



Draft prepared by Endrita Xhaferaj,
Director of Financial Modernization Program and Analytics
For PWG Approval

SPI Albania Project on Enhancing Banks' Liquidity Risk Management

<http://www.spi-albania.eu/en/2009-program/enhancing-banks-liquidity-risk-management/>

Final Project Working Group Recommendations

July 2009

Project information					
PUBLIC-PRIVATE FINANCIAL SECTOR MODERNIZATION MATRIX					
Italian Banking Association CRITERIA	European Central Bank CRITERIA				
	<i>Asymmetric information reduction</i>	<i>Completeness of the market</i>	<i>Increased opportunities to engage in financial transactions</i>	<i>Reduced transaction costs</i>	<i>Increased competition</i>
Business development					
Industry competitiveness		X			
Industry reputation					

Short description of the context: Bank of Albania is seeking to enhance banks' liquidity risk management by reviewing the regulatory framework according to international guidelines and best practice.

The present regulatory framework provides only principles for the liquidity management, and banks have the liberty to manage the liquidity level based on principles set by the BoA, with no quantitative prudential ratios (thresholds).

BoA is considering the introduction of quantitative minimum/prudential ratios, in order to prevent the occurrence of systemic liquidity difficulties.

Stakeholder proposing the project: Bank of Albania

Other Stakeholders involved (sponsors): AAB and Banking community.

Project objective: To enhance banks' liquidity risk management by reviewing the current regulatory framework according to international guidelines and best practice, including introduction of quantitative prudential ratios, in order to prevent the occurrence of systemic liquidity difficulties.

Description of the project contribution toward financial modernization:

Effective liquidity risk management helps ensure a bank's ability to meet cash flow obligations, which are uncertain as they are affected by external events and other

SPI Albania Secretariat

Mrs. Anuela Ristani, Director of Operations, anuela.ristani@spi-albania.eu
Ms. Endrita Xhaferaj, Director of Financial Modernization Program and Analytics, endrita.xhaferaj@spi-albania.eu
Address: Twin Tower I, Kati 6, Apt. A3. Tirana, Albania. Tel. +355 42 280 359; Fax. + 355 42 280 371
www.spi-albania.eu

agents' behavior.

A better management of liquidity risk is a key determinant of the soundness and stability of the banking sector, which will decrease the probability of banks' default and will give thus an enhanced consumer protection.

Project Working Group:

Project Owner: **Indrit Banka**, Bank of Albania
Project Manager: **Miranda Ramaj**, Bank of Albania
Co- Project Manager: **Ms. Enkelejda Bargjo**, Tirana Bank
Project Working Group Members: **Donata Totokoci / Persefoni Papa**, ProCredit Bank
Artiola Agalliu, Alpha Bank-Albania
Altin Sholla, Bis Banca
Christian Canacaris / Rigels Kristo, RBAL
Altin Koci, ICB
Jola Dima, Intesa Sanpaolo Bank
Eralda Gurga / Gresa Panajoti, Emporiki
Miranda Kacani, BKT
Elvira Jaze / Admir Ramadani, First Investment Bank
Erjon Tace, Banka Popullore
Erjona Poro, Credins
Niko Kotonika, NBG

PWG Meetings:

1st meeting – March 13, 2009; Output: Project ToRs; Scoping of Problem Document; Note on International Experience and Presentation of the IMF Draft Regulatory Proposals.

2nd meeting – May 20, 2009; Output: Main Findings of the Survey on Banks' Current Practices with Liquidity Risk Management; BoA's Draft Regulation Proposal; Cost Benefit Questionnaire Draft

3rd meeting – June 17, 2009; Output: Cost and Benefit Questionnaire and Analysis on the Impact on the Banking System of the New Liquidity Risk Management Framework; Analysis of Final Draft Regulation and PWG Comments; Summary of Main Outcomes of SPI Albania Consultations; Document on the PWG Recommendations.

Contributions:

PWG members: participation in PWG meetings and discussions; answers to the Questionnaires on Banks' experiences, suggestions and Cost and Benefits.

SPI Secretariat: ToR; Scoping of Problem Document; Note on International Experience; Questionnaire and Analysis on Banks' Experiences in Liquidity Risk Management; New Regulation Draft Proposal and Comments; Questionnaire and Analysis on Banks' Suggestions on the Draft Regulation on Liquidity Risk Management; Cost and Benefit Questionnaire and Analysis on the Impact on the Banking System of the New Liquidity Risk Management Framework; Analysis of Final Draft Regulation and PWG Comments; Summary of Main Outcomes of SPI Albania Consultations; Document on the PWG Recommendations.

Other Supportive Activities:

June 2009: Participation of Bank of Albania's foreign expert in the 3rd PWG meeting

Methodology: EU Better Regulation (Annex 9)

Content

1.Summary of PWG analysis.....	4
2.PWG recommendations	5
3.Other PWG observations.....	5
4.Proposed SPI Committee Decision	5
<u>Annexes.....</u>	<u>6</u>
<i><u>Annex 1. Transmission Note by Project Owner.....</u></i>	<i><u>6</u></i>
<i><u>Annex 2. Regulatory Proposal.....</u></i>	<i><u>7</u></i>
<i><u>Annex 3. Summary of Issues Discovery through Consultation with Banks.....</u></i>	<i><u>20</u></i>
<i><u>Annex 4. Main Findings on banks' suggestions on the Draft Regulation on Liquidity Risk Management.....</u></i>	<i><u>36</u></i>
<i><u>Annex 5. Cost and Benefit Analysis of the Impact on the banking system of the new Regulation on Liquidity Risk Management.....</u></i>	<i><u>54</u></i>
<i><u>Annex 6. Main Findings on banks' experience in Liquidity Risk Management.....</u></i>	<i><u>58</u></i>
<i><u>Annex 7. Note on International Experience with Liquidity Risk Management</u></i>	<i><u>69</u></i>
<i><u>Annex 8. Scoping of Problem.....</u></i>	<i><u>82</u></i>
<i><u>Annex 9. SPI Albania Methodology.....</u></i>	<i><u>88</u></i>
<i><u>Annex 10: Summary of PWG Assessment of SPI Secretariat Performance.....</u></i>	<i><u>90</u></i>

1. Summary of PWG analysis

The turmoil in financial markets of last year and resulting difficulties that persist today demonstrate the critical importance that effective practices for liquidity risk management and high liquidity buffers play in maintaining institutional and systemic resilience in the face of shocks.

Albeit the banks' current good levels of liquidity, it is expected that Albania will start feeling the consequences of the world's financial crisis through decreased level of remittances. In addition, tight conditions on liquidity in the international markets might influence the activity of the banking system in Albania. On such grounds, and driven by the need to align Albanian regulatory framework to the revised Basel Committee guidelines, Bank of Albania has considered to enhance liquidity risk management and the regulatory framework that regulates it.

The present regulatory framework provides only principles for the liquidity management, and banks have independence in managing the liquidity level based only on principles set by the BoA, with no quantitative prudential ratios (thresholds). It has not been updated to fully cover all elements related to liquidity risk such as identification, measurement, control and monitoring of liquidity risk. As it is now, it cannot be adapted to the increased complexity of liquidity risk and its management.

Looking at the liquidity risk management in some countries, and based on the review and survey performed by Working Group on Liquidity set by the Basel Committee on Banking Supervision and by the European Commission, it is evident that liquidity regimes have been developed along national lines to support the preservation of the safety and soundness of each country's financial system (Annex 3).

Almost all regimes expect banks to establish and develop effective systems for risk management, and to document liquidity policies in order to set out the internal strategy for managing liquidity risk. In the majority of countries supervisors has set quantitative limits in order to constrain the amount of liquidity risk that a bank takes, and ensure that banks are adequately prepared for stressed conditions. Particular attention has been put by supervisors to the identification, recognition and classification of any position, activity or product, which has influence on the level of liquidity and the assessment of the liquidity indicators and ratios.

To help the SPI Project Working Group identify areas for intervention on the existing BoA's Guideline "On the liquidity of the bank", the SPI Secretariat ran a survey on banks' experiences. The aim of the survey was to acquire information on the Albanian banks' individual experiences with the risk management liquidity, and to identify the particularities of banks' internal systems for liquidity risk management (Annex 6).

Based on the findings of the survey, on the international experience, and on Basel Committee's Sound Practices for Managing Liquidity in Banking Organizations, Bank of Albania compiled a draft proposal for a new regulation. The SPI Project Working Group run two rounds of consultations on the draft proposals (see a summary of consultation with banks in Annex 3).

In the first round, following the discussions on the second PWG meeting, SPI Secretariat conducted a survey on banks' suggestions on the first draft regulation proposal in order to help aligning the regulatory framework to the banks' need and specifics. Based on the suggestions from the Project Working Group member banks, Bank of Albania revised and updated the first draft regulation, and the revised one was subsequently discussed in the third PWG meeting.

2. PWG recommendations

The main amendments to the draft proposal, as an outcome of the consultations, were regarding the following items:

- The Organizational structure for liquidity risk management;
- Establishment and maintenance of an adequate maturity structure;
- Liquidity rates and limits;
- Definition of liquid assets; and
- Definition of short term liabilities.

Views, discussions and suggestions of banks were in vast majority reflected in the final draft regulation delivered by Bank of Albania to all banks for a final consultation (Annex 2).

3. Other PWG observations

The Project Management Team considers that the SPI Albania analytical and consultative process, informed by the European Union Better Regulation methodology, has allowed the preparation of a high-quality regulatory proposal during a compressed time period.

4. Proposed SPI Committee Decision

SPI Committee takes note of the conclusion of the PWG deliberations and of the accompanying note by the Project Owner about the usefulness of this work as an input into Bank of Albania's regulatory activities.

SPI Committee acknowledges the usefulness of the EU Better Regulation methodology as practiced by SPI Albania for the purpose of the efficient preparation of high-quality regulatory proposals.

Annex 1. Transmission Note by Project Owner

SPI Albania Letterhead

To: SPI Committee

From: Indrit Banka, SPI Project Owner and Head of Supervision Department,
Bank of Albania

Copy: SPI Committee Permanent Observers, Project Management Group; SPI
Secretariat

Dear Members of the SPI Committee,

Recommendations on Enhancing Banks' Liquidity Risk Management

As the Project Owner of the SPI Project undertaken at Bank of Albania's request on the changes to be made in the Bank of Albania regulatory framework with the aim to enhance Banks' Liquidity Risk Management, I am transmitting the final consensus recommendations formulated by the Project Working Group.

The Project Working Group, under the direction of Project Manager Ms. Miranda Ramaj, has shown full commitment to Better Regulation principles by conducting a participatory evidence-based analysis, which gave full consideration to observations, comments and proposals coming from Albanian banks. Its outputs have already been widely shared within the Supervision Department of Bank of Albania as it was drafting the new regulation on the management of liquidity risk.

I welcome the views of the SPI Committee or any its members on the Project Working Group final recommendations.

Sincerely,

Indrit Banka

SPI Albania Project Owner &
Head of Supervision Department
Bank of Albania

Annex 2. Regulatory Proposal

BANK OF ALBANIA SUPERVISORY COUNCIL

Draft Regulation

“ON LIQUIDITY RISK MANAGEMENT”

Adopted with the decision No. , dated , of the Supervisory Council

Chapter I General provisions

Article 1 Purpose

The purpose of this regulation is to set out the minimal requirements and standards for banks and branches of foreign banks on an effective administration of the liquidity risk.

Article 2 Subjects

This regulation shall apply to banks and branches of foreign banks which exercise banking and financial activity in the Republic of Albania. For simplicity, following in this regulation, these subjects shall be referred to as “banks”.

Article 3 Legal ground

This regulation is issued in accordance with Article 12, letter "a", of the Law No. 8269, dated 23.12.1997 “On the Bank of Albania” as amended, and Article 66 of the Law No. 9662, dated 18.12. 2006 “On Banks in the Republic of Albania”.

Article 4 Definitions

For the purpose of implementing this regulation, the terms used have the same meanings stipulated in Article 4 of the Law No. 9662, dated 18.12.2006 "On Banks in the Republic of Albania", while the following terms shall have these meanings:

1. “Lack of Liquidity (Illiquidity)” shall mean any situation in which the bank:
 - a. Has not sufficient amount of cash to be able to meet any of it's obligations as they become due and asked from a depositor or creditor.; or
 - b. Can not finance the increase of its assets.

2. “Liquidity risk”, in the meaning of this regulation, is the risk that the bank will not be able to provide a sufficient amount of cash to meet its obligations as they become due and asked to be paid, and risk that the bank may obtain cash to meet the matured and obligations were asked by depositors and creditors with higher expenses.
3. “Emergency situations” shall imply those situations where there exists a real threat that could lead the bank to insolvency thus not being able to pay its obligation when mature.
4. “Contingency plan” shall imply a document compiled by the Bank, providing the regulations and procedures to be met in emergency situations and the processes related to available contingency funding sources.
5. “Net cash flow” shall imply the difference between inflows with outflows for an established period of time thus disclosing a rise or reduction of cash amount.
6. “Contractual maturity of assets and liabilities”, shall be the remaining period up to the conclusion of their contractual term.
7. “Concentration in the funding sources” shall be the condition when an only one decision-making or only one external factor may cause an immediate and considerable withdrawal of funds, thus obliging the bank to significantly change its funding strategy.
8. “*Stress-testing*” shall imply the risk management technique employed to assess the possible impact of one or more internal and external factors on the financial stability and/or bank liquidity. *Stress tests* may encompass analysis of scenarios or analyses of vulnerability.
9. “Gap” shall be the difference between the bank’s assets and liabilities, according to the maturity buckets.

Chapter II

Systems of liquidity risk management

The managing systems of the liquidity risk that aim to appropriately cope with the administration of liquidity risk should include minimally:

1. Strategy and policies;
2. Organizational structure;
3. System of internal control;
4. Management information system;
5. Contingency plan.

Article 5

Strategy and Policies

1. Banks compile the strategy and policies, such as formal documents, which support the procedures for managing liquidity risk.
2. The strategy related to the management of liquidity risks shall set minimally the:
 - i) objectives of the strategy
 - ii) principles for managing liquidity risk
 - iii) general methodology the bank shall implement for the management of the liquidity risk in short term and long term
 - iv) overall methodology and the bank's vision to enter more markets and find more financing sources; and
 - v) policies for managing liquidity risk
3. The strategy for the management of liquidity risk shall be compiled as a separate document or as a part of the bank's strategic plan and periodically reviewed at least once a year.
4. The policies for managing liquidity risk shall include minimally the following elements:
 - a. identifying the risk of liquidity stemming from new products and activities; and
 - b. measuring of liquidity risk, specifically:
 - i) current liquidity position;
 - ii) forecast of cash inflows and outflows;
 - iii) compare (match) the maturity of funds with financing sources;
 - iv) concentration of deposits and other financing sources, according to the maturity, type and structure of the customers;
 - v) the level of vulnerability and volatility of deposits;
 - vi) determining the indicators of liquidity and their use in the process of monitoring liquidity in the bank;
 - vii) the use of the stress test as an element/part of liquidity risk monitoring process.

Article 6

The organizational structure of the liquidity risk management

1. The bank shall create a suitable organizational structure for managing liquidity risk, which would clearly stipulate the separation of powers and responsibilities of the units / functions of the bank which are in charge of the organizational monitoring and managing liquidity risk.
2. The board of the bank, for the purposes of liquidity risk management shall:
 - a. Consider and approve the strategy and policy / management of the liquidity risk and monitors their implementation, including approval and monitoring of the contingency plan;
 - b. Review the appropriateness of the strategy and policies implemented minimally annually;

- c. Approves the limits of internal exposure for liquidity risk in accordance with its risk profile, business strategy and its role in the financial system;
 - d. Reviews the report on the management of liquidity risk and verifies the deflection of the policies adopted;
 - e. Analyses the results deriving from stress tests and set out in compliance with these latter the measures to adjust liquidity profile according to fit its risk tolerance;
 - f. Ensures that the responsible structure manages effectively the liquidity risk;
 - g. Assesses and monitors the efficiency of internal control system for liquidity management risk.
3. The board of the bank creates Committees / Structures for the management of liquidity risk. The committee / structure, along with the management of subject's other risks, shall be responsible for the management of risk liquidity and for the purpose of this latter, shall:
- a. compile, implement and monitor the strategy, policies and procedures for liquidity risk management and provide proposals for its review;
 - b. develop and assess liquidity risk management to maintain its efficiency;
 - c. analyze the reports related to the bank liquidity condition as well as shall establish and monitor the needed operations on the liquidity risk management;
 - d. review regularly the exposure limits against liquidity risk and propose changing of such exposure limits;
 - e. compile the methodology to perform stress tests and procedures the derived outcomes, and the regular reporting to the Steering Council on the condition and perspective of bank's liquidity;
 - f. suggest how to resolve any potential liquidity problem and provide the continuance of bank's operations;
 - g. provide the conditions for the efficient functioning of the internal control system;
 - h. etc.
4. The bank, may establish a special structure for the management of risk liquidity, which shall be responsible for the operational implementation of the liquidity risk management policy through the daily monitoring and control of liquidity risk.

Article 7

Information management system

- 1. The bank shall have in place internal control procedures to ensure the integrity of its liquidity risk management process within the whole management process of risk. Internal control on the liquidity risk management is an component of the general internal control system of the bank.
- 2. Internal control system on liquidity risk management shall minimally include:
 - a. the monitoring of suitability with the established limits and the reporting on their possible exceeding;
 - b. the regular control of terms, correctness and completeness of used data and assumptions for the purposes of liquidity measuring and monitoring;

- c. implementation of measures to correct the concluded weaknesses;
- d. the continuing development of methods and methodologies to measure and control liquidity risk;
- e. the compliance with all the laws, regulations and other bylaws of the Bank of Albania and the internal regulations of the bank.

Article 8

Information management system

1. The bank shall establish an information system which provides timely and in a consistent way the necessary data for measuring, monitoring, controlling and reporting for the decision-making process for the purpose to manage liquidity risk.
2. Information system shall minimally provide:
 - a. the measurement, control and monitoring of bank liquidity on a day-to-day basis and over a series clear time periods;
 - b. the measurement, control and monitoring of bank liquidity for each foreign currency, which impacts considerably the overall liquidity of bank on individual and aggregated basis;
 - c. the monitoring of compliance with the established limits on the exposure against liquidity risk;
 - d. generating of data with the aim to account the liquidity indicators and to prepare reporting forms to meet the needs of the bank's steering structures and of all the other individuals involved in the management process of liquidity risk;
 - e. the reports of deposits concentration and the monitoring of their endurance;
 - f. the spreadsheet to perform stress-tests of liquidity and/or analysis of scenarios.

Article 9

Stress-testing

1. Bank manages liquidity not only under normal conditions/circumstances, but it should also be prepared to manage liquidity under stressed conditions/circumstances.
2. Bank should perform stress tests and/or scenario analyses, in order to identify and quantify its exposures to possible future liquidity stresses, analyzing the impact on cash flows, the short-term and long-term liquidity position, preparation of bank to operate under stressed circumstances, and the assessment of its ability to grow its assets through the identification of the most favorable funding sources.
3. The frequency of testing should be commensurate with the size of the bank and its liquidity risk exposures, as well as relative importance within the banking system, but this frequency must be not less than twice a year. In any case, Bank of Albania may request to the bank to conduct stress *tests* at more frequent periods.
4. The Steering Council of the bank shall analyze the *stress test* outcomes and use them:
 - to improve the strategies and policies of liquidity risk management;

- to identify the main issues for action related to the bank's liquidity position;
 - to develop effective contingency plans.
5. *Stress-tests* performed by the bank shall include the use of special scenarios based on internal factor, and scenarios based on the market conditions where the bank operates and on macroeconomic factors (external factors).
 6. Scenarios to perform *stress tests* may include:
 - a. massive withdrawals of deposits;
 - b. possible worsening of borrowers' ability to pay the obligations that implies a deterioration of credit portfolio quality;
 - c. impossibility for the easy exchange and without considerable losses of cash assets;
 - d. the possibility of early payment of obligations under the existence of optional contractual terms that make possible this settlement;
 - e. operational risk and the degree of its impact on liquidity risk increase.
 - f. changes of economic conditions in sectors against which the bank is exposed and the worsening of the entire economy;
 - g. the deterioration of markets functioning where the bank operates and a significant reduction of confidence in these markets;
 - h. interest and exchange rates shock;
 - i. the effect of sensitive changes on the bank assets' value and/or its assets accepted as a guarantee (collateral);
 - j. the partial or complete restriction of financing from the main funding sources, including the possible continuity of financing from the parent bank;
 - k. the impact of negative economic developments at a regional and global level.
 - l. etc.
 7. Bank shall take account of the assumptions listed in paragraph 6 of this Article, which are guidance for the bank, while the bank shall employ the assumptions that best fit with the risk complexity and profile and its importance in the banking system.
 8. Bank shall set out the approach for the conduction of stress tests, the used assumptions and the actions as response to the generated outcomes, including:
 - a. the implementation, analysis and frequency of stress test scenarios;
 - b. conduction of stress tests for individual and combined scenarios, under the conditions of simultaneous occurrence of some scenarios;
 - c. regular documentation and review of assumptions used for the performance of stress tests;
 - d. the reporting forms and frequency of stress test outcomes to the management;
 - e. the actions to be undertaken by the management and special structures in charge of liquidity risk management based on stress test results.

Article 10
Contingency plans for liquidity risk management in emergency situations

1. The bank should develop a contingency plan for liquidity risk management under emergency situations (hereinafter referred as the plan).
2. The plan shall be part of liquidity risk management policy and shall include:
 - a. clear separation of tasks, competences, responsibilities and decision-making related to the plan implementation;
 - b. Early warning indicators used as signals for the development of emergency conditions and the assignment of persons within the bank, responsible for the monitoring and reporting of these indicators (Annex 1 provides some of these indicators);
 - c. circumstances under which the plan shall take place;
 - d. establishment of operations to be undertaken, identification of possible funding sources, their level and the priorities in utilization, as well as the establishment of timeframes within which these activities shall be carried out;
 - e. communication method with the main depositors, business partners, other customers and the public;
 - f. Contacts of persons responsible for the plan implementation.
3. The bank shall review the plan regularly, to consider the optional changes of internal and external circumstances of the bank's operations.
4. Under difficult economic-financial conditions the bank should collaborate closely with the Bank of Albania, by sharing information on its financial condition on continual basis and the operations taking place for its return at satisfactory parameters.

Chapter III **Indicators of liquidity risk management**

Article 11 **Identification and measuring of liquidity risk**

In order to ensure stability in the administration of its liquidity needs, the bank should establish measures and controls based, as minimum, on:

- a. principle of relaying as much as possible on stable source of founding;
- b. principle of minimizing the difference between actual and contractual profiles of maturity;
- c. principle of maximizing diversification of source of founding by type, instruments, maturity, number of client and markets;
- d. degree of inclusion of the bank in many markets (inter bank markets) and confidence and liquidity of those markets as well as of the instruments that have been traded on them;
- e. principle of human resources availability for effective liquidity risk management.

Article 12 **Planning and monitoring of inflows and outflows funds**

1. The bank shall plan and monitor the inflows and outflows of funds. This planning shall disclose all types of inflows and outflows, the current and expected ones, including the off-balance sheet inflows and outflows. Periodically the bank should compare the planned and actual values of inflows and outflows.
2. Assumptions on cash inflows shall include, at minimum:
 - a. actual collection of loans (where the level of collection cannot be higher than the contracted inflow decreased by the percentage of established reserves for potential losses);
 - b. actual conversion of assets to cash that do not have determined maturity;
 - c. available cash based on the ownership of financial instruments held to maturity;
 - d. actual possibilities of securitization or sale of assets, where equity investments, non performing loans and fixed assets are treated as the least liquid assets, and pledged resources are excluded from the evaluation;
 - e. expected growth of deposits;
 - f. bank's ability to obtain funds from additional sources and availability of market sources of financing;
 - g. other cash inflows through analysis of data on level and trends of cash inflows in the prior period, bearing in mind specifics of bank's operations, seasonal impacts, interest rate sensitivity and macro economic factors.
3. Assumptions on cash outflows shall include, at minimum:
 - a. maturing obligations;
 - b. future growth of credit activities of the bank;
 - c. standard level of deposits and other obligations that is determined based on usual variability of bank's deposits and knowledge of depositors' behavior and intents;
 - d. actual maturity of demand deposits and time deposits that can be withdrawn before maturity period (early withdrawal option);
 - e. influence of interest rates changes on change of level of deposits;
 - f. level of deposit concentration;
 - g. potential outflows from off balance sheet items;
 - h. other cash outflows through analysis of data on level and trends of cash outflows in the prior period, bearing in mind seasonal impacts, interest rate sensitivity and macro economic factors.
4. Expected inflows arising from all types of deposits, credit receipts, securities sales, interbank loans uses, off-balance sheet inflows (regarding derivative instruments) and all inflows with possibility of future materialization.
5. Expected outflows are considered all the outflows of approved credits funds, securities purchasing, granting of interbank loans, payment of customers' deposits, and off-balance sheet items (relevant to derivative instruments) and all the funds outflows expected to be materialized for the respective period.

Article 13

Establishment and maintenance of an adequate maturity structure

1. The bank shall monitor the maturity structure of assets and liabilities with the purpose to identify the possible maturity gaps.
2. The bank, for the purposes of gaps measuring and monitoring, shall allocate the inflows and outflows arising from assets (rights), liabilities (obligations) and off-balance sheet items according to maturities.
3. The bank uses as the date of assets collection the latest possible date and as liabilities settlement the earliest possible date related to the following maturities:
 - a. up to 7 days
 - b. 7 up to 1 month
 - c. 1 month to 3 months
 - d. 3 months to 6 months
 - e. 6 months to 12 months
4. The bank, along with the monitoring of gaps according to contractual maturity, shall monitor regularly the gaps in line with the expected maturity, by employing for this purpose assumptions on the expected inflows and outflows (probability of assets summation when they mature, probability of deposits withdrawal before maturity, etc).
5. The bank, in the projection framework of future cash inflows, shall ensure that the approved assumptions be reasonable, adequate, documented and reviewed on regular basis.
6. The bank to set out the expected maturity, should:
 - a. possess a data base of inflows and outflows where the assumptions are based on;
 - b. review regularly the used assumptions to reflect ion these later the optional changes arising in the internal and external circumstances; and
 - c. provide that assumptions consider the seasonal and cyclical character of inflows and outflows.
7. The bank may classify (group) the flows according to the customer's type, maturity, currency, sector, etc, in line with methodology set out for this classification.
8. Supervisors of Bank of Albania may request the implementation of various assumptions or of corrective factors in the projection and monitoring of flows according to the expected maturity, when it deems these operations provide a better reflection of the bank's risk profile.
9. The bank shall perform the analysis gaps liquidity based mainly on:
 - a. the classification of assets, liabilities, and off-balance sheet items according to maturities;
 - b. the assessment of deposits' stability based on historical data and stress tests' results;
 - c. the establishment of limits for liquidity gaps;
 - d. the calculation of gaps on weekly basis and by currencies;
 - e. forecasting of future liquidity gaps;

f. etc.

Article 14
Monitoring of funding sources and their concentration

1. A bank shall monitor regularly the funding sources to maintain a diversified base of these sources and to identify the possible concentrations. Concentrations should be analyzed according to funding source, funding type, market, geographical concentration, according to currency and maturity.
2. The monitoring of funding sources and their concentration shall include:
 - a. the maintenance of strong relationships with the biggest depositors, correspondent banks, other important customers as well as with business partners;
 - b. the establishment of stability of the deposits, by considering the characteristics of depositors and deposit's type;
 - c. the monitoring of diversification level of funding sources;
 - d. the monitoring of transfers in other funding sources.
3. The bank shall set out and monitor the concentration level of current accounts and demand deposits in the domestic and foreign currency.
4. The biggest depositors shall be considered the twenty depositors having the highest weight in the bank's total deposits.

Article 15
Monitoring of collateral positions for the purposes of liquidity

1. The bank shall manage its collateral positions, to differentiate between encumbered and unencumbered assets.
2. Effective collateral management requires a bank to be in a position to meet a range of collateral needs, including long-term, short-term and intraday liquidity.
3. The bank should have sufficient collateral to meet expected and unexpected borrowing needs, depending upon the banks' funding profile.

Article 16
Monitoring of financing lines

1. The bank shall assess the possibility of credit lines repetition (renegotiation) and the possibility that funds' providers react equally under emergency conditions / circumstances.
2. The bank shall consider the possibility (probability) of funding shortfalls in emergency situations.
3. The bank may not assume the secure automatic renovation (renegotiation) at 100 per cent of maturity lines on intraday basis.

Article 17

Liquidity rates

1. The bank shall maintain liquidity at an amount, structure and ratios that allow it to meet all its obligations and commitments, timely, at a reasonable cost and at a minimum risk.
2. The bank shall set out the needed procedures for the measurement and monitor of net cash flows and for the monitor of liquidity in the main currencies and as total.
3. The bank should monitor and respect in every moment the ratio of liquid assets to short term liabilities at a minimal level of 20%, on weekly basis.
4. The following items shall be included when accounting liquid assets:
 - a. Cash;
 - b. Accounts with Bank of Albania including the legal reserve up to 50% of its usable amount;
 - c. Treasury Bills (up to 80%) and obligations issued by BoA or Government of Republic of Albania;
 - d. other re-financing bills accepted by the central bank;
 - e. Current accounts with banks, credit institutions and other financial institutions;
 - f. Deposits with banks, credit institutions and other financial institutions with remaining maturity up to 7 days;
 - g. Loans to banks, credit institutions and other financial institutions with remaining maturity up to 7 days (excluding subaccount 157);
 - h. securities issued by central government and central banks with rating assigned by internationally recognized rating agency equivalent to rating of S&P not less than A+ (investment grade);
 - i. securities issued by financial institution with rating assigned by internationally recognized rating agency equivalent to rating of S&P not less than A+;
 - j. securities that have not been rated but issued by international development banks listed in the regulation of Bank of Albania "On risk management arising from the large exposures of Banks";
 - k. Securities with remaining maturity up to one month;
 - l. Securities purchased in a repurchase agreement with a remaining maturity up to one month;

Liquid assets are included on a net basis excluding accrued interests and by discounting the reserve funds, and when rated by different agencies, the lower rating will be considered.

5. Short term liabilities are considered all banks liabilities with maturity up to one year.
6. Bank, along with the indicators stipulated in paragraph 3 of this Article, shall monitor and set out if deeming necessary the internal limits regarding the following indicators:
 - a. cumulative gap up to one month against liquid assets;
 - b. cumulative gap up to three months against liquid assets;

- c. loans to deposits (accounted as total and divided in LEK and foreign currency);
- d. loans to deposits and funding lines;
- e. liquid assets ratio versus total deposits;
- f. cash ratio against short-term liabilities;
- g. liquidity ratio according to maturity;
- h. transforming ratio of short-term sources maturity into long-term investments;
- i. indicator of deposits' concentration (according to depositor's type, currency, sector, etc) and their stability;
- j. marginal average cost of liquidity;
- k. limits of deposits in other banks;
- l. expectation of future needs for liquidity (available liquid assets – requested liquid assets).

CHAPTER IV

Supervision and reporting

Article 18

Reporting and supervisory requirements

1. Banks should fill in and submit to Bank of Albania, at the end of each month the reporting forms attached to this regulation (Annex 2). Banks report to BoA (Supervision Department) immediately when it is observed a breach of the limit established in article 17, paragraph 3.
2. Banks should inform BoA (Supervision Department), every time they detect that can be facing situations of liquidity difficulties, and in such cases disclose a full description of the respective reasons, of the following effects and the measures planned to take to improve the situation.
3. Banks should create systems of liquidity risk management and respect the criterions and principles defined in this regulation.
4. Banks shall assure that the systems of liquidity risk management, qualitatively and quantitatively, are in accordance with the size of the bank, the type of its activity, and the its level of exposure towards liquidity risk.
5. Bank of Albania shall estimate continuously the general conditions of banks' liquidity and the functioning of the systems of liquidity risk management, by means of on site inspections and off site analysis.
6. Bank of Albania shall require broader and more frequent information in cases of situations of liquidity constrains, or when deemed necessary. In such cases, banks shall provide an effective communication and full information in accordance to the requirements, nature of information and frequency needed through the responsible structures.

Article 19

Preventive and penalizing measures

Bank of Albania, when it finds that there are infringements of meeting the obligations set out in this regulation, shall imply the supervisory, preventive and penalizing measures as stipulated in the Law. No. 9662, dated 18.12. 2006 “On Banks in the Republic of Albania” and in the other by-laws implementing this Law.

Annex 1 **Early Warning indicators**

The following list presents some of the early warning indicators that banks should deal with carefully. This list is not mandatory but an orienting one.

1. rapid assets growth, especially when funded with potentially volatile sources;
2. growing concentration in assets and/or liabilities;
3. huge increase/decrease of net positions in selling/purchasing according to the currency
4. a decrease of weighted average maturity of liabilities;
5. repeated breaches of internal or regulatory limits set out for the liquidity indicators;
6. negative trends and/or heightened risk associated with a particular and/or business line;
7. significant deterioration in the banks’ earnings, its assets quality and overall financial condition;
8. negative publicity;
9. downgrade of bank credit rating;
10. stock price decline or increase of debt cost;
11. increase of wholesale or retail funding costs;
12. correspondent banks that eliminate or decrease their credit lines;
13. increase of deposits withdrawal speed;
14. increasing redemptions of certificates deposits (CDs) before maturity;
15. difficulties accessing longer-term funding;
16. etc.

Annex 3. Summary of Issues Discovery through Consultation with Banks

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL (<i>BANKS CONCERNS ACCEPTED</i>)	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
A. General			
1. Legal form	Guideline	Regulation	
2. Definitions	<ul style="list-style-type: none"> - Liability degree - A group of related depositors 	<p>- Illiquidity</p> <ul style="list-style-type: none"> - Liquidity Risk - Emergency situations - Contingency plan - Net cash flows - Contractual Maturity (of assets and liabilities) - Relying on funding sources - Stress testing - GAP 	Banks required a clearer definition of illiquidity, which was provided in the final draft.
B. Systems for liquidity risk management			
3. Systems for liquidity risk management	No provisions	Systems for liquidity risk management should include: <ol style="list-style-type: none"> 1. Strategies and policies; 2. Organizational framework; 3. Internal control system; 4. Information administration system; 5. Emergency plan 	Banks do have already structures and strategies for the management of liquidity risk, therefore the requirements of the new proposed regulation were well accepted.
4. Strategies and policies	No provisions	Banks establish strategies and policies to support the procedures of liquidity risk management. The strategy should include at least: <ul style="list-style-type: none"> - Objectives of the strategy, - Principles of Liquidity risk management; 	Banks argued that in those who have a foreign parent bank, the strategies and policies, including indicators on liquidity to be monitored, might be established and defined

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL (<i>BANKS CONCERNS ACCEPTED</i>)	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
		<ul style="list-style-type: none"> - General methodology to be followed in the short and medium term; - General methodology of the bank to enter in financing markets; and - Policies for liquidity risk management. <p>Policies for liquidity risk management should include at least:</p> <ul style="list-style-type: none"> a) identification of liquidity risk deriving from new products and activity; and b) measuring of liquidity risk, especially: <ul style="list-style-type: none"> - actual liquidity position; - forecast of inflows and outflows of cash; - maturity match of funds and sources of financing; - concentration of deposits and other sources of financing by maturity type and customer structure; - fluctuation and vulnerability of deposits; - setting of liquidity indicators and their monitoring process in the bank; - use of stress tests to monitor liquidity risk. 	<p>by the parent bank. However, they have to be included in the strategies and policies of the bank as of the regulation.</p>
<p>5. Organizational framework for liquidity risk management</p>		<p>The bank shall establish a robust organizational framework to manage liquidity risk, which clearly set out the competences and responsibilities of the bank organizational units, which monitor and manage</p>	

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
		<p>liquidity risk.</p> <p>Steering Council of the bank should mainly:</p> <ul style="list-style-type: none"> - Approve the Strategy and policies for liquidity risk management, including contingency plans - Review the appropriateness of the Strategy and policies annually; - Approve internal limits for liquidity management, - Review stress tests reports <p><i>Steering Council of the bank should establish a committee / structure for the managements of risk/s.</i> The Committee Structures should mainly:</p> <ul style="list-style-type: none"> - Develop and implement and monitor Strategy and policies, - Establish and develop methods for liquidity risk management and stress tests methodologies, - Report to Board on status and perspective of bank's liquidity; 	<p>Banks discussed on the Risk Management Committee that banks should have, with the argument that different banks might have different structures with the role of managing different risks within the bank.</p> <p>Therefore BoA changed the definition into a broader one, covering for different types of committees and structures, with defined functions.</p>
6. Internal control system	Bank's internal control shall review: a) whether the report compiling system is designed in such a way as to	The internal control system for liquidity risk management, integrated in the overall system of internal control, should include: - Monitoring and reporting on limits exceeding; - Regular check of timelines, accuracy and comprehensiveness of data and assumptions used;	No comments

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
	truly reflect the actual liquidity of the bank, b) whether liquidity reports as of December 31 are correct.	<ul style="list-style-type: none"> - Implementation of measures to correct the concluded weaknesses; - The continuing development of methods and methodologies to measure and control liquidity risk and; - the compliance with all the laws, regulations and other bylaws of the Bank of Albania and the internal regulations of the bank. 	
7. Management Information System	Through its information system, the bank shall classify its assets, liabilities and off-balance sheet items, according to: a) the maturity date of fixed term assets, liabilities and off-balance sheet items; b) the expected development of fixed term liabilities; c) the depositor's behavior in the past; d) the liquidity	Banks should develop an information system to assure measurement, monitoring, and control of the liquidity risk management. It should provide for: <ul style="list-style-type: none"> - Measuring and monitoring bank's liquidity position on a daily basis and in predetermined time periods, and for each foreign currency that considerably affects bank's liquidity; - Monitoring observance of established liquidity risk exposure limits ; - Generating information in order to calculate liquidity indicators and prepare reporting forms; - Concentration report and monitoring on bank deposits; - Spreadsheets for Stress tests performing and scenario analysis. 	No comments

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
	degree of assets; e) the amount of deposits by a individual depositor or a group of joint depositors; f) the type and the degree of liability for off-balance sheet items given or received by the bank; g) the currencies in which assets, liabilities and off-balance sheet items are denominated, with special focus on Lek, convertible and non-convertible currencies.		
8. Stress-testing	No provisions	Banks should perform periodical stress tests and / or scenarios analysis, to identify situations that influence its liquidity position The frequency of stress tests is chosen by the bank	Most of banks already perform stress testing for their internal control on liquidity. The issue raised by banks is that there should be a clear definition in the regulation about the

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
		<p>but should not be less than twice in a year. Bank of Albania can require more frequent stress tests.</p> <p>The results of stress tests are reviewed by the banks' Board and used to improve the strategy, identify main issues, and develop effective contingency plans.</p> <p><i>Scenarios could be developed as bank specific, based on factors within the banks, and scenarios arising from market or macro economical conditions (exogenous factors). The proposed regulation gives several possible scenarios that banks can use; however, it is up to banks to use the scenarios that better fit them.</i></p> <p>Banks should define the methodology of performing stress tests including the periodicity, the scenarios used, the periodical revision of assumptions used, the form and reporting of the results, and the actions to be undertaken based on the stress tests results.</p>	<p>required number and formats of the basic scenarios to be followed for the stress tests.</p> <p>Two banks suggested the proposal from BoA of 2 or three models of Stress tests as obligatory but the decision of the PWG was for the models to be only indicative, and banks to choose the ones that better suit them.</p>
9. Contingency planning	The banks should draft and report to BoA a contingency plan for unusual events, which may threaten bank's	<p>The bank shall adopt a contingency plan for liquidity risk management that should include:</p> <ul style="list-style-type: none"> - Clear distribution of tasks, powers and responsibilities in the bank regarding the plan implementation; - <i>Early Warning Signals</i> that indicate the emergency 	The early warning signals are a novelty of this

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
	<p>liquidity, that should comprise a compiling method and its terms of use including designation of a responsible employee, identification and value (volume) of assets, which, according to the plan, are held to promote and secure bank's liquidity. The bank should regularly update the contingency plan with respect to changing internal (asset and liability structure of the bank) and external (situation in the interbank market) conditions.</p>	<p>conditions (some of them are shown in Annex 1.)</p> <ul style="list-style-type: none"> - Conditions in which the plan is to be applied; - Define actions to be undertaken, identify possible fund sources, the priorities and time limits within which the actions should be undertaken; - Forms of communication with key depositors, commercial partners, other customers and general public; - Contacts of persons responsible for the implementation of the plan <p>The bank shall, periodically and whenever needed, review and revise the plan and, in difficult economic-financial situations, collaborate and exchange information with Bank of Albania.</p>	<p>draft regulation, and banks had neither comments nor objections on them.</p>

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
C. Indicators for measuring monitoring and managing liquidity risk			
10. Measuring and Monitoring Funds Flows		<p>The planning of cash flow should include all types of actual and expected inflows and outflows including those regarding off-balance sheet items.</p> <p>Expected inflows are those from deposits, loan repayments, sales of securities, interbank loans, inflows from off balance items (for derivative instruments) and all other inflows that could be materialized in the future.</p> <p>Expected outflows are those for: approved loans, purchases of securities, interbank loans, repayment of clients' deposits, as well as off balance sheet items (for derivative instruments) and all outflows of funds that are expected to materialize for the respective period.</p>	No comments
11. Maturity Gaps		<p>The bank monitors maturity structure of assets and liabilities in order to identify the possible gaps of maturity. It groups incoming and outgoing flows of assets (rights), liabilities (obligations) and off balance sheet items according to their maturity (the date of collection of the rights is considered the latest date possible and that of payment of obligations the first possible):</p> <p>a) up to 7 days</p>	

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
		<p>b) 7 days to 1 month c) 1 month to 3 months d) 3 months to 6 months e) 6 months to 12 months</p> <p>The proposed regulation provides guidelines on how to determine the maturity bucket based on the contractual and remaining maturity of assets and liabilities.</p> <p>The bank shall perform the analysis gaps liquidity based mainly on:</p> <p>a. the classification of assets, liabilities, and off-balance sheet items according to maturities; b. the assessment of deposits' stability based on historical data and stress tests' results; c. the establishment of limits for liquidity gaps; <i>d. the accounting of gaps on weekly basis and by currencies;</i> e. expectation of future liquidity gaps; f. etc.</p>	<p>Banks argued that it is very difficult to achieve realization of daily gap analysis. BoA reconsidered and established as obligatory only weekly gap analysis.</p>
12. Monitoring and concentration	In order to ensure the necessary liquidity, the bank	The bank should monitor periodically its funding sources in order to preserve diversification and identify concentrations.	No comments

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
of funds resources	should: - obtain funds from stable sources within agreed terms, - diversify funding sources according to maturity, type of bank instrument and bank's clientele,	The proposed regulation gives guidelines on monitoring funding sources and their concentration. Large depositors are considered to be the first 20 depositors with the largest weight in the total banks deposits.	
13. Monitoring of guarantees		The bank should manage its collateral positions in order to identify free assets from assets blocked as guarantees. An effective management should comply with several requirements regarding the collateral, related with the insurance of long term, short term and daily liquidity. The bank should hold sufficient amount of collateral to answer to expected or unexpected needs for borrowing.	No comments
14. Liquidity Indicator And Liquid Assets Ratios	Bank calculates certain liquidity ratios, which are: highly-liquid assets to total assets, the	The bank shall maintain liquidity at an amount, structure and ratios that allow it to meet all its obligations and commitments, timely, at a reasonable cost and at a minimum risk.	

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
	<p>ratio of highly-liquid assets to short-term liabilities, the ratio of net cumulative balance sheet position (GAP) for a period up to 3 months, to total assets, as well as other ratios established by it. The bank shall establish the degree and methodology of their calculations.</p>	<p>The bank shall set out the needed procedures for the measurement and monitor of net cash flows and for the monitor of liquidity in the main currencies and as total.</p> <p><i>The bank should monitor and respect in every moment the ratio of liquid assets to short term liabilities at a minimal level of 20%, on weekly basis.</i></p>	<p>After hearing banks' concerns, Bank of Albania reconsidered the ratios with the aim to accommodate all banks and their specifics, holding to the best practices of liquidity risk management, and opted for only ratio limit on liquid assets.</p> <p>Banks have argued that liquidity ratio limits established in the first draft :</p> <ul style="list-style-type: none"> a) minimum 0.8x – within a working day; b) minimum 0.9x – in 3 consequent working days; c) minimum 1x – up to one month (calculated as average of the working days) <p>could not be fully monitored on a daily basis. BoA removed from the draft regulation such limits.</p> <p>Banks have argued that the ratios of liquid</p>

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
			<p>assets to total assets proposed by BoA in the first draft:</p> <ul style="list-style-type: none"> a. ratio of liquid assets to total assets at a minimal level of 20%; b. ratio of liquid assets in foreign currency to total assets in foreign currency at a minimal level of 30%; c. ratio of loans in foreign currency to deposits in foreign currency at a maximum level of 100%. <p>are very difficult to reach even in the medium term.</p>
<p>15. Liquid Assets Definition</p>	<p>Liquid-assets minimally include the integrity of the following elements:</p> <ul style="list-style-type: none"> - Monetary assets, - other accounts in the central banks, - T-bills and other re-financing bills accepted by the central banks, 	<ul style="list-style-type: none"> a. Cash; b. Accounts with Bank of Albania including the legal reserve up to 50% of its usable amount; c. Treasury Bills (up to 80%) and obligations issued by BoA or Government of Republic of Albania; d. other re-financing bills accepted by the central bank; e. Current accounts with banks, credit institutions and other financial institutions; f. Deposits with banks, credit institutions and other financial institutions with remaining maturity up to 7 days; 	<p>There were some clarifications needed on the definition of liquid assets in terms of:</p>

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
	<p>relationship with the other banks, - securities operations (net).</p> <p>Highly liquid assets shall mean cash values, current accounts with other banks, short-term deposits with other banks with maturity up to 7 days, treasury bills, short-term bonds of central banks and other similar instruments, and excess reserves with the Bank of Albania</p>	<p>g. Loans to banks, credit institutions and other financial institutions with remaining maturity up to 7 days (excluding subaccount 157);</p> <p>h. <i>securities issued by central government and central banks with rating assigned by internationally recognized rating agency equivalent to rating of S&P not less than A+ (investment grade);</i></p> <p>i. <i>securities issued by financial institution with rating assigned by internationally recognized rating agency equivalent to rating of S&P not less than A+;</i></p> <p>j. securities that have not been rated but issued by international development banks listed in the regulation of Bank of Albania “On risk management arising from the large exposures of Banks”;</p> <p>k. Securities with remaining maturity up to one month;</p> <p>l. Securities purchased in a repurchase agreement with a remaining maturity up to one month;</p> <p>Liquid assets are included on a net basis excluding accrued interest and subtracting provisions, and when rated by different agencies, the lower rating will be considered.</p>	<p>- Securities issued by financial institutions to be considered liquid. Banks argued that the A⁺ rating might be questionable as an indicator of liquidity for the security. However, in the PWG meeting, in the presence and with the advice of a Bank of Albania foreign expert, it was agreed that in the present conditions, this is the optimal indicator for the liquidity of securities.</p> <p>- Banks suggested that the rating of securities to be included in liquid assets should be the latest available rather than performed no earlier than six months from the reporting period as suggested in the first draft, and BoA removed the 6 months condition.</p> <p>- Percentage of overdrafts (on and off balance sheet) to be considered as liquid. Therefore BoA <i>removed point m.</i> (irrevocable credit facilities approved to the bank) based on the information provided by banks through SPI Secretariat, on their historical data and average</p>

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
			percentages used for their internal control on liquidity.
16. Short Term Liabilities Definition	Short – term liabilities are minimally the integrity of the following elements: - Interbank operations (class 1), - demand deposits (class 2), - 10% of current accounts of credit outstanding (class 2).	<i>Short term liabilities are considered all banks liabilities with maturity up to one year.</i>	Banks argued that in the first detailed definition of short term liabilities given by BoA in the first draft, there were many clarifications needed main ones being: - Percentage of overdrafts (on and off balance sheet); - Percentage of current accounts and on sight deposits to be considered as short term liabilities (items (i) and (j) of article 8 of the draft regulation – banks argued that 30% figure is quite high) BoA through SPI Secretariat collected information on banks' historical data and average percentages used for their internal control on liquidity, and revised the definition of short term liabilities.
17. Other Indicators		a. Cumulative GAP up to one month / liquid assets; b. Cumulative GAP up to three months / liquid	Banks required a clearer definition of the composition and maturities of the assets

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
		assets; c. Loans / Deposits (calculated in total and separately in Lek and foreign currency) d. Loans / Deposits and financing lines e. Liquid Assets / Total Deposits f. Cash / Short Term Liabilities g. Liquidity Ratio by maturity bands; h. Ratio of maturity transformation of short term sources in long term placements; i. Indicator of deposits concentration (by type of depositor, currency, sector, ect.) and their volatility; j. Average marginal cost of liquidity k. Limits of placements in other banks; l. Forecasting future needs for liquidity (disposable liquid assets – necessary liquid).	composing the buckets used to calculate GAPS. Bank of Albania has provided indicative tables attached to the regulation.
D. Reporting to Bank of Albania			
18. Forms	The reporting form attached each month.	Banks report to BoA each month the forms attached to the regulation. In case of failure to meet the ratio limit, banks should report to the Supervisory Department at BoA.	No comment
19. Liquidity Management Structures	Name and organizational structures responsible for the management of Liquidity and the	Banks create systems of liquidity risk management and make sure that these systems suit the typology, size and risk nature of the bank.	No comment

ISSUE	PRESENT REGULATORY FRAMEWORK	NEW BANK OF ALBANIA REGULATORY PROPOSAL <i>(BANKS CONCERNS ACCEPTED)</i>	BANKS' COMMENTS IN PROJECT WORKING GROUP DISCUSSIONS
	respective policies.		
20. Policies	The internal regulation that stipulates, the principles for composing the contingency plan for unusual events threatening bank's liquidity.	BoA estimates continuously the general liquidity conditions of the bank and might require further and more frequent information in situations of liquidity constrains.	No comment

Annex 4. Main Findings on banks' suggestions on the Draft Regulation on Liquidity Risk Management

1. Summary findings

1.1. Bank of Albania is seeking to enhance banks' liquidity risk management by reviewing the regulatory framework according to international guidelines and best practice, including introduction of quantitative prudential ratios, in order to prevent the occurrence of systemic liquidity difficulties.

1.2. BoA has drafted a regulation that sets specific principles for the internal banks' systems for liquidity risk management. It also gives detailed definitions of liquid assets and short-term liabilities and liquidity indicators, and establishes quantitative prudential ratios, for measuring monitoring and managing liquidity risk.

1.3. Six out of sixteen banks gave their suggestions or comments on the draft regulation on Liquidity Risk Management proposed by Bank of Albania. Five out of the six banks gave quantitative assessments.

1.4. The responding banks have given information, based on their historical data on the approach they have towards considering as liquid or less liquid certain balance sheet items such as overdrafts, credit cards, credit lines, current accounts and deposits, securities etc., and off balance sheet items such as warrantees, forward contracts etc.

1.5. Banks have given their opinion on the new liquidity ratio limits introduced by Bank of Albania in the draft proposal of the new regulation.

1.6. Most of the responding banks (4 out of 6) consider the daily generation and monitoring of liquidity ratio indicators very difficult or impossible in the near term, although totally or partially doable in the future.

1.7. In general banks consider the new ratios suitable or partially suitable, and have also given their suggestions on issues that can be better managed.

2. Detailed presentation of the survey findings

2.1. Characteristics of the surveyed sample

Total members of AAB (no.):	16 banks
Market Share (100%):	100%
Total respondent banks (no.):	6 banks
Respondent ratio:	38%
Market share of the respondent banks: (reference indicator: total assets)	48%

Size of the respondent banks:	medium, large
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6 out of 16 commercial banks operating in Albania gave their comments and suggestions on the Draft Regulation on Liquidity Risk Management. One of the responding banks did not answer to the quantitative data, but nonetheless gave its opinion on issues of the draft regulation.

The composition of the group of respondent by banks of different size is important, since they deal with different situations of liquidity as well as use different policies and strategies to manage liquidity risk.

2.2. Aggregated answers

Question 1. Based on your historical data, please provide information and arguments on:

a. the average percentage of overdrafts and credit cards approved and used in periods:

i. up to 7 days _____ **ii. up to 1 month** _____

Answer:

The information on historical data and average percentages used by banks for their internal control on liquidity, show that **average percentage of the used part of approved overdrafts and credit cards within 7 days varies from 4.5% to 37 %, and within a month from 13% to 44%.** This kind of data is not available or not applicable in 2 banks out 5 respondents.

One bank's experience suggest that reports are prepared on contractual expiry basis, therefore Overdrafts are included according to line expiry date, as done with all other BoA items. Under this assumption, this bank has been including more or less 8% in one week.

In the bank's internal scenarios, overdrafts have been considered as 100% rollover, so only interest cash inflows are deriving from them.

This bank's suggestion is that of not including any cash inflow from Overdrafts in the short-term liquidity, but including cash flow from Loans for 2% in 1 week, 3% in 1 month.

b. the average percentage of approved and unused overdrafts that you consider as short term liabilities _____

Answer:

The **average percentage of approved and unused overdrafts that banks consider as short-term liabilities is about 12% for the 5 reporting banks.** Two of the banks report a zero value for this indicator, while the maximum value is 30%.

c. do you include in short term liabilities any percentage of credit cards?

Answer:

Three out of 5 banks do not include in short term liabilities any percentage of credit cards.

Table 1. Credit Cards percentage as short term liabilities

	Yes	No
No. banks	2	3
Market share	22%	21%

d. if not, why?**Answer:**

The reason for not including the unused overdrafts in the short term liabilities from the 2 banks is that although increasing, their overdraft portfolios are still minor consisting only on salary accounts and not massive use as a loan type.

In one of the banks, the reason for not including credit cards is that this is an instrument still in development for the bank.

One of the banks explains that for internal monitoring of liquidity, the analysis is included on the assumptions done on Overdrafts/Current accounts linked to the card, and that credit card impact is reflected in the Nostro account, which affects negatively bank's asset side.

Question 2. Based on your historical data, please provide information on:**a. The average of credit lines approved (unused) and irrevocable used in periods:**

- i. up to 7 days** _____ **ii. up to 1 month** _____

Answer:

On the average of credit lines approved (unused) and irrevocable used, only one of the banks has given quantitative information, that is a range of 15 – 19% for credit lines used up to 7 days, and 12-14% for those used up to one month. In other banks data are either not available, or actually not taken in consideration, since they are usually in small amounts.

b. The percentage of credit lines currently considered as short term liabilities**Answer:**

The percentage of credit lines currently considered as short term liabilities varies from bank to bank (on the three banks that have reported a figure) as shown below.

Table 2. Percentage of credit lines considered as short term liabilities

Bank	Percentage of unused credit lines considered as short term liabilities
1.	17-20%
2.	100%
3.	0%

One of the banks has explained their methodology on treating the credit lines as follows:

The bank integrates unutilized committed credit lines in off-balance sheet as cash outflow. The way they calculate the figure is: the monthly average of new loans for the past three months is distributed equally through the following months. In this way, they plan to include almost 100% of their projected new loans. On this bank's

experience and suggestion, maturing loan payments normally offset the new loan amounts.

Question 3. Do you find it reasonable to include in liquid assets and short term liabilities the off balance sheet items listed below :

a. Liquid assets:

- i. Warrantees Yes No
- ii. Credit letters Yes No
- iii. Upcoming Forward transactions and other off balance sheet items which can be materialized into *inflows* and will mature in 7 days Yes No
- iv. If any of the above answers is No, please give your reasons and alternatives

Answer:

Table 3. Off balance sheet items to be included in liquid assets

Off balance sheet items/ no. of banks	Yes	No	N/A
Warrantees	1	3	1
Credit letters	1	3	1
Upcoming Forward transactions and other off balance sheet items which can be materialized into <i>inflows</i> and will mature in 7 days	3	1	1

A reason given for not including warranties and credit letters in liquid assets is that those are customers' transactions and do not affect the liquidity inflow of the bank.

Other items that banks might include as liquid assets are banks' approved credit lines (irrevocable) from counterpart.

b. Short term liabilities:

- i. All upcoming Forward transactions Yes No
- ii. Open credit uncovered letters of credit Yes No
- iii. Credit lines Yes No
- iv. Warranties and other off balance sheet items which can be materialized into *outflows* and will mature in 7 days Yes No
- v. If any of the above answers is No, please give your reasons and alternatives

Answer:

Table 4. Off balance sheet items to be included in short term liabilities

Off balance sheet items/ no. of banks	Yes	No	N/A
All upcoming Forward transactions	3	1	1
Open credit uncovered letters of credit	3	1	1
Credit lines	3	1	1
Warranties and other off balance sheet items which can be materialized into <i>outflows</i> and will mature in 7 days	3	1	1

For one of the banks, the Head office (parent bank) uses a 5% ratio on the net exposure but they do not have local historical data statistics and in addition, this raises questions on types of collaterals admitted.

Question 4. Based on your historical data, please provide information on the percentage of the used part of current accounts with credit balance.

Up to 7 days _____ Up to 1 month _____

Answer:

The information provided by banks on the percentage of the used part of current accounts, varies significantly from bank to bank, and therefore in the tables below is shown all data collected.

Table 5. Percentage of the used part of current accounts with credit balance

Banks	Within 7 days			Within 1 month		
	avg.	min	max	avg.	min	max
1.	28%			22%		
2.	4.40%			5%		
3.	-0.03%	-3.20%	2.20%	-0.05%	-6.40%	4.40%
4.	0.5%			2%		
5.	N/A			N/A		

The worst case scenario reported refers to September – October 2008, with a decrease of -8.8% in one month (only October).

Question 5. Based on your historical data, please provide information on the percentage of on sight deposits withdrawals

Up to 7 days _____ Up to 1 month _____

Answer:

The information provided by banks on the percentage of the used part of sight deposits with credit balance, varies significantly from bank to bank, and therefore in the tables below is shown all data collected.

Table 6. Percentage of the used part of on sight deposits withdrawals

Bank	Within 7 days			Within 1 month		
	avg.	min	max	avg.	min	max
1.	16.5%	14%	19%	26.5%	25%	28%
2.	0.50%			0.50%		
3.	-0.06%	-1.90%	0.70%	-1.20%	-3.90%	1.40%
4.	0.50%			2%		
5.	N/A			N/A		

Question 6. How often are rated the securities your bank holds in its balance sheets?

Answer:

In regards to the frequency of the rating of securities that banks hold in their balance sheets the situation is reported as follows:

- One of the banks up to now has only invested on one-year Government securities.
- One other bank daily monitors the rating available in Bloomberg and related changes for foreign securities but have no knowledge on the policy of the rating agency regarding the assessment frequency.
- Another bank performs monthly rating (reprising) of securities.
- In the forth bank securities booked as “held for trading” (which include all foreign currencies bonds, and part of Lek T-bills/Bonds), are re-evaluated on monthly bases in the banks books, showing the monthly changes in measurements due to market price fluctuations.
- One of the responding banks does not apply any rating and monitoring on securities.

Question 7. The liquidity of securities is related to the active / non active market (which is reflected in the bid-ask spread) where they are traded and worthiness of the issuer. What is your opinion on including the A⁺ rating (according to S&P and the equivalent from other rating agencies)?

Answer:

Banks have different opinions regarding this proposal, as is shown below:

One of the banks is not affected by the above restriction since, based on the internal Investment Guidelines, it invests on bonds in foreign currencies issued by sovereigns or multinational banks, with a triple A rating.

Three of the responding banks agree on the use of this type of rating elaborating that such rated securities are always liquid. However, they suggest 2 different options:

1. one bank proposes the limit rating to be A⁻ and above;
2. - Foreign securities – one bank’s opinion is that the latest rating available should be used. This info is easily monitored from all parts. An alternative could be to treat as liquid the whole securities portfolio (traded in international markets) at their market price instead of their book value.

- Albanian Government Securities. The same bank points out that even these securities can be considered as liquid for local currency purposes, considered the appropriate haircuts, as per regulation. (Based on the Regulation “On credit operation collaterals”)

As reported by one of the banks, according to the empirical studies done on the subject of liquidity, it has been concluded that there is no correlation between the credit rating and the liquidity of an instrument. Instead, there are other factors which affect the liquidity such as 1) trading turnover, 2) issue amounts, 3) number of deals, 4) bid-ask spread, 5) time to maturity, which have strong correlation with liquidity. Moreover, none of the Basel II documents gives any reference to the correlation between liquidity and credit rating of a security. Whereas, in the draft regulation it is noted an association of the credit rating with the liquidity of an instruments.

On this bank’s opinion, it will not be suitable to consider credit rating of the securities as a measure of their liquidity, so the credit rating shall not be included.

Question 8. What is the level of the ratio of loans in foreign currency / deposits in foreign currency in your bank?

Answer:

The average level of the ratio of loans in foreign currency / deposits in foreign currency of the 5 responding banks is about 103%. The minimum level is 56% and the maximum 204%, and 2 out of the 5 banks have a ratio above 100%.

Question 9. Referring to the above mentioned ratio, how suitable would you consider a maximal limit of 130% (instead of 100% proposed in the draft), with the condition of the existence of a credit line contract (with the mother bank) of non less than one year to cover the amount over 100%.

Agree Disagree Why disagree

Answer:

3 out of the 5 responding banks do not agree with such proposal.

Table 7. Alternative proposal on the ratio loans in foreign currency / deposits in foreign currency

	Agree	Disagree
No. of banks	2	3
Market share	16.6%	26.4%

Reasons for disagreements from banks vary as follows:

- It is too late to turn the situation back;
- Bank of Albania is not permitting the shift of existing loans in Euro to local currency;
- banks have credit line limits of one year maturity (subject to be renewed) according to their liquidity needs;
- If for every loan exceeding the limit of 100 % there is a credit line supporting it, there is no need for such limit (130%);
- 10% of deposits is kept as reserve and some money is kept as cash for liquidity reasons so 100% matching is impossible through same currency so the bank should turn from ALL to FX which means taking foreign exchange risk;
- allowing large exposures in FX loans could increase the credit risk of loan customers who have the biggest part of their incomes in ALL, therefore a ratio above 100 % increases the systemic risk of Albanian banking system.

Question 10. Regarding the indicators in point 4 of article 15 of the proposed draft regulation:

a. How difficult is for your bank to generate daily data?

Impossible difficult Very difficult Difficult Not

Answer:

Point 4 of article 15 of the proposed draft regulation defines the liquidity ratio as liquid assets divided by liquid liabilities and banks should monitor it within the following limits:

- a) minimum 0.8 – within a working day;
- b) minimum 0.9 – in 3 consequent working days;
- c) minimum 1 – up to one month (calculated as average of the working days)

3 out of 5 responding banks consider the generation and monitoring of such limits very difficult.

Table 8. How difficult is for your bank to generate daily data?

	Very difficult	Impossible	Not difficult
No. of banks	3	1	1
Market share	17.8%	12.9%	12.3%

b. What makes it impossible:

Answer:

Table 9. What makes it difficult / impossible:

	No. of banks	Market share
Existing systems of information management	2	17.2%
Impossibility of daily monitoring	2	16.6%
Impossibility of reporting the next working day	2	22.7%

The existing management information systems can be a holdback especially in regards to the bonds related data that are impossible to be correctly generated from the system.

Daily monitoring is very difficult, especially related to the fact that current tools, which generate the whole financial position of the bank, offer very poor performance and they can be used only with monthly frequency.

In addition, daily frequency of reporting would be logical for internal purposes but not for reporting to BoA.

c. Can these difficulties be overcome within a time frame?

Answer:

The four responding banks that reckon that it is either difficult or impossible to generate and monitor daily data, comment that these difficulties be totally or partially overcome within a time frame. One of the banks has an action plan on liquidity system implementation for the third quarter 2010, in relation to their Group Liquidity policy adoption.

d. Do you consider these indicators as suitable / logical?

Answer:

Overall, 3 out of the responding banks consider these indicators as suitable / logical. One of the banks has not responded and the other believes that they are only partially suitable.

e. Please suggest other alternatives

Answer:

Banks experiences and suggestions:

1. For liquidity monitoring purposes, one of the respondents banks uses a universal logic relying on a liquidity GAP analysis. All assets and liabilities are classified into time buckets according to a specific/agreed logic (cash in/cash out) and once the GAP is obtained, ratios are calculated on it. Limits are set up with relation to such ratios as well and also scenarios utilization could only rely on the same logic.
2. The bank includes contractual interest cash flows and excludes NP receivables.
3. This analysis is performed monthly and provides evidence for all terms, from 1 week to more than 15 years, split in time buckets. Therefore, even though the reporting is monthly, it reflects the forward-looking performance of the bank in all periods.
4. In the very short term (1, 2, 4 weeks) figures are pretty defined. Meanwhile, estimations/assumptions in compliance with agreed criteria are to be done despite of the method used. This is the aim of considering the statistics on historical data requested on this questionnaire. (For internal liquidity system we plan to do more detailed behavioral analysis distinguishing different counterparties).
5. For a base scenario, the bank proposes to keep 82% of Sight deposits as hard core, distributing the 18% in the time buckets 1w, 2w, 1m, 3 m, 6 m and 12m.

Ratios/limits would be calculated on these GAPs, ex. 1w GAP ≥ 0.9 , 1m GAP ≥ 1 .

For stress test purposes (maybe is better referring to *scenario analysis* because it is difficult to set up stress test systems), certain assumptions should be defined for all banks in order for the results to be comparable. For ex. higher %-ages of retail funding decay, NP receivables increase, difficulties in wholesale funding markets.

6. It could be better to have longer term monitoring period such as 3 months - 1 year because it is very important to see the prospective liquidity situation not only the current one. It can happen that the bank's liquidity situation seems good in 1 month but the bank might have liquidity problem in the next 6 months period. In order to foresee the situation and take the precautions the proposal is to extend the period.
7. On the indicators (point 4, article 15 of the draft proposal), the liquidity ratio calculated as liquid assets divided by liquid liabilities to be reported only weekly;
8. Regarding the Liquid Assets Ratios - On the ratio of liquid assets in foreign currency to total assets in foreign currency at a minimal level of 30% - proposals are to:
 - clarify whether the indicator refers to all foreign currencies taken together, or to each currency separately;
 - set the limit for each currency if meant otherwise in the draft regulation;
 - decrease the minimal limit to 20%;

3. Implications of the findings for regulatory design

Main issues of the new regulatory proposal and banks' suggestions

ISSUE	REGULATORY PROPOSAL	BANKS' EXPERIENCES AND SUGGESTIONS	CONSIDERATIONS FOR FINAL REGULATION DRAFTING
Systems for liquidity risk management			
Organizational framework for liquidity risk management (Article 5 of the Draft Regulation "On Liquidity Risk Management" proposed by Bank of Albania)	Banks should have in place effective organizational structure for liquidity risk management with a clear set of procedures and policies on liquidity risk management, defined competences, power and responsibility of the bank's bodies. Banks' boards should mainly: <ul style="list-style-type: none"> - Approve the Strategy and policies for liquidity risk management, including contingency plans - Review the appropriateness of the Strategy and policies <i>annually</i>; - Approve internal limits for liquidity management, - Review stress tests reports 	Banks do have already structures and strategies for the management of liquidity risk, therefore the requirements of the new proposed regulation are well accepted.	
Stress-testing (Article 8 of the Draft	Banks should perform periodical stress tests and / or scenarios analysis, to identify situations that influence its liquidity position	Most of banks already perform stress testing for their internal control on liquidity. The issue raised by banks is that there should	BoA may consider the option of defining 1 or 2 base scenarios for stress testing with certain assumptions defined for all banks in order for the

ISSUE	REGULATORY PROPOSAL	BANKS' EXPERIENCES AND SUGGESTIONS	CONSIDERATIONS FOR FINAL REGULATION DRAFTING
<p>Regulation proposed by BoA)</p>	<p>The frequency of stress tests is chosen by the bank but should <i>not be less than twice in a year</i>. Bank of Albania can require more frequent stress tests.</p> <p>The results of stress tests are reviewed by the banks' Board and used to improve the strategy, identify main issues, and develop effective contingency plans.</p> <p>Scenarios could be developed as bank specific, based on factors within the banks, and scenarios arising from market or macro economical conditions (exogenous factors).</p> <p>The proposed regulation gives several possible scenarios that banks can use; however, it is up to banks to use the scenarios that better fit them.</p> <p>Banks should define the methodology of performing stress tests including the periodicity, the scenarios used, the periodical revision of assumptions used, the form and reporting of the results, and the actions to be undertaken based on the stress tests results.</p>	<p>be a clear definition in the regulation about the required number and formats of the basic scenarios to be followed for the stress tests.</p> <p>For a base scenario, the bank proposes to keep 82% of <u>Sight deposits</u> as hard core, <u>distributing the 18%</u> in the time buckets 1w, 2w, 1m, 3 m, 6 m and 12m.</p> <p>Ratios/limits would be calculated on these GAPs, ex. 1w GAP ≥ 0.9, 1m GAP ≥ 1.</p>	<p>results to be comparable.</p>
	<p>Indicators for measuring monitoring and managing liquidity risk</p>		
<p>Liquidity</p>	<p>The liquidity ratio is calculated as liquid</p>	<p>3 out of 5 responding banks consider the</p>	<p>It is still to be discussed</p>

ISSUE	REGULATORY PROPOSAL	BANKS' EXPERIENCES AND SUGGESTIONS	CONSIDERATIONS FOR FINAL REGULATION DRAFTING
<p>Indicators</p> <p>(Article 15, point 4 of the Draft Regulation proposed by BoA)</p>	<p>assets divided by liquid liabilities and banks should monitor it within the following limits:</p> <p>a) minimum 0.8 – within a working day;</p> <p>b) minimum 0.9 – in 3 consequent working days;</p> <p>c) minimum 1 – up to one month (calculated as average of the working days)</p> <p>In case of failure to meet the established limits, the banks should report to the Bank of Albania not later than the following working day.</p>	<p>generation and monitoring of such limits very difficult.</p> <p>The existing management information systems can be a holdback especially in regards to the bonds related data that are impossible to be correctly generated from the system.</p> <p>Daily monitoring is very difficult, especially related to the fact that current tools, which generate the whole financial position of the bank, offer very poor performance and they can be used only with monthly frequency.</p> <p>In addition, daily frequency of reporting would be logical for internal purposes but not for reporting to BoA.</p> <p>The four responding banks that reckon that it is either difficult or impossible to generate and monitor daily data, comment that these difficulties be totally or partially overcome within a time frame.</p>	<p>whether the daily limits should only be indicative, and whether the reporting period in case of failure to meet the limits should be extended.</p> <p>One of the possible alternatives is for the liquidity ratio calculated as liquid assets divided by liquid liabilities to be reported only weekly.</p>
<p>Liquid Assets Ratios</p> <p>(Article 15, point 6 of the Draft</p>	<p>The bank should monitor and respect in every moment the following limits:</p> <p>a. ratio of liquid assets to total assets at a minimal level of 20%;</p> <p>b. ratio of liquid assets in foreign currency to total assets in foreign currency at a minimal</p>	<p>The average level of the ratio of loans in foreign currency / deposits in foreign currency of the 5 responding banks is about 103%. The minimum level is 56% and the maximum 204%, and 2 out of the 5 banks</p>	<p>Bank of Albania may reconsider the ratios with the aim to accommodate all banks and their specifics, holding to the best practices of liquidity risk management. In particular,</p>

ISSUE	REGULATORY PROPOSAL	BANKS' EXPERIENCES AND SUGGESTIONS	CONSIDERATIONS FOR FINAL REGULATION DRAFTING
<p>Regulation proposed by BoA)</p>	<p>level of 30%;</p> <p>c. ratio of loans in foreign currency to deposits in foreign currency at a maximum level of 100%.</p>	<p>have a ratio above 100%.</p> <p>Bank of Albania has proposed another alternative: a maximal limit of 130%, with the condition of the existence of a credit line contract (with the parent bank) of non less than one year to cover the amount over 100%.</p> <p>3 out of the 5 responding banks do not agree with such proposal.</p> <p>Reasons for disagreements from banks vary as follows:</p> <ul style="list-style-type: none"> - It is too late to turn the situation back; - Bank of Albania is not permitting the shift of existing loans in Euro to local currency; - banks have credit line limits of one year maturity (subject to be renewed) according to their liquidity needs; - If for every loan exceeding the limit of 100 % there is a credit line supporting it, there is no need for such limit (130%); - 10% of deposits is kept as reserve and some money is kept as cash for liquidity reasons so 100% matching is impossible through same currency so the bank should turn from ALL to 	<p>BoA may consider decreasing the ratio of liquid assets in foreign currency to total assets in foreign currency and increasing the ratio of loans in foreign currency to deposits in foreign currency.</p> <p>Regarding the ratio of liquid assets in foreign currency to total assets in foreign currency, the regulation should clarify whether the indicator refers to all foreign currencies taken together or to each currency separately.</p>

ISSUE	REGULATORY PROPOSAL	BANKS' EXPERIENCES AND SUGGESTIONS	CONSIDERATIONS FOR FINAL REGULATION DRAFTING
		<p>FX which means taking foreign exchange risk;</p> <ul style="list-style-type: none"> - allowing large exposures in FX loans could increase the credit risk of loan customers who have the biggest part of their incomes in ALL, therefore a ratio above 100 % increases the systemic risk of Albanian banking system. 	
<p>Liquid Assets Definition (Article 15, point 7 of the Draft Regulation proposed by BoA)</p>	<p>m. Cash; n. Accounts with Bank of Albania including the legal reserve up to 50% of its usable amount; o. Treasury Bills (up to 80%) and obligations issued by BoA or Government of Republic of Albania; p. other re-financing bills accepted by the central bank; q. Current accounts with banks, credit institutions and other financial institutions; r. Deposits with banks, credit institutions and other financial institutions with remaining maturity up to 7 days; s. Loans to banks, credit institutions and other financial institutions with remaining maturity up to 7 days (excluding subaccount 157);</p>	<p>3 out of 5 responding banks do not consider as reasonable including in liquid assets the following off balance sheet items:</p> <ul style="list-style-type: none"> - Warrantees - Credit letters <p>but do consider reasonable including in liquid assets the upcoming Forward transactions and other off balance sheet items which can be materialized into <i>inflows</i> and will mature in 7 days</p> <p>Banks have different opinions regarding this proposal, as is shown below:</p> <p>One of the banks is not affected by the above restriction since, based on the internal</p>	

ISSUE	REGULATORY PROPOSAL	BANKS' EXPERIENCES AND SUGGESTIONS	CONSIDERATIONS FOR FINAL REGULATION DRAFTING
	<p>t. securities issued by central government and central banks with rating assigned by internationally recognized rating agency equivalent to rating of S&P not less than BBB (investment grade);</p> <p>u. securities issued by financial institution with rating assigned by internationally recognized rating agency equivalent to rating of S&P not less than A⁺, assessed not earlier than 6 months from the reporting period;</p> <p>v. securities that have not been rated but issued by international development banks listed in the regulation of Bank of Albania "On risk management arising from the large exposures of Banks";</p> <p>w. Securities with remaining maturity up to one month;</p> <p>x. Securities purchased in a repurchase agreement with a remaining maturity up to one month;</p> <p>y. irrevocable credit facilities approved to the bank.</p> <p>Liquid assets are included on a net basis excluding accrued interest and subtracting provisions.</p>	<p>Investment Guidelines, it invests on bonds in foreign currencies issued by sovereigns or multinational banks, with a triple A rating.</p> <p>Three of the responding banks agree on the use of this type of rating elaborating that such rated securities are always liquid. However, they suggest 2 different options:</p> <p>3. one bank proposes the limit rating to be A⁻ and above;</p> <p>4. - Foreign securities – one bank's opinion is that the latest rating available should be used. This info is easily monitored from all parts. An alternative could be to treat as liquid the whole securities portfolio (traded in international markets) at their market price instead of their book value.</p> <p>- Albanian Government Securities. The same bank points out that even these securities can be considered as liquid for local currency purposes, considered the appropriate haircuts, as per regulation. (Based on the Regulation "On credit operation collaterals")</p> <p>On one bank's opinion, it will not be suitable to consider credit rating of the securities as a</p>	

ISSUE	REGULATORY PROPOSAL	BANKS' EXPERIENCES AND SUGGESTIONS	CONSIDERATIONS FOR FINAL REGULATION DRAFTING
		measure of their liquidity, so the credit rating shall not be included.	
Short Term Liabilities Definition (Article 15, point 8 of the Draft Regulation proposed by BoA)	a. Liabilities to the Central Bank (including current accounts, on sight deposits and deposits with remaining maturity up to 7 days, loans from the central bank refinanced by an international financial institution and not financed by an international financial institution with remaining maturity up to 7 days, and other accounts with the central bank with remaining maturity up to 7 days); b. Treasury bills and other bonds suitable for refinancing with the Central Bank; c. Current accounts with banks, credit institutions and other financial institutions; d. Deposits with banks, credit institutions and other financial institutions with remaining maturity up to 7 days; e. Loans from banks, credit institutions and other financial institutions with remaining maturity up to 7 days; f. Other accounts with banks, credit institutions and other financial institutions with remaining maturity up to 7 days; g. Current accounts and on sight deposits of the Albanian Government and public	The average percentage of the used part of approved overdrafts and credit cards within 7 days varies from 4.5% to 37 %, and within a month from 13% to 44%. The average percentage of approved and unused overdrafts that banks consider as short-term liabilities is about 12% for the 5 reporting banks. Two of the banks report a zero value for this indicator, while the maximum value is 30%. Three out of 5 banks do not include in short term liabilities any percentage of credit cards. On the average of credit lines approved (unused) and irrevocable used, only one of the banks has given quantitative information, that is a range of 15 – 19% for credit lines used up to 7 days, and 12-14% for those used up to one month. In other banks data are either not available, or actually not taken in consideration, since they are usually in small amounts. The information provided by banks on the	Bank of Albania might reconsider the percentage of current accounts and on sight deposits to be considered as short term liabilities (items (i) and (j)) of article 8 of the draft regulation.

ISSUE	REGULATORY PROPOSAL	BANKS' EXPERIENCES AND SUGGESTIONS	CONSIDERATIONS FOR FINAL REGULATION DRAFTING
	<p>administration and time deposits with remaining maturity up to 7 days;</p> <p>h. Securities sold in a reverse repurchase agreement with a remaining maturity up to one month;</p> <p>i. 30% of current accounts with credit balance;</p> <p>j. 30% of on sight deposits;</p> <p>k. 10% of time deposits;</p> <p>l. 5% of guarantees and other commitments (off balance sheet);</p> <p>m. 20% of irrevocable unused approved credit lines.</p>	<p>percentage of the used part of current accounts and on sight deposits, varies significantly from bank to bank.</p> <p>3 out of 5 responding banks believe that off balance sheets such as the following, should be included in short term liabilities.</p> <ul style="list-style-type: none"> - Upcoming Forward transactions - Open credit uncovered letters of credit - Credit lines - Warranties and other off balance sheet items which can be materialized into outflows and will mature in 7 days 	
<p>Other Indicators</p> <p>(Article 15, point 9 of the Draft Regulation proposed by BoA)</p>	<p>a. Cumulative GAP up to one month / liquid assets;</p> <p>b. Cumulative GAP up to three months / liquid assets;</p> <p>c. Loans / Deposits (calculated in total and separately in Lek and foreign currency)</p> <p>d. Loans / Deposits and financing lines</p> <p>e. Liquid Assets / Total Deposits</p> <p>f. Cash / Short Term Liabilities</p> <p>g. Liquidity Ratio by maturity bands;</p> <p>h. Ratio of maturity transformation of short</p>	<p>Banks require a clearer definition of the composition and maturities of the assets composing the buckets used to calculate GAPs.</p>	<p>The new regulation should provide clearer definitions of the assets that will compose the buckets, and an indicative table to cover for different types of maturity buckets.</p>

ISSUE	REGULATORY PROPOSAL	BANKS' EXPERIENCES AND SUGGESTIONS	CONSIDERATIONS FOR FINAL REGULATION DRAFTING
	term sources in long term placements; i. Indicator of deposits concentration (by type of depositor, currency, sector, ect.) and their volatility; j. Weighted average interest rate on assets and liabilities; k. Average marginal cost of liquidity l. Limits of placements in other banks; m. Forecasting future needs for liquidity (disposable liquid assets – necessary liquid).		

Annex 5. Cost and Benefit Analysis of the Impact on the banking system of the new Regulation on Liquidity Risk Management

1. Summary

1.1. The responding banks have validated the PWG's cost-benefit qualitative analysis on the impact of the implementation of the new regulation on liquidity risk management, thus more benefits in the long-run term and higher costs in the short-run term.

1.2. The implementation of the new regulation is likely to generate new costs that can be classified as:

- costs to banks of new administrative and reporting activities;
- costs to banks of holding increased liquid assets;
- costs due to supervisory requirements for changes in funding; and
- costs to the Supervisory authority..

1.3. On the other hand, at a high level, benefits include:

- A reduction in the probability of bank failure and in the associated costs of such events to shareholders, depositors, etc..
- A reduction in the costs of systemic instability, which have large negative impacts on the economy.
- An enhanced Supervision: The proposed regulation will enable supervisors to analyse, and make it more likely that liquidity risks will be identified early in the supervisory process when regulatory intervention may be cheaper and more effective.

2. Detailed presentation

2.1. Characteristics of the surveyed sample

Conclusion:

There were 8 banks that responded to the qualitative part of the questionnaire and 7 of them also to the quantitative part, representing all three groups (G1, G2 and G3) of small, medium and large banks, with an aggregated market share (taking as reference indicator their total assets) of around 45%.

Total members of AAB (no.):	16 banks
Market Share (100%):	100%
Total respondent banks (no.):	

Qualitative Part	8 banks
Quantitative Part	7 banks
Respondent ratio:	
Qualitative Part	50%
Quantitative Part	44%
Market share of the respondent banks:	
Qualitative Part	45.1%
Quantitative Part	44.6%
(reference indicator: total assets)	
Size of the respondent banks:	small, medium, large

2.2. Costs and benefits to banks

2.2.1. Costs

Compliance costs

All responding banks have agreed that as a result of the movement from the current liquidity reporting requirements to the proposed new ones, banks might need to change their procedures, as well as to hire additional staff to ensure compliance with the new requirements. However, it is argued by one of the banks that these costs increase will be minimal due to restriction on costs, since it will be very difficult for the bank to hire additional staff. One other bank states that the management will attempt the compliance with the new regulation with the existing personnel and resources. In fact it is possible that part of these costs would in fact have been incurred even in the absence of the new liquidity reporting proposals, for example, for internal liquidity risk management purposes.

Other compliance costs that may arise, such as administrative costs derived from demands for more and better information from investors and other counterparties on the liquidity risk profile are foreseen to increase from 6 banks out of the 8 responding banks. The new liquidity risk management requirements involve a higher volume of reporting, monitoring and complying activities.

The final spending will also vary substantially according to the size of the firm. The cost to large firms is based on the implementation of a similar infrastructure to that required for capital calculations. If firms are able to use systems that are already available to initiate reporting then implementation costs could be substantially lower

Costs of adopting more conservative asset holdings and liability positions

6 banks confirm and 2 reject that the immediate impact of banks to hold more liquid assets than previously would be a diminution in their revenues.

Implementing the proposed liquidity standards will impose changes on banks' holdings of liquid assets, and their liability structure will be subject to greater regulatory oversight. The cost to each firm will also depend on its risk appetite and type of business, thus varying substantially across the whole set of firms.

Against the above estimates must be set countervailing benefits to firms, which may be large. Firms' balance sheets would be less risky, so expected losses would be lower. If firms choose to reduce the size of their balance sheet then the cost implications may be reduced.

Costs due to changes in funding

The enhanced liquidity regime is likely to lead to a review of the appropriateness or otherwise of funding sources.

The quantitative standards and individual guidance will encourage firms to quantify appropriately the risk characteristics of their funding structures. Some firms may be subject to costs related to a change in their funding methods. However, the incremental costs will depend on individual supervisory decisions and the need for these will depend in turn on how firms themselves decide to change their funding.

6 out of the 8 responding banks believe that the reduction in risk might reduce firms' funding costs. On the other side, banks might be subject to increasing funding costs if they were to increase their liquid assets.

2.2.2. Benefits

Expected losses

All responding banks agree that if banks' balance sheets would be less risky, the expected losses in moments of liquidity crisis and turmoil would be lower.

Reduced probability of banks failing

7 out of 8 responding banks agree that the new liquidity regime is expected to reduce the probability of banks to fail and thus the expected costs of such events. Apart from the obvious costs of failure to bank owners and employees, bank failure costs may also represent costs to taxpayers through resolution of the failed bank. Further costs of bank failure may arise to borrowers from the distressed bank and its creditors, including depositors.

In conclusion, all responding banks agree on the total impact on banks being higher costs during the implementation process, and higher long run benefits.

2.3. Costs and benefits to the Supervisory Authority

2.3.1. Costs

7 out of the 8 responding banks believe that the Supervision Authority will face higher costs related to the drafting, enactment and implementation the modified regulations.

Additional training will be required for new staff to understand the remit of their new liquidity risk-monitoring role. Costs can arise from training materials and associated resources, including time devoted to training activities.

The supervision applied to banks subject to the new liquidity regime will be more intensive and complicated for supervisors. The intensity of the supervision applied to firms subject to the new liquidity regime will vary depending on the firm's potential impact on financial stability

2.3.2. Benefits

All the responding banks agree that with the new proposed regulation the Supervisory Authority reaches better its statutory goals. It accomplishes its statutory obligations of ensuring the financial stability. The new regime could reduce the frequency of systemic financial crises, which historically have large negative impacts on the whole economy

The same banks also agree that the enhancements of Liquidity Risk Management of banks will reduce the probability of banks to fail which would lead to an augmented consumer protection.

The new liquidity regime is also undertaken with the aim to reduce the frequency of systemic financial crises, and thus the expected cost of such crises. It is not possible to quantify this benefit of the new liquidity regime, but since systemic crises are very costly, we believe it will be large.

A tighter liquidity regulation is also expected to give the authorities more time to resolve distress at a bank, should this arise.

The total impact on the supervisory Authority of the new regulatory framework, as agreed by all the responding banks, will be higher costs related to the process of implementation, but much higher benefits in terms of financial stability at a macroeconomic level.

2.4. Costs and benefits to consumers

2.4.1. Costs

5 of the responding banks confirm that the additional one off costs faced by banks in the implementation of the new regulatory framework could be reflected on the prices (cost transfer from the banks), although not with significant effect. One of the rejecting banks argues that it is not in the bank's policy to reflect such costs on the prices of their products, while the 2 other rejecting banks state that there will be visible impact.

All responding banks confirm that the customers will not be affected in terms of quality of services offered to them.

2.4.2. Benefits

All responding banks agree that the new regulatory framework aims at a safer banking system, which would reduce the risk and eventually increase protection for depositors and investors.

The total impact on consumers, confirmed by the 8 responding banks, is expected to be slightly higher costs but more protection for depositors and investors.

Annex 6. Main Findings on banks' experience in Liquidity Risk Management

1. Summary findings

1.1. Respondent banks represent a large share of the banking market, therefore the aggregated responses are a good evidence of the practices and experience of banks in managing liquidity risk.

1.2. Almost all respondent banks have in act a policy for liquidity risk management, approved by the bank's management and revised continuously, which cover for normal course of business and crisis situations. In most of the banks, the policy includes daily monitoring and monthly reporting for liquidity.

1.3. 7 out of 12 respondent banks (G1, G2 and G3¹ groups) use stress tests for liquidity, using different scenarios for type of deposits and currencies.

1.4. 6 out of 12 respondent banks, (G1 and G3 banks) representing have set warning signals for possible liquidity crises.

1.5. All respondent banks use internal liquidity indicators, and have set internal limits for most of these indicators. The largest number of indicators used is reported by G2 banks.

1.6. 6 out of 11 banks, (G1, G2 and G3) use risk factors to build their indicators on liquidity.

2. Detailed presentation of the survey findings

2.1. Characteristics of the surveyed sample

Total members of AAB (no.):	16 banks
Market Share (100%):	100%
Total respondent banks (no.):	12 banks
Respondent ratio:	75.0%
Market share of the respondent banks: (reference indicator: total assets)	67.6%
Size of the respondent banks:	small, medium, large

Most of the commercial banks operating in Albania answered to the questionnaire on banks experiences in managing liquidity risk.

¹ G1 banks are small banks with market share less than 2%; G2 banks have a market share higher than 2% and lower than 7%; and G3 banks have a market share higher than 7%.

The composition of the group of respondent by banks of different size is important, since they deal with different situations of liquidity as well as use different policies and strategies to manage liquidity risk.

2.2. Qualitative aspects of liquidity risk management

Conclusions:

- Almost all (11 out of 12) respondent banks have in act a policy for liquidity risk management, approved by the bank's management and revised continuously.
- In 9 out of 12 banks, this policy covers both for normal course of business and crisis situations.
- In most of the banks, the policy includes daily monitoring and monthly reporting for liquidity.
- 7 out of 12 respondent banks use stress tests for liquidity and they are G1 (1) G2 (2) banks and G3 (4) banks. The scenarios used are different by type of deposits and currencies.
- 6 out of 12 respondent banks, (G1 and G3 banks) representing 32.1% of market share, have set warning signals for possible liquidity crises.

11 out of 12 respondent banks representing 54.7% of the market have in act a policy or strategy for liquidity risk management, which is approved by the bank's management or supervisory council.

Table 1. Use of Liquidity Policy / Strategy

	Yes	No
No. of banks	11	1
% of market share	54.7	12.9

Except for one case, all other banks that have a strategy / policy for liquidity risk management revise it continuously.

Table 2. Continuous revision of Liquidity Policy / Strategy

	Yes	No
Nr. of banks	10	1
% of market share	48.1	6.6

4 banks, G1, G2 and G3 sizes, and representing 23.6 of the market, have responded to revise their policies at least once a year. Other 2 banks, respectively G2 and G3, apply the revision once in two years, while 4 other banks from groups G1, G2 and G3 have different frequencies of revisions. Their decision for revision is taken when deemed necessary, depending on market conditions changes, or Board of Directors and Group banks instructions and decisions.

Table 3. Frequency of revision of Liquidity Policy / Strategy

	6 months	1 year	2 years	Other
Nr. of banks	1	4	2	4

% of market share	0.5	23.6	16.6	15.9
Size	G1	G1, G2, G3	G2, G3	G1, G2, G3

In all banks that have a strategy / policy, there is a set of guidelines that addresses liquidity management in a normal course of business. For 9 of them from all 3 groups, with a total market share of 50.4%, it also covers crisis situations.

Table 4. Coverage of Liquidity Policy / Strategy

	Normal course of business	Crisis situations
No. of banks	11	9
% of market share	54.7	50.4
Size	G1, G2, G3	G1, G2, G3

All the banks (including the one having no specified liquidity strategy), do monitor liquidity regularly with the aim to better manage it.

9 banks monitor liquidity daily: one of them does also weekly monitoring, and 6 of them also monthly monitoring. Meanwhile most of the banks provide monthly reports on liquidity. There is one responding bank (G2) which does also quarterly monitoring and reporting of liquidity management.

Table 5. Frequency of Monitoring and Reporting Liquidity

Periodicity	Monitoring			Reporting		
	No. of banks	%	Size	No. of banks	%	Size
Daily	9	55.5	G1, G2, G3	3	15.2	G1, G2, G3
Weekly	2	16.4	G2, G3	1	9.8	G3
Monthly	8	52.6	mainly G3	11	54.7	G1, G2, G3

Only 7 out of the 12 respondent banks use stress tests on liquidity as part of their liquidity management strategy. These are one G1 bank, two G2 banks and four G3 banks representing 55.5% of the market share. For the G1 bank the stress tests are run at a group level only.

Table 6. Use of stress tests on liquidity

	Yes	No
No. of banks	7	5
% of market share	55.5	12.1
Size	G1, G2, G3	G1, G2

The types of scenarios these banks use are different, and may be market crisis scenarios and bank specific crisis scenario. Scenarios include asset liabilities mismatches and are usually divided by currencies.

The table below presents the types of scenarios that are mostly used in G2 and G3 banks.

Table 7. Types of scenarios used for stress tests on liquidity

Type of Scenario	Frequency of running
------------------	----------------------

	stress tests
Static scenarios using the percentages of decrease of deposits in crisis situations	Monthly
Interest Rate Shock of 250 bp* for local currency	Monitored weekly reported monthly
Interest Rate Shock of 50 bp for G20 countries' currencies	Monitored weekly reported monthly
Decrease / Increase of 100 bp; 200 bp, 400 bp (EUR)	Quarterly
Increase of 50 bp in treasury bills interest rate change	Quarterly
0 change in short run, 100 bp medium-term, 200 bp long-term	Quarterly
Change in different foreign currencies exchange rate of 30%	Quarterly
Change of FX rate (historical) of EUR/USD, and EUR/GBP BY 20%	Quarterly
Withdrawals of deposits	Monthly
Delays of loan repayments	Monthly
Liquidation of trading portfolio	Monthly
Market Crisis Scenario	Monthly

*bp – basis point (1/100 of 1%)

6 of the banks that use stress tests for liquidity have different scenarios by types of deposits, currency and type of depositors.

Half of the respondent banks, with a market share of 32.2%, continuously monitor *bid-ask spreads* for financial instruments. They follow mainly their Group bank policies in doing so.

Table 8. Monitoring of bid-ask spreads for financial instruments

	Yes	No
No. of banks	6	6
% of market share	32.2	35.4
Size	G1, G2, G3	G1, G2, G3

6 out of 12 respondent banks, G1 and G3 banks, representing 32.1% of the market share have set *warning signals* for possible liquidity crises.

Table 9. Use of warning signals

	Yes	No
No. of banks	6	6
% of market share	32.1	35.5
Size	G1, G3	mainly G2

The events listed by these banks as warning signals of possible liquidity crises are the following:

1. Increase in withdrawals request
2. Unforeseen, sudden and heavy deposits withdrawals

3. Counterparty's defaults, sudden bankruptcies, and loss of contingency back up facilities.
4. Shrinkage and volatility of Deposits
5. Shortage of Foreign Currency
6. Sudden increase in Nonperforming Loans (short-run)
7. Domestic currency (ALL) devaluation
8. Significant Decrease of Liquid Accounts / Deposits
9. Deterioration of Loans Repayments
10. Volatility of interbank credit lines and rates

2.3. Quantitative aspects of liquidity risk management

Conclusions:

- **All respondent banks use internal liquidity indicators, and have set internal limits for most of these indicators.**
- **The largest number of indicators used is reported by G2 banks**
- **6 out of 12 banks, (G1, G2 and G3) use risk factors to build their indicators on liquidity.**
- **G2 banks have reported a set of such risk factors used.**

All respondent banks use internal liquidity indicators. Not all of them and not for all types of ratios set up limits. However they are regularly monitored and reported. In the following tables the reported indicators used by banks are described broken down by size of banks.

Table 10. Indicators and liquidity ratios used by G1 banks

Description of the liquidity indicator	Definitions of the factors used to calculate the indicator	Internal Limit of the bank	Frequency of monitoring
Ratio of liquid assets against total assets	Liquid assets/total assets	15%; 20%	Monthly
Ratio of liquid assets against short-term liabilities	Liquid Assets/Short-Term Liabilities Fixed Deposits up to 7 days, cash, t-bills / time deposits, borrowing, current& savings accounts	50%	Monthly
Liquidity ratio by maturity time bands	GAP	25%	Monthly
Ratios of maturity transformation of short term sources in long term placements	Spread(Interest Rate Risk) and GAP		
Maturity Mismatches (related to the size of the maturity gaps; cash inflows / cash outflows including off-balance sheet items)	Spread(Interest Rate Risk) and GAP; 3 months cumulative GAP in total; 3 months cumulative GAP for each currency	+/-40% of total assets; +/-55% of total assets	Weekly; Monthly

Table 11. Indicators and liquidity ratios used by G2 banks

Description of the liquidity indicator	Definitions of the factors used to calculate the indicator	Internal Limit of the bank	Frequency of monitoring
Ratio of liquid assets against total assets	Liquid assets/total assets (Liquid Assets are all assets with remaining maturity of 30 days)	15%; For ALL min 10%; for FC min 20%	Weekly monitoring monthly reporting
Ratio of highly liquid assets against total assets		>+20%; >15%	Weekly; Monthly
Ratio of liquid assets against short-term liabilities	Short-term liabilities are liabilities with remaining maturity of 30 days	>+25%; >30%; For ALL min 20%; for FC min 40%	Monthly; (Weekly Monitoring)
Ratio of liquid assets against short-term liabilities	Cash, nostro accounts, securities, etc (1 month) Assets/Liabilities up to 1 month & as Total	80% 100%	Monthly Weekly
Liquidity ratio by maturity time bands	Net funding up to 30days / total liabilities; net funding up to 90days / total liabilities	Min -30% (-50%) for ALL; min -25% (-35%) for FC	Weekly; Monthly

Description of the liquidity indicator	Definitions of the factors used to calculate the indicator	Internal Limit of the bank	Frequency of monitoring
Description of the liquidity indicator	Definitions of the factors used to calculate the indicator	Internal Limit of the bank	Frequency of monitoring
Indicators of deposit concentration (individually and as group of related parties), volatility and sensitivity	Ratio of 10 largest depositors	No limit defined	Daily; Weekly; Monthly
Maturity Mismatches (related to the size of the maturity gaps; cash inflows / cash outflows including off-balance sheet items)	Net funding up to 30days / total liabilities; net funding up to 90days / total liabilities	Min -30% (-50%) for ALL; min -25% (-35%) for FC	Monthly
Short term liquidity GAP	Net funding up to 30days / total liabilities;	Min -30% (-50%) for ALL;	
Ratio of Cumulative Gap 3 months against total assets		>- 25%	Monthly
Total Equity against total assets		NA	Monthly
Risk Assets against total assets		NA	Monthly
Reserves for loan losses against net loans		NA	Monthly
Total deposits against total liabilities		NA	Monthly
Core deposits against total assets		NA	Monthly
Short term borrowing against total liabilities		NA	Monthly
Cummulative Balance of Overnight Time Bucket Assets up to 30 Days/ Borrowed Funds		> 20%	Monthly
Cummulative Balance of ASSETS-BALANCE of the Overnight Time Bucket up to 30 Days/ Borrowed Funds		> - 20%	Monthly
Loans to Assets	Total loans to total assets	<40% Lek; <55% USD, <65% EUR	Monthly
Loans to (Deposits + Current Accounts)	Total amounts	80%	Weekly; Monthly
Forecasting of net liquidity needs to total	Cash nostro, vostro accounts, current accounts,	>30%	Monthly

Description of the liquidity indicator	Definitions of the factors used to calculate the indicator	Internal Limit of the bank	Frequency of monitoring
available liquidity	interbanks securities, loans partially		

Table 12. Indicators and liquidity ratios used by G3 banks

Description of the liquidity indicator	Definitions of the factors used to calculate the indicator	Internal Limit of the bank	Frequency of monitoring
Ratio of liquid assets against total assets	Liquid Assets / Total Amount of Liabilities (without including the Capital) (both on & off balance sheet)	15%	Monthly
Ratio of liquid assets against short-term liabilities	Liquidity Position (Assets – Liabilities less than 30 days) / Total Amount of Liabilities (without including the Capital) (both on & off balance sheet) (Cumulative assets /cumulative liabilities)	100%	Daily
Liquidity ratio by maturity time bands	Cumulative liquidity gap up to 3 months/total assets	-40%	Monthly
Ratios of maturity transformation of short term sources in long term placements			Monthly
Indicators of deposit concentration (individually and as group of related parties), volatility and sensitivity	Top 10 and Top 20 Depositors concentration and trend; - Concentration by main deposits categories; - Concentration of Wholesale Funding; - Concentration of Retail Funding	NA	Daily; Monthly
Maturity Mismatches (related to the size of the maturity gaps; cash inflows / cash outflows including off-balance sheet items)	Distribute items with undefined maturity and Off Balance Sheet items on time buckets for monthly reporting purposes. The ratio used is cumulated GAP for cash flow Out and In for each time bucket up to 1 Year	GAP > 0 for the first year than slightly negative but next to 0 for the other periods.	
Short term liquidity GAP	The ratio of cumulated cash flow In to Cash Flow Out for each time bucket up to 1 Year; Short Term (<30 days)	The ratio ≥ 1	Daily, Weekly

	Liquidity GAP (on & off balance sheet)		
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In order to have a sense of the indicators most used by banks as part of their liquidity management, in the following table are collected the indicators used by more than one bank, and for which banks have reported to set internal limits.

Table 13. Indicators on liquidity most used by banks

Liquidity indicators	No. of banks	% of market share	Size
Ratio of liquid assets against short-term liabilities	11	54.7	G1, G2, G3
Ratio of liquid assets against total assets	8	49.8	G1, G2, G3
Total negative mismatches between assets and liabilities in respect of maturities	6	45.3	G1, G2, G3
Liquidity ratio by maturity time bands	5	30.5	G1, G2, G3
Indicators of deposit concentration (individually and as group of related parties), volatility and sensitivity	5	38	G2, G3
Maturity Mismatches (related to the size of the maturity gaps; cash inflows / cash outflows including off-balance sheet items)	5	20.6	G1, G2, G3
Short term liquidity GAP	5	38	G2, G3
Ratio of liquid assets against total deposits	2	14.7	G2, G3
Ratios of maturity transformation of short term sources in long term placements	2	10.2	G1, G3

When building up indicators on liquidity, 6 out of 12 banks, representative of all three groups of banks by size, with a market share of 40.7% use risk factors for assets and liabilities according to their degree of liquidity. In one of the G2 banks work is in progress for implementing risk factors.

Table 14. Use of risk factors

	Yes	No
No. of banks	6	6
% of market share	40.7	26.9
Size	G1, G2, G3	G1, G2, G3

Some types of risk factors used as reported by G2 banks are shown in the following table:

Table 15. Risk and probability factors used by G2 banks

Loans	
Loans to banks repayable on Demand	100%
Interbank loans to Group Entities & Central Bank Obligatory Reserves	0%
Demand Loans due within 1 month (maturity <2 yr)	75%
Demand Loans due within 1 month (maturity> 2 yr)	100%
Loans and Advances to Customers	0%-30%
Treasury Bills	60%-100%

T-Bills due within 1 Month	100%
T- Bills and Bonds Due more than 1 Months	95%
Deposits	
Due to Customers (Demand + Saving + Term Deposit)	10%-50%
Deposits due within 1 Month	70%
Deposits due within more than 1 Month	25%
Debt Issues & Cheques and Orders Payable	100%
Off Balance Sheet (both Assets & Liabilities side)	20%
Liabilities due within one month	25%
Capital	100%
Cash	100%
Statutory Deposits with BOA	100%
Repos & Loans due within 1 month	100%

Annex 7. Note on International Experience with Liquidity Risk Management

1. Summary

Looking at the liquidity risk management in some countries, and based on the review and survey performed by Working Group on Liquidity set by the Basel Committee on Banking Supervision and by the European Commission, it is evident that liquidity regimes have been developed along national lines to support the preservation of the safety and soundness of each country's financial system. These objectives for liquidity supervision are similar across jurisdictions, although there is much diversity in how they translate into rules and guidelines.

Almost all regimes expect banks to establish and develop effective systems for risk management, and to document liquidity policies in order to set out the internal strategy for managing liquidity risk.

These systems, in most cases, include:

- Normative and organizational framework;
- Internal control for liquidity risk management and internal audit of it;
- Management information system;
- Conduction of liquidity stress tests; and
- Contingency plan for managing liquidity of the banks.

Another approach of supervisors to liquidity risk management has been that of setting quantitative limits in order to constrain the amount of liquidity risk that a bank takes, and ensure that banks are adequately prepared for stressed conditions. These can be solely internal limits or targets, or can be prescribed as part of the regulatory requirements.

Particular attention has been put by supervisors to the identification, recognition and classification of any position, activity or product, which has influence on the level of liquidity and the assessment of the liquidity indicators and ratios.

2. International regulations and best practice in managing liquidity risk

2.1. Basel Committee on Banking Supervision (BCBS) on liquidity risk management principles and best practice

The Basel Committee on Banking Supervision is well known for its work to establish a regulatory capital framework (Basel I and II), and its work on liquidity has focused on developing high-level principles of good practice — an approach that the banking industry has also favored.

A 1992 Basel Committee paper, “A Framework for Measuring and Managing Liquidity,” first assembled the practices followed by major international banks in one framework (BCBS, 1992). This was intended primarily as summary guidance for banks and was largely silent on supervisory standards. In 2000, this paper was significantly updated in “Sound Practices for Managing Liquidity in Banking

Organizations,” which laid much greater emphasis on liquidity management as a vital element of banks’ overall risk management practices. Its key elements were also incorporated through a stand-alone principle in the 2006 revision of the Basel “Core Principles for Effective Banking Supervision

In December 2006, the Basel Committee on Banking Supervision (BCBS) established the Working Group on Liquidity (WGL) to review liquidity supervision practices in member countries.

The WGL also reviewed the 2000 BCBS publication Sound practices for managing liquidity risk in banking organizations, and issued in September 2008 Principles for Sound Liquidity Risk Management and Supervision.

Guidance has been significantly expanded in a number of key areas. In particular, more detailed guidance is provided on:

- the importance of establishing a liquidity risk tolerance;
- the maintenance of an adequate level of liquidity, including through a cushion of liquid assets;
- the necessity of allocating liquidity costs, benefits and risks to all significant business activities;
- the identification and measurement of the full range of liquidity risks, including contingent liquidity risks;
- the design and use of severe stress test scenarios;
- the need for a robust and operational contingency funding plan;
- the management of intraday liquidity risk and collateral; and
- public disclosure in promoting market discipline.

2.2. EU regulatory framework on liquidity risk

European banks are subject to The Capital Requirements Directive (CRD), which has introduced in Annex V, point 10 of Directive 2006/48/EC, an explicit requirement for institutions to have in place:

- policies and procedures for the management of liquidity risk, and
- contingency plans to deal with liquidity crises.

In addition to these guidelines, almost all EU countries have some additional form of regulation or monitoring addressing liquidity risk, although the range of national options varies widely. Most if not all national authorities, however, appear to recognize the Basel Sound Practices for Liquidity.

3. National experiences with liquidity risk management

3.1. Key findings of the WGL’s report on supervising liquidity risk (national liquidity regimes)

Liquidity regimes are *nationally based* according to the principle of “host” country responsibility (although in some cases, the task, though not responsibility, of supervision of branches is delegated to the home supervisor).

The high level objectives for liquidity supervision are similar across jurisdictions, although there is *much diversity in how these objectives translate into rules and*

guidelines. In addition, there is a diversity of approach to liquidity supervision within some countries.

In some jurisdictions, ***different rules are implemented for large and small banks.*** For example, in some countries the regime embodies a more sophisticated approach for certain large banks, and a more prescriptive approach principally designed for smaller banks. In another style of regime, the larger banks are required to hold a large buffer of liquid assets compared to smaller banks, reflecting their systemic importance.

One important differentiating factor across regimes is ***the extent to which supervisors prescribe detailed limits on liquidity risk and insurance that banks should hold.*** This is in contrast to an approach that relies more on reviewing and strengthening banks' internal risk management systems, methods and reports.

In recent years several regimes have placed greater emphasis on banks' internal risk management practices to better capture the risks that arise from financial market innovations.

In general, high-level approaches to supervising liquidity risk are common across regimes:

- firms are expected to have specific policies to address liquidity risk;
- the use of stress tests is commonplace;
- all regimes recognize the importance of contingency funding plans; and
- all regimes require firms to report information regularly to supervisors.

Firms' liquidity policies are expected to set out the internal processes in place to measure, monitor and control liquidity risk. Various regimes require some combination of the following elements to be included in their policies:

- the need for adequate information systems;
- required processes to assess future cash flows and net funding requirements;
- the importance of specific approaches for the management of foreign currency flows;
- stress tests;
- the setting of internal limits;
- the need for independent review of internal policies; and
- the need to communicate the policy through the institution.

Some regimes require banks to set ***internal limits or targets.***

These may include:

- target holdings of liquid assets
- limits on maturity mismatches
- limits on the reliance on a particular funding source.

These quantitative limits can help to constrain the amount of liquidity risk that a bank takes, can help to ensure that banks are adequately prepared for stressed conditions or can serve as early warning indicators of stress or vulnerability.

Several regimes prescribe explicit limits or target ratios as part of the regulatory requirements.

Examples of ratios:

- for target holdings of liquid assets, the ratio may be (liquid assets / short-term liabilities > x %).
- for a maturity mismatch the limit may be (cash inflows / cash outflows including off-balance sheet items > y %).
- a limit on the proportion of liabilities sourced from securitization markets could be (Asset-backed Securities (ABS) in issue / total liabilities < z %).

Standardized limits are relatively inflexible and hence are not so easily adapted to changing financial markets, compared to other tools such as stress tests (e.g. some do not incorporate off-balance sheet risks). In recent years several regimes have lowered their emphasis on standardized limits. Several WGL members have reported plans to update such limits in the light of market developments.

3.2. Main findings of the survey of the liquidity regulatory regimes across European Economic Area (EEA) countries

On 5 March 2007, the European Commission issued a Call for Advice (CfA) (no. 8) asking the Committee of European Banking Supervisors (CEBS) to provide technical advice on liquidity risk management at credit institutions and investment firms. The Call for Advice was split into two parts:

1. an updated survey of the regulatory regimes across the EEA;
2. an in-depth analysis of the variables that may significantly affect liquidity risk management, the interaction of funding liquidity risk and market liquidity risk, the use of internal methodologies by sophisticated firms and by credit rating agencies as well as the impact of payment and settlements systems design and relevant increased interdependencies.

CEBS was also asked to identify any other areas and problems that appear not to be adequately addressed by the current regulatory framework at EU level.

3.2.1. Approach to quantitative requirements

The survey performed showed that of the two thirds of countries that set such requirements, there are various approaches. They range from the ***application of mismatch limits*** (related to the size of the maturity gaps) (11 countries), ***stock ratios*** (related to static indicators such as the size of balance sheet (4 countries), ***combined mismatch/stock*** (5 countries), and ***separate mismatch and stock applied according to type of institution*** (1 country).

The remaining third of countries do not set supervisory limits/apply quantitative requirements per se but nevertheless expect institutions to use their own approaches to

arrive at their assessment of mismatch positions, including allowing for behavioral factors, which are then subject to supervisory review.

Regarding the assets eligible as marketable/liquid assets, a majority of respondents have indicated that *eligibility requirements/provisions apply to the recognition of assets*. Most supervisors list eligible types of assets whilst a minority applies also/instead a set of overriding or minimum liquidity criteria, which assets must satisfy in order to be deemed liquid. All respondents accept cash in hand and freely convertible foreign currency as eligible assets. In addition to that, there is a large variety of assets accepted by one or more of the respondents.

There is a range of *practices in relation to the mismatch/stock approach*, with a third of countries requiring reports to cover 1 month onwards, and another third requiring variously from 1 week onwards, 1 month only, and placing the onus on institutions to use their own approaches.

3.2.2. Approach to Qualitative Requirements

The majority of supervisors require that institutions have a documented liquidity policy in place, including currency management, contingency arrangements and internal limits. The remainder of supervisors, whilst not formally requiring a documented liquidity policy, expects or encourages institutions to have an appropriate written policy in place. No supervisor indicated that supervisory approval of the policy is required, with the exception of one country in the context of accepting the use of an institution's own procedures under recently introduced regulations.

Several countries, however, encourage or require entities to redefine their policy where deemed necessary, and almost all review liquidity policies during the course of examinations and onsite inspections/visits. It is generally accepted that ultimate responsibility for policy approval rests with the Boards of institutions.

3.2.3. Stress testing and scenario analysis

All countries require institutions regardless of their regimes (quantitative / qualitative / mix) to apply stress tests as part of their process of liquidity management. The majority of supervisors do not set obligatory/explicit scenarios for institutions but expect them to apply appropriate scenarios based on their own risk profile. Based on the responses, there is a general expectation that institutions will apply both bank specific and market wide scenarios.

3.3. Comparative table on the international experience on liquidity risk management

3.3.1. Summary of international guidelines (To be completed by mid August 2009)

International Guideline	Basel II	CEBS
Criterion		

3.3.2. Countries Experiences

Country	Belarus	Poland	Romania	Serbia	Slovenia
Criterion					
Regulatory framework	<ul style="list-style-type: none"> - The Law on the National Bank of the Republic of Belarus - Banking Code of the Republic of Belarus (Article 113. Bank Liquidity Standards) - Banks' standards – Instructions on the requirements to secure functioning for banks and non-bank credit and financial institutions 	<ul style="list-style-type: none"> - Resolution of the Commission for Banking Supervision (2007) “On detailed principles of the functioning of risk management and internal control systems, and detailed conditions of banks' assessment of their internal capital and review of the process of assessing and maintaining internal capital” 	<ul style="list-style-type: none"> Law on banking activity NBR Norms no. 1/2001 “On banks' liquidity” amended by NBR Norms no. 7/2003, modified by Norms no. 2/2008 	<ul style="list-style-type: none"> - Law on the National Bank of Serbia - Law on Banks - Decision on liquidity risk management + Guidelines for the implementation of this decision. 	<ul style="list-style-type: none"> Banking Act Bank of Slovenia – Regulation on the Minimum Requirements for Ensuring an Adequate Liquidity Position of Banks and Savings Banks
Requirement for banks to set up a	In order to provide financial security for the bank, and	Under the risk management strategies and	Banks have to establish their strategy for liquidity	1) to define the principles of liquidity risk management;	(1) For the purpose of liquidity risk management, the bank shall shape and carry out a policy of

Country	Belarus	Poland	Romania	Serbia	Slovenia
Criterion					
liquidity risk management system	<p>financial institution, local regulatory legal acts shall be developed and approved by the competent authorities (officials) of the bank, and financial institution. These legal acts should provide efficient management and control over the liquidity risks, credit, country, market, operational risks and determine the order and the corresponding procedures of identifying, monitoring, estimating and limiting risks.</p> <p>Local regulatory legal acts should be developed in accordance with The Instruction on Banks and other regulatory legal acts, regulating the activity of banks</p>	<p>procedures the bank should implement with regard to liquidity risk:</p> <p>a) procedures for liquidity management, taking into account competence and responsibility division,</p> <p>b) liquidity identification, measurement and monitoring methods,</p> <p>c) contingency plans to ensure uninterrupted operations, taking into account the need to maintain liquidity in crisis situations.</p>	<p>risk management that is to be approved by banks' management and revised at least annually or as often as necessary.</p> <p>Banks need to have contingency plan that detail the strategy in crisis conditions. The contingency plans have to provide the management responsibilities and the procedures to be followed when the contingency plans are activated and have to identify the potential liquidity sources for covering the liquidity deficits in crisis conditions.</p> <p>Banks need to have internal structures for monitoring and administering the liquidity risk.</p>	<p>2) organize liquidity risk management;</p> <p>3) establish procedures for the identification, measurement, mitigation and monitoring of liquidity risk;</p> <p>4) establish an information system in support of liquidity risk management;</p> <p>5) ensure prompt and adequate response in the event of increased liquidity risk;</p> <p>6) put in place a system of internal controls for liquidity management.</p>	<p>regular liquidity management to be approved by the bank's management, encompassing the following:</p> <p>1. Planning of anticipated identified and eventual cash outflows and sufficient cash inflows, by taking into account the normal course of business and eventual liquidity crisis situations,</p> <p>2. Regular liquidity monitoring and management,</p> <p>3. Definition of appropriate measures for preventing or eliminating causes of illiquidity and definition of other possibilities for such measures.</p> <p>(2) The bank shall verify regularly the correctness and appropriateness of assumptions used in establishing liquidity management policies.</p> <p>(3) The bank shall adopt a contingency plan and create conditions for implementing this plan in order to prevent or eliminate the causes of liquidity crises.</p>

Country	Belarus	Poland	Romania	Serbia	Slovenia
Criterion					
	and financial institutions.				
Liquidity ratios	<ul style="list-style-type: none"> - minimum 0.2 for momentary liquidity - minimum 0.7 for current liquidity (assets /liabilities with remained maturity less than 30 days) - The minimal allowable value of the short-term liquidity ratio is set at 1. - The minimal allowable value of the minimal liquid-to-total assets ratio of a bank and non-banking financial institution is set at 20 percent. - Total negative mismatches between assets and liabilities in respect of maturities 	<p>Differentiated ratios: For banks with assets higher then 200 million (of local currency):</p> <p>Short term indicators</p> <ul style="list-style-type: none"> - minimum 0 for T1 – Short term liquidity GAP (difference in first and second degree liquidity reserves and value of external unstable funds) - minimum 1 for T2 – Short term liquidity rate (first degree and supplement liquidity reserves / by external unstable funds) <p>Long term indicators:</p> <ul style="list-style-type: none"> -minimum 1 for T1 - illiquid assets / own funds – Own funds (minus capital for market risk) / illiquid assets. - minimum 1 for T2 – illiquid and partly 	<p>Effective liquidity / necessary liquidity = 1 for per each bend and in total.</p> <p>The following time bends are used:</p> <ul style="list-style-type: none"> - up to 1 month inclusive - 1 -3 months inclusive - 3 – 6 months inclusive - 6 -12 months inclusive - More than 12 months <p>High liquidity risk towards a single person is considered the one that represents at least 10% of the balance liabilities, other than loans, and of the off balance sheet financing commitments issued</p>	<ul style="list-style-type: none"> – at least 1.0 if calculated as the average liquidity ratio for all business days in a month; – not less than 0.9 for more than three days in a row; – at least 0.8 if calculated for one business day only. 	<p>A bank shall calculate the liquidity ratio daily for an individual category for the previous working day.</p> <p>(4) The category one liquidity ratio shall be at least 1.</p> <p>(5) The category two liquidity ratio is of an informative nature.</p> <p>(6) If a bank does not achieve the requirement set out in the fourth paragraph of this article, it shall state the reasons for failure to do so in its liquidity ratio report.</p>

Country	Belarus	Poland	Romania	Serbia	Slovenia
Criterion					
	uncompensated by positive gaps in the preceding periods, is taken into account with the risk of simultaneous withdrawal at a rate of 80 percent, when calculating required liquidity.	liquid assets / own funds and external steady funds – own funds (minus capital for market risk) and steady external funds / illiquid and partly liquid assets. For banks with assets lower then 200 million (of local currency): - minimum 0.2 for T1 – first degree and supplementary liquidity assets / total assets - minimum 1 for T2 – illiquid assets / own funds For branches of foreign credit institutions with assets higher than 200 million (local currency) - minimum 0 for T1 – short term Gap of liquidity - minimum 1 for T2 – short term liquidity For branches of foreign credit	by bank. In case the liquidity risk towards a single person is more than 15% of the balance liabilities, other than loans, and of the off balance sheet financing commitments issued by bank, banks will calculate the necessary liquidity by registering at sight balance sheet liabilities to that person at their accounting value.		

Country	Belarus	Poland	Romania	Serbia	Slovenia
Criterion					
		institutions with assets lower than 200 million (local currency) -minimum 0.2 for T1 – first degree and supplementary liquid reserves / total of assets			

Country	Belarus	Romania	Serbia	Slovenia
Criterion				
Definition and classification of assets according to their liquidity	<p>- Disposable funds, commodities and jewels, accounts with National Bank, Funds in central banks of A countries, international financial institutions, securities of the Government and the National Bank of the Republic of Belarus, and governments and central banks of A countries, credit lines and interbank deposits secured by them in the of the Republic of Belarus – 100%</p> <p>- Funds in B countries banks and securities issued by them, securities issued by banks of A countries, credit lines and interbank deposits secured by them – 80%</p>	<p>- assets for which the bank has reserved provisions are reported at their net value (accounting value less provisions);</p> <p>- on balance sheet assets at sight (cash current account with the central bank, deposits at sight with the central bank and with banks) will be registered in the first liquidity bend, at the accounting value diminished by eventual provisions;</p> <p>- other at sight assets such as debit current accounts and respective attached receivables will be registered in the first liquidity bend at an adjusted value, determined by applying to the accounting value diminished</p>	<p>First-degree liquid receivables of a bank</p> <p>mean cash and receivables falling due within a month from the date of the liquidity ratio calculation, including the following:</p> <p>– vault cash, gyro account balances, gold and other precious metals;</p> <p>– balance on accounts with banks that have been awarded at least BBB by the latest Standard&Poor’s or Fitch/IBCA rating or at least Baa3 by the latest Moody’s rating;</p> <p>– deposits with the National Bank of Serbia;</p>	<p>Financial assets are classified by residual maturity in the following two categories of maturity bands:</p> <p>(a) category one: financial liabilities with a residual maturity of up to 30 days, and</p> <p>(b) category two: financial assets with a residual maturity of up to 180 days.</p> <p>Other assets classified (apart from by maturity):</p> <p>- financial assets to an obligor, rated and impaired:</p> <p>- individually, only financial assets to obligors for which no problems are expected in the settlement of obligations and who settle their obligations at maturity or with a delay of up to 30 days,</p> <p>– collectively, only financial assets to obligors</p>

	<ul style="list-style-type: none"> - Funds in C countries central banks and securities issued by them, securities issued by banks of B countries, credit lines and interbank deposits secured by them – 50% - Other assets including matured once – 0% 	<ul style="list-style-type: none"> by provisions an adjustment factor (1-k); - overdue loans and placements to banks classified as standard and sub-standard will be arranged in the first liquidity bend at an adjusted value obtained by applying to the accounting value diminished by provisions an adjustment factor (1-k); - k is determined reporting the balance of overdue loans and placements qualified as “doubtful” and “loss” to the total balance of loans and placements. 	<ul style="list-style-type: none"> – cheques and other monetary receivables under collection; – irrevocable credit facilities approved to the bank; – listed shares and bonds. <p>Other receivables of a bank falling due within a month from the calculation of the liquidity ratio shall be understood as such bank’s second-degree liquid receivables.</p>	<p>which meet the conditions for classification into groups A and B pursuant to point 13 of the Regulation on the Assessment of Losses from Credit Risk of Banks and Savings Banks,</p> <ul style="list-style-type: none"> - only the sum of financial assets that the bank has freely at its disposal, - among the off-balance-sheet items, only forward transactions, contractually obtained credit lines and the un drawn portion of loans are taken into consideration.
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Country	Belarus	Romania	Serbia	Slovenia
Criterion				
Definition and classification of liabilities according to their liquidity	<ul style="list-style-type: none"> - Balances of current accounts of corporations, bank holdings (deposits), loans and other funds of corporations and individuals raised on demand, funds available on correspondent accounts with other banks – 20% - Banks holdings (deposits), loans and 	<ul style="list-style-type: none"> - guarantee liabilities are to be considered in determining the effective liquidity only if they are irrevocable and unconditioned; - at sight liabilities such as banks’ current accounts and deposits, clients’ current accounts and deposits, will be registered on the first liquidity bend at an adjusted value, only 	<ul style="list-style-type: none"> Bank’s liabilities payable on demand and with no agreed maturity shall constitute a part of the bank’s liabilities. They shall be as follows: <ul style="list-style-type: none"> – 40% of demand deposits by banks; – 20% of demand deposits by other depositors; – 10% of savings deposits; – 5% of guarantees 	<p>Financial liabilities are classified by residual maturity in the following two categories of maturity bands:</p> <ul style="list-style-type: none"> (a) category one: financial liabilities with a residual maturity of up to 30 days, and (b) category two: financial liabilities with a residual maturity of up to 180 days <p>Other liabilities</p> <ul style="list-style-type: none"> - sight deposits of households and non-financial companies in category one are given a weighting of 50%; - sight deposits of households and non-financial companies in category two are given a weighting of 45%; - among off-balance-sheet items the following are taken into consideration:

	<p>funds with correspondent banks (on demand) – 60%</p> <p>- Other liabilities, including the matured once – 100%</p>	<p>if the calculated value is positive. The adjusted value is determined by deducting from the current balance of each balance category at the end of the reported month the average balance of those categories for a previous 6 months period. In case the adjusted value is zero or negative, these liabilities will not be considered in determining the liquidity;</p>	<p>and other sureties, and – 20% of undisbursed irrevocable credit facilities.</p> <p>Other liabilities of a bank falling due within a month after the calculation of liquidity ratio shall be understood as such bank's liabilities with agreed maturity.</p>	<p>- forward transactions, open uncovered letters of credit, contractually approved credit lines for banks and the un-drawn portion of approved loans which are not eligible financial assets for collateralization of liabilities of the Eurosystem, as defined in the resolution of the Bank of Slovenia, regulating general rules for monetary policy implementation, all taken into consideration in the amount of 100%;</p> <p>– contractually approved credit lines for non-banks, excluding credit lines approved for covering open letters of credit, are taken into consideration in the amount of 20%;</p> <p>– warranties issued, guarantees and stand-by letters of credit, and limits approved for current accounts and cards are taken into consideration according to the residual maturity in the amount of 5%.</p> <p>Liabilities pursuant to letters of credit are taken into consideration in an individual category in the amount of the uncovered portion according to the remaining period of validity, or according to the residual maturity after the documents are submitted.</p>
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Country	Romania	Serbia
Criterion		
Notification to the Central Bank (Supervisor)	Monthly reporting of the liquidity ratios and of high exposures to liquidity risk.	If the liquidity of a bank reaches a critical level, the bank shall notify the National Bank of Serbia thereof not later than on the following business 4 th day. Such notification shall contain data on the exact shortfall amount of liquid assets, causes of illiquidity and the activities planned for their elimination.

Bibliography

Acts and regulations of Supervisors in countries: Serbia, Belarus, Poland, Romania and Slovenia.

Basel Committee on Banking Supervision (2008) – *Liquidity Risk: Management and Supervisory Challenges*

Basel Committee on Banking Supervision (2008) – *Principles for Sound Liquidity Risk Management and Supervision*

Committee of European Banking Supervision (2007) - CEBS's Technical Advice to the European Commission on Liquidity Risk Management: Survey of the Current Regulatory Frameworks Adopted by the EEA Regulators.

Annex 8. Scoping of Problem

Section 1					
Project information					
PUBLIC-PRIVATE FINANCIAL SECTOR MODERNIZATION MATRIX					
Italian Banking Association CRITERIA	European Central Bank CRITERIA				
	<i>Asymmetric information reduction</i>	<i>Completeness of the market</i>	<i>Increased opportunities to engage in financial transactions</i>	<i>Reduced transaction costs</i>	<i>Increased competition</i>
Business development					
Industry competitiveness		X			
Industry reputation					

Short description of the context: Bank of Albania is seeking to enhance banks' liquidity risk management by reviewing the regulatory framework according to international guidelines and best practice.

The actual regulatory framework provides only principles for the liquidity management, and banks have the liberty to manage the liquidity level based on principles set by the BoA, with no quantitative prudential ratios (thresholds).

BoA is considering the introduction of quantitative minimum/prudential ratios, in order to prevent the occurrence of systemic liquidity difficulties.

Stakeholder proposing the project: Bank of Albania

Other Stakeholders involved (sponsors): AAB and Banking community.

Project objective: to enhance banks' liquidity risk management by reviewing the current regulatory framework according to international guidelines and best practice, including introduction of quantitative prudential ratios, in order to prevent the occurrence of systemic liquidity difficulties.

Description of the project contribution toward financial modernization:

Effective liquidity risk management helps ensure a bank's ability to meet cash flow obligations, which are uncertain as they are affected by external events and other agents' behavior.

A better management of liquidity risk is a key determinant of the soundness and stability of the banking sector, which will decrease the probability of banks' default and will give thus an enhanced consumer protection.

Project Working Group:

Bank of Albania (PO & PM)

Tirana Bank (DPM)

ProCredit Bank (member)

Italian Development Bank (member)

Raiffeisen Bank (member)

Alpha Bank - Albania (member)
 International Commercial Bank (member)
 Intesa Sanpaolo Bank – Albania (member)
 EMPORIKI Bank – Albania (member)
 National Commercial Bank (member)
 First Investment Bank – Albania (member)

Section 2: Scoping the problem

1.1. Problem identification

Background Information

Bank of Albania is seeking to enhance banks' liquidity risk management by reviewing the regulatory framework according to international guidelines and best practice.

The actual regulatory framework provides only principles for the liquidity management, and banks have independence in managing the liquidity level based only on principles set by the BoA, with no quantitative prudential ratios (thresholds).

More specifically, these principles include:

- Diversification of funding sources according to maturity, type of bank instrument and bank's clientele;
- The degree of bank's integration into the money market, short-term bonds issued and traded in the market;
- Formulation of its commercial policy alongside with financial planning in order to avoid any potential deficiency in resources necessary for its developmental plans, and to reduce any structural asset and liability shortcomings resulting from differences between the maturity dates agreed and the actual ones.

Based on this general regulatory framework, the liquidity level differs from bank to bank.

Albeit the banks' current good levels of liquidity, it is expected that Albania will start feeling the consequences of the world's financial crisis through decreased level of remittances. In addition, tight conditions on liquidity in the international markets might influence the activity of the banking system in Albania. On such grounds, and driven by the need to align Albanian regulatory framework to the revised Basel Committee guidelines, BoA is considering the introduction of quantitative minimum/prudential ratios, in order to prevent the occurrence of systemic liquidity difficulties.

1.1.2 Market Analysis

<i>General market:</i>	Banking market
<i>Specific segment:</i>	Risk management
<i>Sub segment:</i>	Liquidity risk management

1.1.3 Legal framework

- Law No. 9662 Nr. 9662, dated 18.12.2006, “On Banks of the Republic of Albania”.

According to the Law no. 9662, dated 18.12.2006, “On Banks on the Republic of Albania”, the bank or the branch of the foreign bank have the obligation to notify the Bank of Albania when the liquidity or solvency of a bank or branch of a foreign bank is threatened, as defined in the by-laws of the Bank of Albania (art 26.1.a).

Regarding the liquidity risk, articles 66.1 and 66.2 of the same law establish that:

1. The bank or branch of a foreign bank shall maintain its liquidity in an amount, structure and ratio, which will allow them to fulfill their liabilities and commitments on time, with reasonable costs and minimum risk.

2. With the purpose of administering the liquidity risk in an effective way, the bank or branch of foreign bank shall draw up and implement policies in connection with:

- a) the planning for the transportation of cash, including unforeseen events;
- b) the continuous monitoring of liquidities;
- c) taking the appropriate measures for the prevention or elimination of reasons for the lack of cash.

Bank of Albania shall place the bank under conservatorship to re-establish the financial situation when the bank threatens its liquidity or solvency by carrying on the activity (art. 96.1.c).

- Regulation no. 04, dated 19.01.2003 and amended with the decision no. 08, dated 12.02.2003 of the Supervisory Council of the Bank of Albania, “On the liquidity of the bank”

It offers banks a guideline on principles used to monitor liquidity, classifying liquid assets and liabilities, calculating certain liquidity ratios, and formulating internal regulation to manage risk liquidity.

The regulation emphasizes that banks shall determine the total minimum amount of liquidity sources or their specific categories on their own, independently.

The bank shall report every month to the Bank of Albania on liquidity. In case the bank has an unfavorable liquidity position, Bank of Albania is entitled to require reports more frequently.

Banks shall formulate the internal regulation that stipulates, according to this regulation, the principles for composing the contingency plan for unusual events threatening bank’s liquidity.

1.1.4 Stakeholders - Institutional framework

- **Bank of Albania.**

Bank of Albania is regulating and supervising banks’ liquidity. Supervision is made based on the banks’ monthly reports and on sight supervision.

- **Commercial banks.**

The Albanian banking system consists of 16 commercial banks.

During 2007 the banking system's liquidity situation continued to be satisfactory. *GAP*² values of liquidity were within controllable limits and short-term assets covered the major part of same maturity liabilities.

Notwithstanding the growth of liquid assets by 2.8 percent during 2007, their share to total assets has had a pronounced downward trend. At end of December 2007, the liquid assets constituted almost 50 percent of the assets of the system, from 58 percent in the previous year or 63 percent at end 2005.

The assessment of adequacy of banking system liquid assets, according to some shock scenarios assuming a massive withdrawal of deposits at 10 percent, 20 percent and 30 percent, evidenced an impact on liquid assets at 17 percent, 35 percent and 52 percent. Therefore, the system's liquid assets level was assessed as generally adequate for generating resources.

At system level, the liquidity indicators estimated according to monthly and quarterly gap present satisfactory and improved values, compared with year-end 2006.

Source: Bank of Albania, Supervisory Report 2007

1.2. Market/regulatory failure analysis (nature and evidence)

The regulatory framework has not been updated to fully cover all elements related to liquidity risk such as identification, measurement, control and monitoring of liquidity risk. As it is now, it cannot be adapted to the increased complexity of liquidity risk and its management.

The turmoil of last year and resulting difficulties that persist today demonstrate the critical importance that effective practices for liquidity risk management and high liquidity buffers play in maintaining institutional and systemic resilience in the face of shocks.

These evolving conditions have called for the Bank of Albania to take steps to enhance liquidity risk management. There is no evidence for this regulatory failure in terms of banking bankruptcies, but the central bank should act in a visionary and prudent manner and prevent the occurrence of systemic liquidity difficulties in the future.

1.3. Policy Goal(s) threatened by the failure

General Objective:

- To ensure the banking system stability.

Specific objective:

- To ensure sound prudential risk management techniques for preventing financial disruptions and protecting depositors.

² Difference between assets and liabilities with same maturity (1or 3 months)

Operational objective:

- To enhance liquidity risk management

1.4. “Do nothing” option

1.4.1 Possible medium-term (max 2 years) self – corrective market actions (e.g. mechanisms through which the “Do Nothing” option would address the market/regulatory failure).

The regulation in place provides only general principles for the liquidity management giving banks independence to set up their own liquidity levels. There might be liquidity limits set up internally, based by banks’ own experience or by their parent companies’ rules and procedures. It is though less probable that all banks decide on a unique limit system, with a uniform application of liquidity risk management rules.

1.4.2. Impact of the “Do Nothing” option to the various stakeholders

Impact on regulated firms/ banks:

Vulnerability to liquidity risk – therefore to negative effects on bank's earnings and capital if banks would be unable to meet their obligations when due because of an inability to liquidate assets ("market liquidity risk") or obtain adequate funding ("funding liquidity risk").

Impact on consumers:

More exposure to the risk of banks’ default to pay their obligations.

1.5. Alternative policy option(s)

1.5.1. Broad description of the regulatory or self-regulatory action(s) needed to remedy the market or regulatory failure and hence achieve the policy goal(s)

1.5.2. Possible operational regulatory or self-regulatory actions to achieve the policy goal

Option 1: updating the regulation in accordance with the revised principles of the Basel Committee

Option 2: inserting quantitative liquidity limits for risk management

Option 3: enhancing risk liquidity through other means such as more reporting

1.5.3. General description of various Options

Option 1

Improvement of the actual regulatory framework in terms of concept definitions of liquid assets and liabilities and its update in alignment with the principles recommended by the Basel Committee.

Option 2

Amendments and reinforcement to the regulatory framework by adding requirements to the banks for a solid internal management of liquidity risk, as well as putting quantitative standards (limits to liquidity ratios).

Option 3

Improvement of the liquidity risk monitoring and assessment processes, by collecting more reports and data and performing more analysis, e.g more frequent and detailed stress tests.

1.5.3. Detailed description of Option 1:

Basel Committee has reviewed its 2000 Sound Practices for Managing Liquidity in Banking Organizations and issued in September 2008 Principles for Sound Liquidity Risk Management and Supervision.

Guidance has been significantly expanded in a number of key areas. In particular, more detailed guidance is provided on:

- the importance of establishing a liquidity risk tolerance;
- the maintenance of an adequate level of liquidity, including through a cushion of liquid assets;
- the necessity of allocating liquidity costs, benefits and risks to all significant business activities;
- the identification and measurement of the full range of liquidity risks, including contingent liquidity risks;
- the design and use of severe stress test scenarios;
- the need for a robust and operational contingency funding plan;
- the management of intraday liquidity risk and collateral; and
- public disclosure in promoting market discipline.

This guidance is arranged around seventeen principles for managing and supervising liquidity risk. These principles are categorized as follows:

- Fundamental principle for the management and supervision of liquidity risk
- Governance of liquidity risk management
- Measurement and management of liquidity risk
- Public disclosure
- The Role of Supervisors

The principles on the latter category imply that the supervisor:

- should regularly perform a comprehensive assessment of a bank's overall liquidity risk management and position.
- should monitor a combination of internal reports, prudential reports and market information;
- should intervene to require effective and timely remedial action by a bank to address deficiencies in its liquidity risk management processes or liquidity position.

1.5.4. Detailed description of Option 2:

Supervisors might find it useful to issue quantitative standards (eg limits or ratios) for liquidity risk management. Possible regulatory steps that could be considered include:

- (1) raising minimum liquid asset requirements in the form of holdings of reliably liquid and collateralizable assets;
- (2) stricter limits on maturity mismatches in bank's asset/ liability structures; and
- (3) tighter rules governing diversification of funding sources.

If these steps are to be taken special care will be needed, especially because it would be difficult to define a single norm that applies well to banks with very different business models.

Moreover, if very costly liquidity requirements are imposed, supervisors will need to take into account the incentives for banks to circumvent them, and the welfare loss from increasing the cost of financial intermediation. In addition, regulators will need to be careful to recognize that excessive stringency of norms can exacerbate crises by creating too strong an incentive to hoard liquidity in times of stress.

1.5.4. Detailed description of Option 3:

Central banks need up-to-date information about banks' liquidity risk exposure and liquidity situation on an ongoing basis.

Liquidity requirements based on historic balance sheet positions or cash flows are of little use in this respect. Therefore, banks should make available to central banks data based on forward-looking measures of liquidity risk exposure and counterbalancing capacity, i.e. liquidity stress tests results (including the necessary background information).

More severe stress testing of funding liquidity should be adopted, taking into account the possible closure of multiple wholesale markets (both secured and unsecured) and widespread calls on liquidity commitments, taking into account commitments to off-balance sheet entities. These stress test results and the underlying assumptions should be publicly available.

Cross-border banks should take greater account of multi-currency funding liquidity shocks, taking into consideration the need to manage liquidity mismatches in each operating currency and the potential for stress in the foreign-currency swaps markets.

Summary Problem Scoping			
Enhancing Banks' Liquidity Risk Management			
Market failure			
Asymmetric information	Market power	Positive externalities	Negative externalities
(Existing) Regulatory failure			
Regulation wrongly prescribed for the market	Regulations succeeded in addressing the failure; a different market failure (e.g. side effect)	Regulation made it worse	Regulation so far has failed to work; maybe in due course
X			

Annex 9. SPI Albania Methodology

Steps	Purpose
Scoping of problem	
1. Problem identification	To understand if a market/regulatory failure creates the case for regulatory intervention.
2. Definition of policy objectives	To identify the effects of the market /regulatory failure to the regulatory objectives.
3. Development of “do nothing option”	To identify and state the status quo.
4. Alternative policy options	To identify and state alternative policies (among them the “market solution”).
Analysis of impact	
5. Costs to users	To identify and state the costs borne by consumers
6. Benefits to users	To identify and state the benefits yielded by consumers
7. Costs to regulated firms and regulator	To identify and state the costs borne by regulator and regulated firms
8. Benefits to regulated firms and regulator	To identify and state the benefits yielded by regulator and regulated firms
9. Data Questionnaire	To collect market structure data to perform a quantitative cost and benefit analysis
Consultations	
10. Policy Document	To learn market participant opinions on various policy options
Conclusion	
11. Final Recommendations	Final report to decision-makers, based on Cost Benefit Analysis and market feedback

Annex 10: Summary of PWG Assessment of SPI Secretariat Performance