



# Research proposal

# Liquidity risk management

# in banks

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## *Problem statement*

Financial crisis in 2008-2009 years disclosed that liquidity management is not efficient in Russian banks. It's hard for bank management find the most profitable and liquid structure of assets. In this case it's important to find ways of increasing the efficiency of liquidity management in banks in order to improve the performance of commercial banks.



## *Purpose statement*

The purpose of this explanatory study is to prove the suggestion that structure of banks assets which is determined by liquidity risk management influences bank profitability that is the main indicator of performance in banks. That's why it's vital for banks to find way that can help to increase efficiency of liquidity risk management.



## *Type of research*

- applied research
- quantitative research
- explanatory research



## *Objectives*

1. To determine the effect of liquidity management on the performance of commercial banks;
2. To find out the relationship between the structure of assets in banks and bank profitability;
3. To find out ways of improving the structure of assets in order to avoid lack and excess of liquid assets in banks and increase bank profitability.



## *Research questions*

1. What is nature of the relationship between bank liquidity management and bank profitability?
2. How the structure of assets (level of cash, loans and investments in securities) influences bank profitability?
3. How to improve the structure of assets in order to avoid lack and excess of liquid assets and increase bank profitability?



## *Hypothesis*

1. There is a significant relationship between bank liquidity management and bank profitability.
2. The versatile structure of assets increases bank profitability.
3. Making decisions about the structure of bank assets it's important to take into account that liquidity can be distinguished in different ways according to the size of assets, its quality, level of riskiness and time required for selling this assets.



*A sample design* – stratified random sampling and simple random sampling

*Data collection method* – documentary secondary data





## *Methodology*

*Liquidity analysis coefficients* that would be used in this study:

The liquidity ratio = liquid assets / total assets

Cash ratio = cash / total assets

Short-term funding ratio = liabilities maturing within one year / total liabilities

Capital adequacy ratio = capital / risk weighted assets

Loan / deposit ratio = loans / deposits

Loan / liabilities ratio = loans / liabilities

“Banks liquidity risk analysis in the new European Union member countries: evidence from Bulgaria and Romania”  
written by Roman and Sargu in 2014



# *Methodology*

*Method of analysis* is the regression analysis.

The function for this study is given as:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Where: Y = Profitability representing the dependent variable;

$b_0, b_1, b_2, b_3$  are regression parameters;

$X_1, X_2, X_3$  are independent variables;

$X_1$  – bank cash assets;

$X_2$  – bank loans assets;

$X_3$  – bank securities assets.

“The Impact of Liquidity Management on the Profitability of Banks in Nigeria” written by Sunny Obilor Ibe in 2013



## *Literature review*

“Liquidity risk in banking” written by Bonfim and Kim in 2012

Definitions of liquidity, risk of liquidity , liquidity management;



## *Literature review*

“Some Quantitative Aspects of Stability Management Strategy in a Bank” written by Sksonova and Solojova in 2012

Ways of increasing the effectiveness of liquidity risk management:

Bank assets must be distinguished on three types of transformation : quantitative, qualitative and time.

It's important to keep in mind that management of liquidity in short-term differ from long-term liquidity management



## *Literature review*

“Bank Liquidity Risks: Analysis and Estimates” written by Meilė Jasienė, Jonas Martinavičius, Filomena Jasevičienė, Gražina Krivkienė in 2012

Offer a model of managing both managing short-term (up to one month) and long-term (one-year) liquidity.

Liquidity analysis methods: methods of deposit structure and cash flow reporting.