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Thoughts About Liquidity in Republic of Armenia

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Abstract

This article is devoted to the research of existing mechanisms of liquidity management in practice of commercial banks. In addition, it presents description and grouping of theoretical approaches to the liquidity management in commercial banks. I also formulated main requirements to the mechanism of liquidity management process. Moreover, this paper show descriptive statistics on liquidity through triangle of regions, demonstrates the results of testing of analysis.

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[V1] Draft: comments and suggestions are welcome (sergey.avetisyan@cba.am)
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1. Introduction

Liquidity management plays a significant role in maintaining the stability and efficiency of commercial banks and of the banking system as a whole. Commercial banks do not possess any mechanism that regulates the procedure of analysis, forecasting and liquidity regulation. Although the situation seems to be stable, but still under such conditions the issue of having liquidity management mechanism is crucial for all Armenian banks. Therefore, in this research paper we have tried to create an effective mechanism of managing the liquidity of commercial banks. **The recent growth of theoretical work on regional financial sectors has its origins in attempts to incorporate the effects of national monetary policy in regional econometric models.** It is important to emphasize, however, that where changes in national monetary policy have differential regional impacts these can be entirely independent of a region's financial sector. This independence occurs where, from a monetarist perspective, perfect inter-regional arbitrage maintains regional interests at the national rate. As Bolton, argues, *'where a regional financial market cannot sustain differentials in the interest rates, then the market need not be modelled-the national model will produce any interest rate that one needs'* (Hutchinson and McKillop (1990)).

The many available research papers on liquidity and its measuring are mainly focused on developed markets. There are no major research ventures on stock market liquidity and its measuring in the regional level (NUTS3). This paper contributes to this field of research. However, the important issue for empirical analysis in this paper is the choice of appropriate measures of liquidity for the Armenian market. Market liquidity is very important factor for development and integration of Armenia.

Many of the more sophisticated measures of liquidity (bid-ask spread, Amivest's measure, Amihud's measure, etc.) could not be used for estimation of liquidity of the Armenian financial market, because of the lack of data and specific features of these markets.

2. Previous literature

Liquidity represents the capacity to fulfill all payment obligations as and when they fall due – to their full extent and in the currency required.

Since it is done in cash, liquidity relates to flows of cash only. Not being able to perform leads to a condition of illiquidity.

This is somewhat surprising given the fact that the issue has been around for a very long

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time. Back in the nineteenth century, (Knies, page 249) stressed the necessity for a cash buffer to bridge negative gaps between payment inflows and outflows in cases where their timing cannot be completely regulated. In the last century the issue was also taken up and intensely discussed, as for example initiated by Stützel (pages 622–629).

The further discussions primarily centred on basic considerations such as the relationship between liquidity and level of solvency Stützel or the distinction between the level of liquidity reserves and its structure Witte, for example. Around the mid-1990s a new wave started, became intensified after the turn of the millennium and is still continuing.

It is clearly distinct from former discussions. Its focus is on specific issues of liquidity management, but only touches policy issues related to liquidity. A selection of publications covering wider aspects, in addition to the numerous papers on very specific issues, may illustrate the point made: namely Zeranski(2006); Bartetzky (2008).

Why then can we not relate to clearly defined terms after the subject has been dealt with for well over 100 years? The long intervals certainly have not helped. More importantly, however, banks, as one of their basic functions, are collecting points of money for the various groups within society. Thus, for most of the time, getting funds has been of little concern in itself, and this especially so if compared with employing these funds as assets in a secure and profitable manner. Furthermore, liquidity has many dimensions. The term is used to express a specific condition for a product, an institution, a market segment or even an economy, just to mention some important applications.

As a starting point we take the basic and most narrow definition. Liquidity thus is neither an amount nor a ratio. It rather expresses the degree to which a bank is capable of fulfilling its respective obligations. The opposite would be 'illiquidity', i.e. the lack of the respective capability to fulfil them. In this sense, liquidity represents a qualitative element of the financial strength of a bank (Duttweiler, 2008; page 30). The understanding of how liquidity is affected under different circumstances has improved significantly within the last decade. This is not so much because many of the aspects have been known for much longer, but it is only relatively recently that methods have been developed that allow a more precise quantification. By following a selected and illustrative list of known facts, a commonly used segregation into risk types can be made:

Volume and tenor of assets depend largely on business policy.

• The more the long-term assets are financed with short-term liabilities, the bigger the liquidity gap will be.

• The more stable deposits do come from the retail sector, but they are structurally short term in nature. Usually, their volume is not sufficient to finance all assets on the balance sheet.

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• Banks do write options to their customer base. They can differ in name, like committed lines of credit; backup lines for issuers in the commercial paper (CP) market; drawdown facilities in the mortgage finance sector; or early repayment facilities. But they are similar in character: the option may or may not be executed, or partly only; and the timing of the event is very much open to an agreed timeframe.

• If one allows for liquidity gaps to stay, the initial funding matures before the respective asset falls due. Thus, the bank will have to go into the market at a later date to finance the old asset for the remaining time till maturity.

• How easy the later financing can be executed in the market and the price one has to pay at that date in the future are not known in advance. Some assets are generally marketable, i.e. they can be turned into cash through selling or entering into a repo transaction for example. As conditions of instruments and markets can change, their value as liquidity is subject to alterations.

• The willingness of the market to provide funding will depend on the financial solidity of the borrowing institution, as assessed by the market at that future date.

• The financial status of a bank itself, as well as its perception by the market, are made up of various interrelated business data such as quantity and quality of risk taken on the book, capital and capital ratio, earning power and expected future trend, to mention just a few.

• There is no guarantee that one can forecast today what one's own financial status will be a few years down the road. Furthermore, one does not know how this status will be perceived by the market at that time.

When it comes to the characteristic of liquidity sources, the following distinctions are generally made: availability, maturity structure, cost structure and liquidity risk. Structurally they are usually grouped into the following four blocks:

1. Call liquidity risk: This relates to both assets and liabilities. Drawings under an option facility may be executed. Deposits can be withdrawn heavily at the earliest date possible instead of being prolonged.

2. Term liquidity risk: Payments deviate from the contractual conditions. Repayments may be delayed for example.

3. Funding liquidity risk: If an asset has not been financed congruently, the follow-up financing may have to be done under adverse conditions, i.e. at a higher spread. In extreme cases, funds may even be withdrawn heavily as explained under call risk.

3. Different liquidity measures

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Why combine liquid deposits with illiquid loans and credit lines? There have been many attempts to understand this traditional structure of banks. What is liquidity in an economics? Liquidity is not a one-dimensional variable, but may be looked at from different points of view, such as time, tightness, depth, or resiliency. At first part we investigates liquidity in an intuitive manner to delineate the fields of research. **Liquidity itself is not observable and therefore, has to be proxied by different liquidity measures.**

Liquidity itself is not observable and therefore, has to be proxied by different liquidity measures. **Different liquidity measures lead to convicting results when evaluating the liquidity of a financial market.** Bank liquidity is classically defined as *ability of fulfilling obligations for depositors and lenders timely and without loss.*

The theory of bank liquidity management has appeared and developed almost simultaneously with the organization and development of the commercial banks.

Initially, the issue about the bank liquidity had two theoretical approaches

1.The first approach was based on the fact that the structure of the bank's assets by terms must exactly match the structure of its liabilities. This has nearly excluded the necessity for a bank to conduct a policy for managing its liquidity. On this theoretical basis has been worked out "golden banking rule": the amount and timing of the bank's financial requirements should correspond to the amounts and maturity of its liabilities.

2. The second approach was based on a real mismatch of assets and liabilities of the balance. This approach enabled to obtain higher profits. It was further developed in two areas: assets management and bank's liabilities management. Currently the assets and liabilities management is based on 3 methodological statements (Matz, 1999):

[1]. bank can maintain liquidity, if the assets are placed in short-term loans and are timely repaid; [2]. bank may be liquid if its assets can be transferred or sold to other lenders or investors; [3]. bank liquidity can be planned, if the basis of the schedule of payments and the repayment of loans will comprise the borrower's future income. The theory of assets and liabilities management, in turn, is based on two statements (Matz, p. 30-50): [1]. the bank must solve the problem of liquidity by attracting additional funds, buying them on the capital market; [2]. the bank can ensure its liquidity due to extensive borrowings, including borrowings from the Central Bank. These are only the theories and approaches, which can be used by the bank as guidance for its activity by the will of the bank management and depending on the prevailing market situation.

4. Notes

Commercial banks produce credit and they provide liquidity. Credit involves channeling

resources from entities with excess funds (savers) to entities with a scarcity of funds (investors). Many institutions produce credit. Banks collect savings from depositors and lend the funds to firms and households; finance companies collect funds in the commercial paper market and lend (or lease) the funds to various investors; insurance companies collect premiums and purchase stocks, bonds, commercial paper, and other securities (Berger et al., 2014). Also one important note about distance; Özyildirim and Önder's paper argue that physical distance from the bank headquarters is important for the credit provision decisions of local banks. Besides analysis of evolution of indicators comparison of regions (Figure 1), paper suggest that regional disparities in financial development can be an open question (see comparison statistics Figure 2).

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Number of registered firms, Wages, Unemployment

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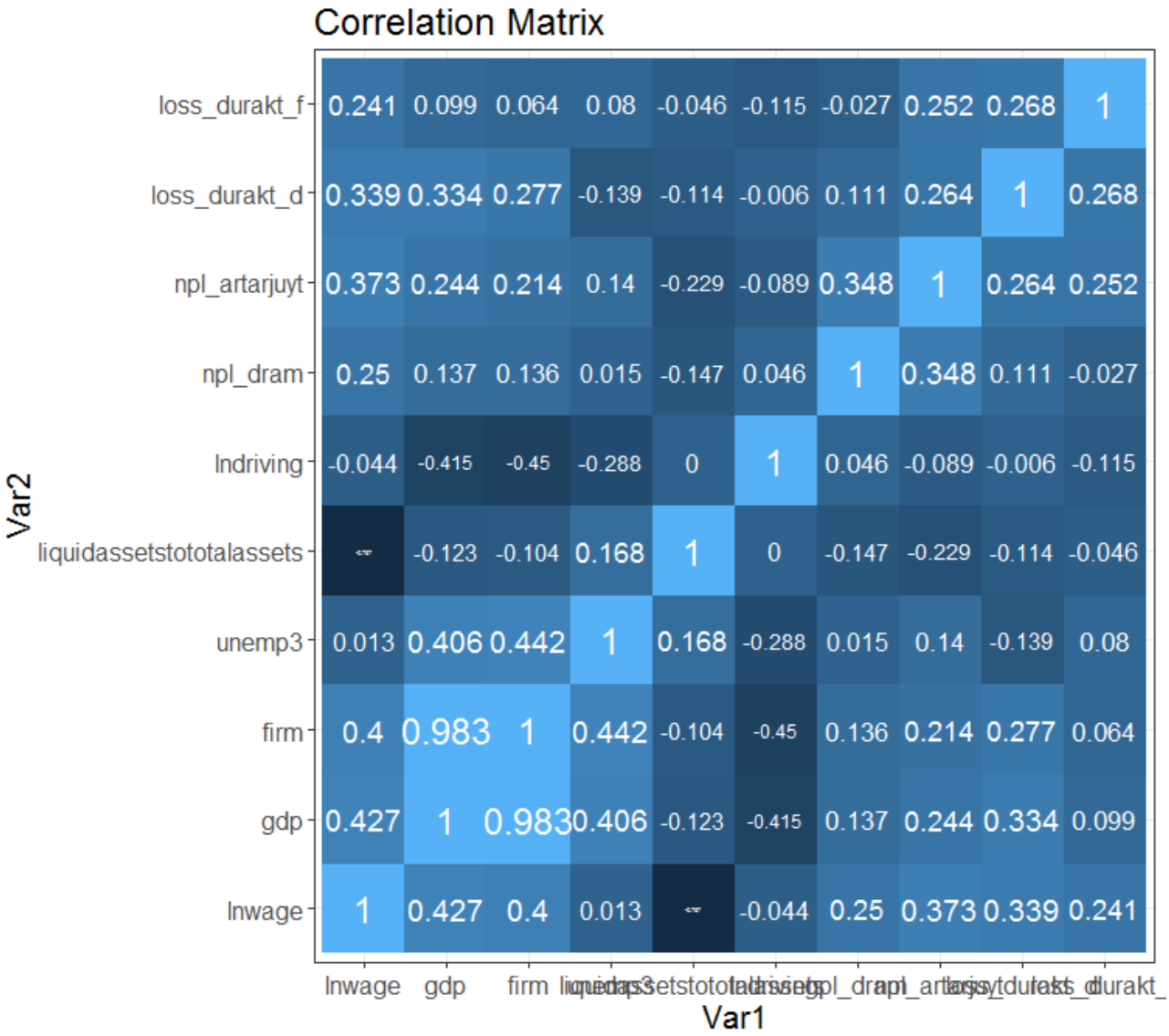

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