- Depending on the specifics of the bank activity its treasury has several major functions (trade function – operations in the money and stock

markets and exchange operations; liquidity management function) which often bear the conflict between the banking business and managing current and strategic activities of the bank.

Figure 5 summarizes three types of organizational and governance structures in treasury units. Thirty years ago, virtually all banks were at stage one; indeed, many still are. The integrated model became popular 10 to 15 years ago as many banks expanded the scope of their treasuries to include the broader management of the balance sheet (for instance, managing interest rate risk) and the capital markets business, as well as liquidity management. Stage three, treasuries as specialized service centers separate from the capital markets division, is a phenomenon only of the past decade.

Figure 5. Models of banks' treasury and its influence on the peculiarities of administrative channels of liquidity management (operating level)



Source: authoring; based on (PWC, 2009; Alvarez, Poppensieker, 2007; Neu, Widowitz, 2011)

Different banks now occupy a number of points along this spectrum. Treasuries in emerging markets typically manage balance sheets actively and sell treasury products to the customer base - an opportunity that started with products related to foreign exchange and blossomed when governments increased their issuance of tradable debt securities.

Meanwhile, treasuries in developed markets have become highly specialized, broadening their funding sources around secured financing, in particular, and improving their approaches to modeling interest rate risk management.

What really stands out from the research is the underlying difference in management philosophies.

Banks in emerging markets have become more active risk takers and regard treasuries as profit centers. By contrast, leading players in developed markets increasingly have set up treasury units as service centers focused on liquidity and managing interest rate risk and governed as independent businesses.

Banks in emerging markets typically identify three sources of value creation. Many take outright interest rate positions in their own banking books – a development resulting from not only the lack of adequate hedging instruments in many developing markets but also the need to contribute to the banks' income. Some treasuries in these markets, notably capital-rich institutions in places such as the Middle East, manage investment portfolios actively. But the vast majority of treasuries in the developing world see themselves as the banks' experts on capital market products and build their own customer franchises.

In developed markets, by contrast, treasuries tend to distinguish the traditional asset- and liability-management function from the client-related capital markets business. In general, the former function reports directly to the chief executive or to a bank's chief financial officer; the latter function is separated and housed in the bank's wholesale or investment-banking division. Treasuries in developed markets have become independent service centers, with at most very small P&Ls, focused on three types of services to the divisions. The first is the management of interest rate risk on a bank's balance sheets, including the modeling of and transfer pricing for nonmaturing products, noninterest-bearing items (say, current accounts or credit cards), or both. Then there is the management of the bank's funding sources and liquidity – especially vital during the recent market turmoil. The third is the execution of transactions, including securitizations and placements, relating to the bank's own capital structure.

These dissimilarities in philosophy and organization are mirrored in the wide difference between the bottom-line contribution of the treasury and the asset- and liability-management units in developed and emerging markets, respectively.

6 Conclusions

The results of the study allow concluding that:

1. The two-tier board model of the board in Ukraine has a number of drawbacks, even in comparison with the classical German model, because there are no regulatory requirements for directors' independence, so it's necessary to introduce some legislative criteria for independence.

2. The practice of forming committees of the board of directors in Ukraine differs from conventional: traditionally such committees as risk committee, audit committee, remuneration committee, nomination committee are considered as control committees and comprised of independent directors, but Ukrainian law regulates only the issue of

executive committees (credit committee; assets liability committee, tariff committee) forming. This experience does not meet the highest international standards of corporate governance, as foreign banks forms executive committees according to their needs, size and specific of business.

3. Separation the treasury as a special unit of the bank is a prerequisite for successful business development, but this governance structure is not formed in many small Ukrainian banks. It leads to arising of significant limitations liquidity management. The third model of the treasury is usually formed when bank is an active participant on financial markets, but taking into account the low level of securities market development in Ukraine, we recommend to implement the second model of treasury.

References

1. Abdel-Baki, M., Kostyuk, A. & Govorun, D. 2011. Will the proposed regulatory reforms by the Basel Committee improve economic performance in emerging economies? An empirical application to Egypt and Ukraine. *Corporate Ownership and Control*, Volume 8, Issue 2: 14-29.
2. Afanasieva, O. 2011. Analysis of main instruments of crisis regulation of banking activity during the global financial crisis of 2008-2009. *Corporate Ownership and Control*, Volume 9, Issue 1, Continued 1: 230-235.
3. Al-Haddad, W., Alzurqan, S. & Al-Sufy, F. 2011. The effect of corporate governance on the performance of Jordanian industrial companies: An empirical study on Amman stock exchange. *International Journal of Humanities and Social Science*, 4: 55-69.
4. Alvarez, A., Poppensieker, T. 2007. New frontier in treasury management at banks. Available at: <http://www.mckinsey.it/storage/first/uploadfile/attach/139921/file/evtr07.pdf> [Accessed 2013, 13 November].
5. Asset/liability management benchmark study. 2006. Price Waterhouse Coopers. Available at: http://www.pwc.com/en_AT/at/publikationen/financia-l-services/asset-liability-benchmark-study-2006.pdf [Accessed 2013, 13 November].
6. Azim, M., Mei, J. & Rahman, S. 2007. Executives' remuneration and company performance: an evaluation. *Corporate Board: Role, Duties and Composition*, 32: 16-31.
7. Balance sheet management benchmark survey: status of balance sheet management practices among international banks. 2009. Price Waterhouse Coopers. Available at: http://www.pwc.com/en_GX/gx/banking-capital-markets/assets/balance-sheet-management-benchmark-survey.pdf [Accessed 2013, 13 November].
8. Banks and Banking Act № 2121-III. 2000. Verkhovna Rada of Ukraine. Available at: <http://zakon2.rada.gov.ua/laws/show/2121-14> [Accessed 2013, 13 November].
9. Beltratti, A. & Stulz, R. Why did some banks perform better during the credit crisis? A cross-country study of the impact of governance and regulation. Available at:

- http://www.hec.unil.ch/documents/sem_ibf/Stulz.pdf [Accessed 2013, 22 February].
10. Brown, L. & Caylor, M. 2006 Corporate governance and firm valuation. *Journal of Accounting and Public Policy*, 25: 409-434.
 11. Dovgan, L., Pastukhov, V. & Savchuk, L. 2007. *Corporate governance*. Kyiv: Condor.
 12. Guidelines for Improving Corporate Governance in Banks of Ukraine № 98. 2007. The National Bank of Ukraine. Available at: <http://www.bank.gov.ua/doccatalog/document?id=45211> [Accessed 2013, 13 November].
 13. Guidelines on the Organization and Functioning of Risk Management in Banks of Ukraine № 361. 2004. The National Bank of Ukraine. Available at: <http://zakon.nau.ua/doc/?uid=1045.5598.0> [Accessed 2013, 13 November].
 14. Haber, J. 2011. Financial crisis: towards a new powershift. *Financial Space*, Volume 2, Issue 2: 7-13.
 15. Higgs, D. Review of the role and effectiveness of non-executive directors. Available at: <http://www.dodsdata.com/Resources/epolitix/Forum%20Microsites/Chartered%20Management%20Institute/Higgs%20Report%20response.pdf> [Accessed 2013, 22 February].
 16. Jacoby, S. 2007. *The embedded corporation: Corporate governance and employment relations in Japan and the United States*. Princeton: Princeton University Press.
 17. Khalilulina, D. & Nestor, S. The new normal – A summary report on the corporate governance of Europe's top 25 banks. Available at: <http://www.nestoradvisors.com/thursday-15-november-2012> [Accessed 2013, 22 February].
 18. Kong, S. 2008. Unitary boards and mutual funds governance. *The Journal of Financial Research*, 3: 193-224.
 19. Kostyuk, A. 2003. Board practices: an international review. *Corporate Ownership and Control*, Volume 1, Issue 1: 107-117.
 20. Kostyuk, A. 2005. Board committee practices in Ukraine. *Corporate Ownership and Control*, Volume 3, Issue 1: 114-116.
 21. Kostyuk, A., Kostyuk, O., Mozghovyi, Ya. & Kravchenko, Ya. 2013. Corporate social responsibility index for Ukrainian banks: the essentials for implementations. *Corporate Ownership and Control*, Volume 10, Issue 4, Continued 4: 434-440.
 22. Krykliy, O. & Ryabichenko, D. 2012. Scientific-methodological approach to bank liquidity management basing on the results of the taxonomic indicators analysis. *Actual Problems of Economics*, Issue 12: 196-207.
 23. Kunz, P. Swiss corporate governance – An overview. Available at: http://www.iwr.unibe.ch/content/e7137/e7138/e8539/e8655/099-134KUNZ_ger.pdf [Accessed 2013, 22 February].
 24. Leal, R. & Silva, A. 2005. *Corporate governance and value in Brazil*. Washington: Inter-American Development Bank.
 25. Liikanen, E. High-level Expert Group on reforming the structure of the EU banking sector. Available at: http://ec.europa.eu/internal_market/bank/docs/high-level_expert_group/report_en.pdf [Accessed 2013, 22 February].
 26. Lutz, S. 2007. On the road to anglo-saxon capitalism? German corporate governance regulation between market and multilevel governance. *CLPE Research Paper*, 3: 5-47.
 27. Neu, P., Widowitz, M. 2011. Checks and balances: the banking treasury's new role after the crisis. Available at: <http://www.bcg.com/documents/file75768.pdf> [Accessed 2013, 13 November].
 28. Ping, Z. & Wing, C. 2011. Corporate governance: A summary review on different theory approaches. *International Research Journal of Finance and Economics*, 68: 7-13.
 29. Principles for enhancing corporate governance. 2010. Basel Committee on Banking Supervision. Available at: <http://www.bis.org/press/p100316.htm> [Accessed 2013, 22 February].
 30. Scherbina, T., Afanasieva, O. & Lapina, Yu. 2013. Risk management, corporate governance and investment banking: the role of chief risk officer. *Corporate Ownership and Control*, Volume 10, Issue 3, Continued 2: 313-330.
 31. Shahid, S. Does ownership structure affect firm value? Evidence from the Egyptian stock market. Available at: http://www.egx.com.eg/pdf/does_ownership_affect_firm_value.pdf [Accessed 2013, 22 February].
 32. Spisto, M. 2005. Unitary board or two-tiered board for the new South Africa? *International Review of Business Research Papers*, 2: 84-99.
 33. Stern, G. 2009. *Corporate governance*. Kharkiv: HNAMEG.
 34. Tariq, Ya. Quality of corporate governance and financial performance: An empirical analysis. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2083567 [Accessed 2013, 22 February].
 35. Toledo, E. Quality of governance and firm performance: Evidence from Spain. Available at: <http://idem.uab.es/treballs%20recerca/Eloisa%20Perez.pdf> [Accessed 2013, 22 February].

Appendix A

Table A.1. Control committees of the supervisory board that are formed in biggest Ukrainian bank

Bank	Audit and risk committee	Remuneration and nomination committee	Risk committee	Audit committee	Informational security committee	Nomination committee	Remuneration committee	Strategic management committee	Corporate governance committee
Privatbank	+	+							
Oschadbank									
Ukreximbank									
Delta Bank			+	+					
Raiffeisen Bank Aval				+	+				
Ukrsotsbank						+	+	+	
Prominvestbank									
Sberbank of Russia				+					
PUMB									
Alpha-Bank									
VTB Bank				+					
Nadra Bank									
Ukrsibbank									
Finance and Credit									
Ukrigasbank				+					+

Source: official websites of biggest Ukrainian banks

Table A.2. Operating committees of the supervisory board that are formed in biggest Ukrainian bank*

Bank	Strategic committee	Budget committee	Financial committee	Tender Committee	Informational security committee	Retail business committee	Development committee	Operational risk management committee	Information technologies committee	Technological committee	Corporate risk management committee	Bad debts committee	Operating committee
Privatbank	+	+											
Oschadbank			+	+	+								
Ukreximbank						+							
Delta Bank													
Raiffeisen Bank Aval													
Ukrsotsbank				+			+						
Prominvestbank													
Sberbank of Russia													
PUMB								+	+	+			
Alpha-Bank		+		+				+			+		
VTB Bank		+		+					+				
Nadra Bank				+			+					+	+
Ukrsibbank												+	
Finance and Credit													
Ukrigasbank													

*Committees that are obligatory to be formed in banks according to the Banks and Banking Act (credit committee, asset liability committee, tariff committee) are not included to the table;

Source: official websites of biggest Ukrainian banks