FACTORS AFFECTING FINANCIAL MANAGEMENT PARSIAN BANK LIQUIDITY ABSORPTION TECHNIQUES USING AHP

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Abstract

Today, how to manage liquidity and financial management review and assess the factors affecting the absorption of liquidity issues in large companies is crucial. In this study examines the liquidity management and internal and external factors affecting the management of liquidity and the literature was conducted. Finally, AHP technique to examine the hypotheses examined. Then identify and prioritize the most important sub was declared effective liquidity management in PARSIAN bank. The main indicators of the financial management of liquidity absorption include the appropriate structure, resources management, management information systems, training partners, funding instruments, imposing the policies of central banks, money market securities, debt capital markets, credit facilities, capital investment and partnerships, loans and credit, unexpected withdrawal of capital stockholders, current deposits, savings deposits and investment deposits. According to TOPSIS technique concluded the best option absorb liquidity, diversification fund. Net increase of bank accounts is the second priority. Increasing current account with the Central Bank of the third way is working properly absorb liquidity. Finally, deposits have the lowest priority.

Keywords: *cash management, the policies, techniques, AHP, PARSIAN bank*

Introduction

Today, banking is one of the most important sectors of the economy are numbered. Banks, on the one hand, the organization of receipts and payments, will facilitate trade and commerce and the expansion of their markets; on the other hand, by equipping small and large savings and direct them towards manufacturing firms, provides grounds for economic growth and prosperity sets. Banks to achieve this goal, several challenges face the liquidity risk of its biggest challenges. Any attempt to improve the banking system will lead to the savings, investment and improve resource allocation. Apart from the main function of the financial system at the macro level, the mobilization and allocation of financial resources to economic activities, including liquidity absorption as well. Bank liquidity management involves forecasting cash needs and provide them with the least cost possible. The main reason is that most of the banks' liquidity risk from short-term deposits funded, while bank loans to invest in assets which has a relatively low degree of liquidity. Therefore, one of the main tasks of banks and long-term investments is a balance between short-term financial obligations. Maintain sufficient levels of liquidity, banks face the risk of bankruptcy and the inability to meet obligations, and kept large amounts of cash leads to inefficient allocation of resources, reduction of profit rate on deposits, and thus lose the market. Review of assets means that financial assets must be less time (a day or less) be available, for this purpose, Islamic banks must value assets in cash or with low maintain profitability. Thus, Islamic banks also want to respond to liquidity needs, the volume of assets Low yields to minimize, and that while the increasing competition of banks on the one hand, and deposit withdrawals due to different rates of profit in different economic sectors on the other hand, trying to search Factors affecting financial management absorb liquidity in banks, especially PARSIAN Bank (subject) is essential.

Liquidity is based on the law of a country's currency in payment of debts, taxes and meeting the obligations of contracts will be accepted. (RAIE, 1381, p. 13) liquidity, availability of cash or cash

equivalents is. So we can say that liquidity risk is the risk that the bank is ready to provide facilities or timely payment of debts Bank (Banks, 2005).

Proper management of liquidity also means having the right amount (not least - not so much) money in time at a reasonable cost and according to the policies and programs set by the bank.

Financial system: The system includes a network of financial markets, institutions, commercial and industrial companies, households and governments that participate in the system and adjust its operating system. (FARAJI, 1382, p. 24)

Organizational structure: organizational structure, determining the formal reporting relationships, represent the hierarchy of administrative and management control areas, determine the classification of the entire organization, and involves the design of systems that can be integrated in the activities of agencies .

History Research

- THIRD TISSOT ET AL (2014), on economic issues, including railway transportation projects showed that using a statistical model space (model space) can be used for accurate estimate of construction projects.
- SONG, L,(2014), the relationship between the difference in financing and corporate performance (return on equity) by the smoothing in large fluctuations in the profits of companies that are tested. They focus on smoothing the study related to changes in capital and debt structures that affect the relationship, turned. These structures include interest coverage ratio and return on equity.
- BOOT et AL. (2009), the factors influencing capital structure of developing countries surveyed. They provided evidence that capital structure decisions of the countries affected by the same variables developed countries. Also, companies are more profitable, lower debt ratio.
- HAMIDI, CHU AND GUPTA (2008), in an article, income distribution and taxation in developing countries and countries in transition are examined. The results indicate that in developing countries, the distribution of income before taxes, is equal to the industrialized countries. Unlike industrial countries, developing countries in general, are not able to use the tax and transfer policies, reduce income inequality.
- VAHID BAGHERI KHEIRABADI in a study to determine the optimal amount of liquidity ideal as scheduled commercial banks (the Bank welfare workers), the following assumptions were made:

  - model to determine the optimal amount of liquidity of commercial banks is a complex programming model.

  - model to determine the optimal amount of cash commercial banks a hybrid model of multi-objective decision-making and decision-making are manifold.
- Research Project doctor Hassan ALI GHANBARI MAMAN and the doctor ABBAS ARABMAZAR as liquidity management in the agricultural bank, the plan for the overall management of bank resources is a combination of the two methods have been proposed liability management and asset management.carefully foreseeable future will not, therefore, be stressed that banks liquidity adjustment method used and the possible use of these methods against the need to be more secure liquidity.

Conceptual model:

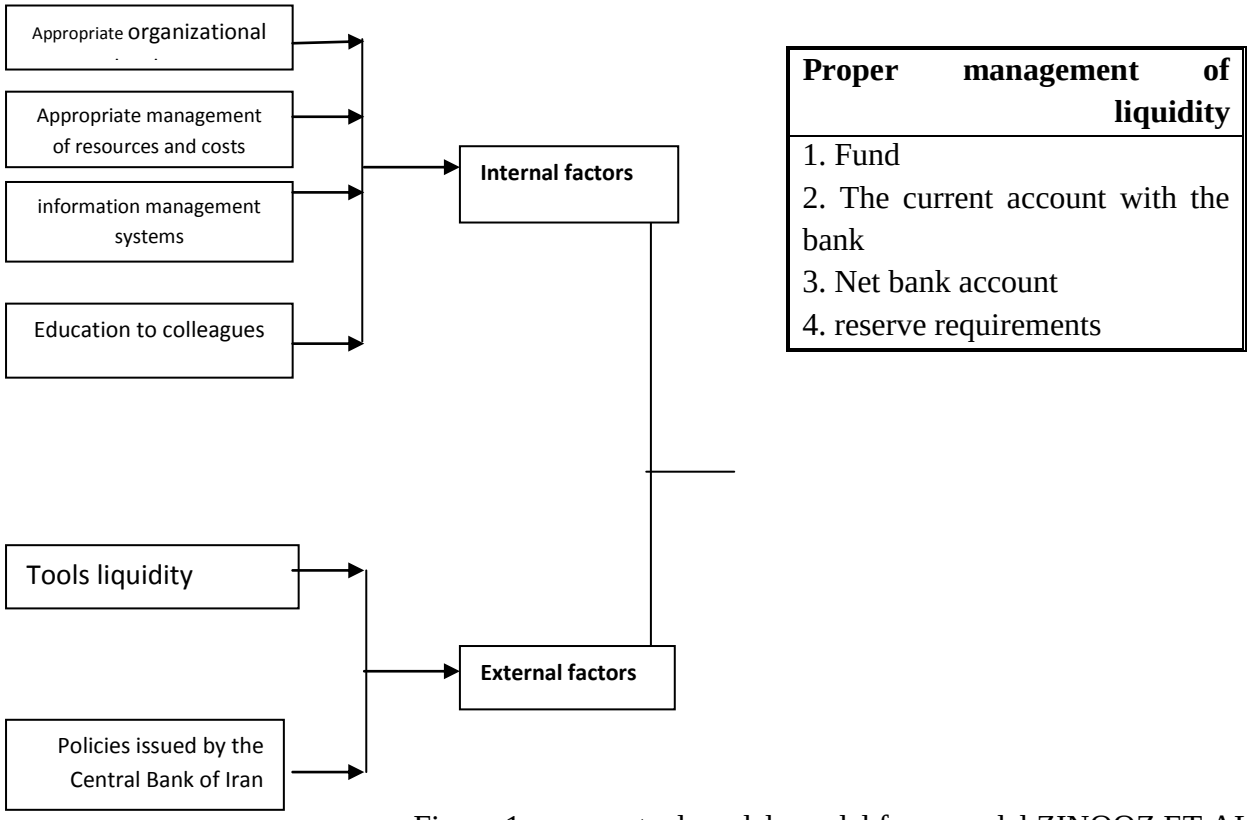


Figure 1 - conceptual model ,model from model ZINOOZ,ET.AL, (2005)

Methodology

Research based on different benchmarks and baselines can be categorized. This provides the basis and criteria to be classified on the basis of research. But the kinds of research that are due to the nature of multidimensional and complex, with multiple floors and that it is fair and transparent general problem can be most useful classification scheme investigation, a case in which category minimum and maximum differences.

Hypotheses:

1- internal factors than external factors in the proper management of liquidity in the headquarters of the PARSIAN Bank has a greater effect.

2- Among external factors means of providing liquidity to the policies of the Central Bank absorbed liquidity in financial management at the headquarters of the PARSIAN Bank, is more effective.

3- Among the factors within the organization, management information systems to provide liquidity, relative to other factors in the management of liquidity, the Central Bureau of PARSIAN Bank has more effect.

Data Analysis:

In this study, using the software SPSS, weighted average data center management experts and expert managers PARSIAN Bank calculates round and importance coefficients to be determined. And then the method of analytic hierarchy process AHP using software superdecisionto express the result of external factors and internal paired comparisons effectively manage PARSIAN Bank will be used to absorb liquidity in the central office. This model is only used to determine the weights of criteria and indicators used to determine the priority of the way things used TOPSIS.

Compare and prioritize key criteria on target

Paired with the main criteria based on objective, factor of importance of each of the main criteria is calculated. For this purpose the Bank Corp was 40 expert at the Central Administration and by using the geometric mean and the normalization values, in particular vector is calculated. According to the views of more than ACZEL, J. AND SAATY when used expert opinions of experts is the best solution using the geometric mean. Therefore, using the geometric mean and the normalization values, in particular vector is calculated. Numbers coefficient indicates the importance of each of the main criteria. Calculations are presented in the following table and also in particular vector W1 is shown.

Table 1. Criteria for determining the priority of study

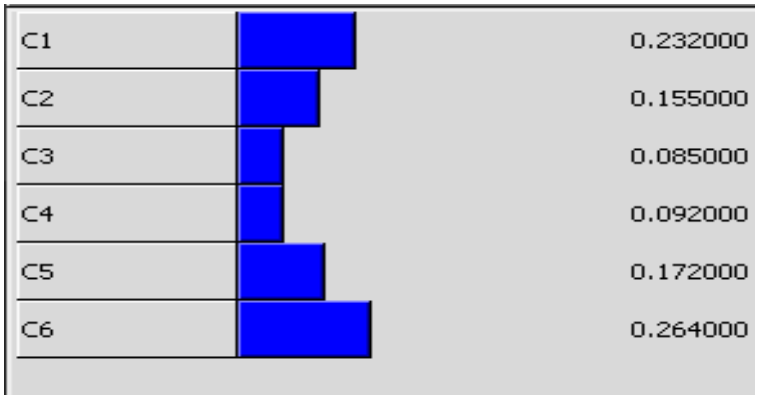
	C1	C2	C3	C4	C5	C6	EV
Organizational Factors	1	1.560	1.671	1.698	1.835	1.885	0.232
External factors	0.641	1	1.337	2.405	1.722	0.391	0.155
Non-cash assets in short-term	0.599	0.748	1	0.444	0.434	0.441	0.085
Long-term investments	0.589	0.416	2.252	1	0.343	0.308	0.092
Long-term commitment	0.545	2.305	2.305	2.918	1	0.302	0.172
Deposit liabilities	0.531	2.555	2.267	3.248	3.306	1	0.264

CR = 0.075

the eigenvector priority will be the main criteria for W1.

$$W_1 = \begin{pmatrix} 0.232 \\ 0.155 \\ 0.085 \\ 0.092 \\ 0.172 \\ 0.264 \end{pmatrix}$$

super decision software output for determining the priority of the main criteria is presented in Figure 2:
Figure 2. The main criteria for priority setting based on the target output super decision software



Special vector obtained by:
- The most important criteria deposit obligations is 264/0 with normal weight.
- Internal factors 232/0 with normal weight is the second priority.
- Criteria for long-term commitment to the third priority is 172/0 with normal weight.
- External factors on the 155/0 with normal weight are more important.
- Short-term cash assets have the lowest priority.

Adjustment factor equal to 089/0 is achieved comparisons because it is smaller than 1.0 and therefore comparisons can not be trusted.

The answer to the first hypothesis: internal factors than external factors in the financial management of liquidity absorption effect is more.

The results of the main criteria for priority setting is defined on the basis of objective factors priority is internal rather than external factors. As well as the highest priority to criteria specified deposit liabilities.

compare and prioritize these criteria (indicators) Once paired main criteria based on objective, importance of each sub index is calculated on them. Six of 15 sub indices were identified. Here, too, the 40 experts and is used to prioritize sub Using geometric mean values and normalization, especially vector is calculated.

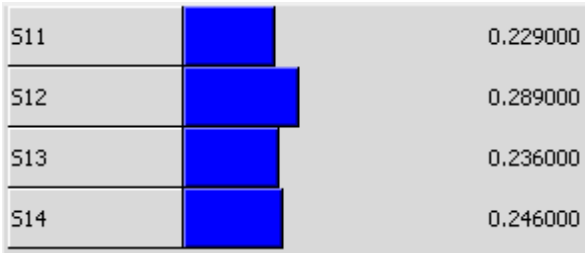
Calculations for determining the priority sub internal factors is presented in Table 2. Adjustment factor comparisons of each table is provided in the following table. All comparisons are consistent coefficient of less than 1.0. Therefore, the results obtained are reliable comparisons.

Table 2- priority sub internal factors

	S11	S12	S13	S14	Eigen vector
Appropriate organization structure	1	0.603	1.067	1.122	0.229
Proper management of resources	1.660	1	1.122	0.976	0.289
Management Information System	0.937	0.891	1	0.962	0.236
Education to colleagues	0.891	1.025	1.039	1	0.246

CR = 0.0150

Figure 3 priority sub internal factors



Special vector obtained by:

- The highest priority of these criteria proper management of resources is 289/0 with normal weight.
- Sub adequate training to workers with normal weight 246/0 is the second priority.
- Sub 236/0 in Information Systems with normal weight are more important.
- These criteria appropriate structure of normal weight 229/0 of the lowest priority.

The general priorities are very close to each other. The adjustment factor equal to 015/0 is achieved comparisons because it is smaller than 1.0 and therefore comparisons can not be trusted.

The second hypothesis: Among the external factors in the policies of central bank liquidity provision tools to absorb liquidity in the financial management is more effective.

Paired comparison was based on the views of experts have shown that the policies of central banks to provide liquidity tools is more important.

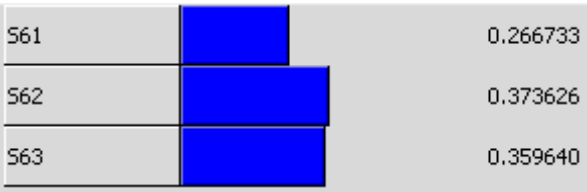
Standard deposit liabilities of the following three criteria are formed so that the three sub-paired for the final priority is required. Calculations for determining the priority of sub deposit liabilities are presented in Table 3.

Table 3. Prioritizing organizational sub agents

	S61	S62	S63	EV
Current deposits	1	0.588	0.901	0.267
Savings deposits	1.700	1	0.856	0.374
Investment deposits	1.110	1.168	1	0.360

CR = 0.0152

Figure 4 under the criteria for priority setting specific performance



Special vector obtained by:

- The highest priority of sub normal weight savings deposits is 374/0.
- Investment deposit sub 360/0 at normal weight are more important.
- These criteria, current deposits with normal weight 267/0 of the lowest priority.

The adjustment factor equal to 015/0 is achieved comparisons because it is smaller than 1.0 and therefore comparisons can not be trusted.

Other criteria study consist only of the two criteria so that only one comparison is necessary so we do not consistent coefficient. The results of the research sub matrix W2 forms and their respective weights in Table 4 below:

Table 4 matrix W2 (initial weight criteria of the study)

Indicators	Initial weight
Appropriate organization structure	0.229
Proper management of resources	0.289
Management Information System	0.236
Education to colleagues	0.246
Tools funding	0.321
Impose the policies of central banks	0.679
Money market securities	0.403
Debt capital markets	0.597
Credit facilities	0.330
Investment and partnership	0.670
Received credit	0.293
The unexpected withdrawal of capital shareholders	0.707
Current deposits	0.267
Savings deposits	0.374
Investment deposits	0.360

The third hypothesis: among the factors within the organization, management information systems to provide liquidity, liquidity management more effective than other factors in there.The results show that the internal among the highest priorities of the sub proper management of resources and expenditures. Sub management information system to provide liquidity, rather than other factors in the financial management of liquidity absorption is third in importance.

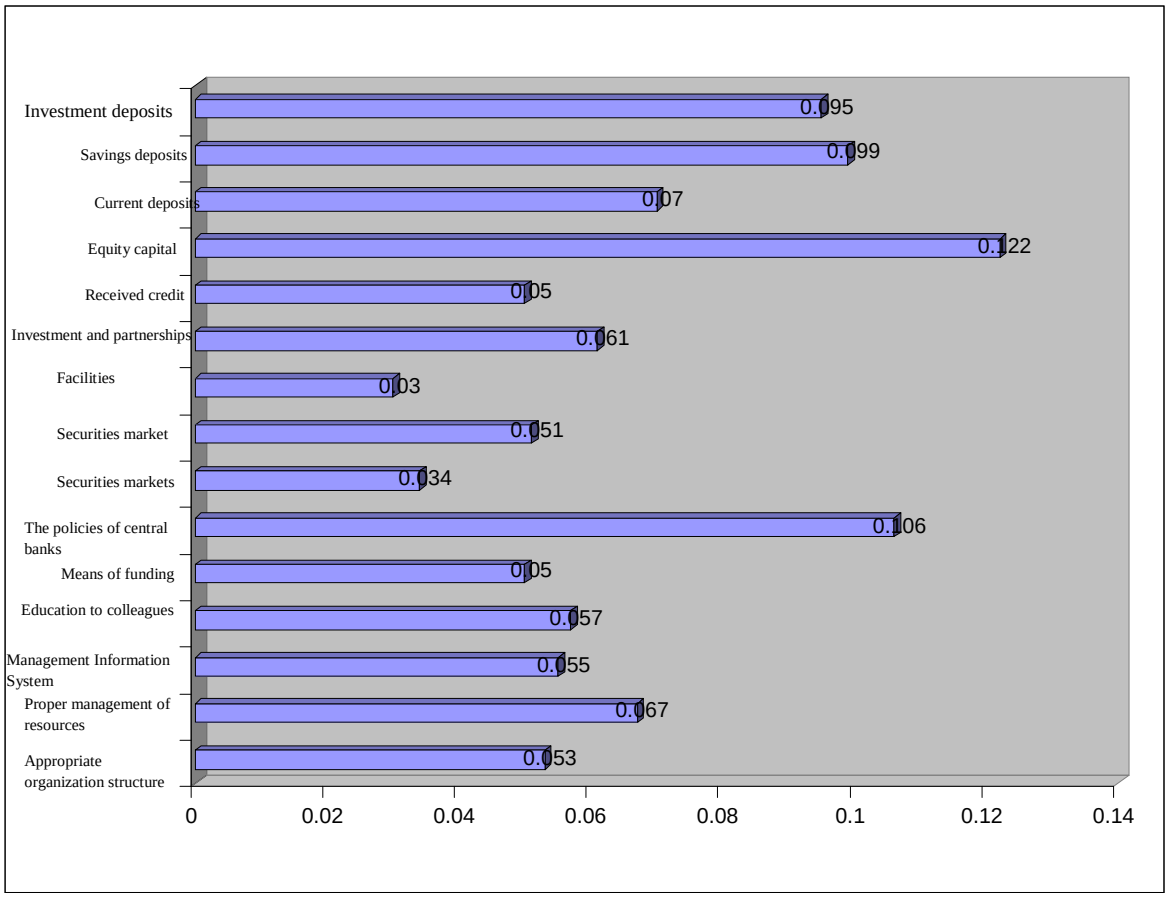
Determine the weight of indicators and prioritizing them

By owning the weight of each of the main criteria (W1) and sub (W2) the weight of each indicator is calculated. For this purpose, the weight of each sub multiplied by the weight of the main criteria. super decision software is used for the calculation. Finally, by multiplying the weight of sub super matrixes Preferences options in the calculation of the final priority option. According to a special vector obtained in the first stage (W1) and compare sub-vector (W2) be the final weight and priorities to be determined for each of the indicators. The final tally was presented in Table 5:

Table 5. The final prioritization criteria and sub-criteria decision-making

Criteria	Weight criteria	Indicators	Weight	Rank
Organizational Factors	0.232	Appropriate organization structure	0.053	10
		Proper management of resources	0.067	6
		Management Information System	0.055	9
		Education to colleagues	0.057	8
External factors	0.155	Tools funding	0.050	13
		Impose the policies of central banks	0.106	2
Non-cash assets in short-term	0.085	Money market securities	0.034	14
		Debt capital markets	0.051	11
Long-term investments and credit facilities	0.092	Credit facilities	0.030	15
		Investment and partnership	0.061	7
Long-term commitment and Capital shareholders	0.172	Received credit	0.050	12
		The unexpected withdrawal of capital shareholders	0.122	1
Deposit liabilities	0.264	Current deposits	0.070	5
		Savings deposits	0.099	3
		Investment deposits	0.095	4

Figure 5. The priorities of indicators, output super decision software



Discussion and conclusion

Capital shareholders with normal weight were unexpected harvest index 122/0 of the highest priority. Normal weight is an indicator of central bank policies conveyed 106/0 secondary priority.099/0 with normal weight indicator savings deposits from third priority. Normal weight is an indicator of investment deposit of the fourth priority is 095/0.Normal weight is an indicator of current deposits fifth priority is 070/0.067/0 with normal weight is an indicator of good management of resources is the sixth priority. Stock investments and partnerships with normal weight 061/0 VII is a priority. Education to colleagues with normal weight indicator 057/0 is the eighth priority. Finally, the index of credit facilities with normal weight 030/0 is the least important. The particular vector is calculated according to calculations index unexpectedly picked shareholders of the highest priority capital. Stock the policies of the central bank in the second priority. Savings deposits index of the third priority. The fourth priority is investment deposit index. Current deposit index, the index of resources, investments and partnerships index and the index of education to the next priorities with colleagues. Finally, the index of the facilities granted to the least important. According to TOPSIS technique can be concluded that the best option to attract liquidity, diversification fund. Net increase of bank accounts is the second priority. Increasing current account with the Central Bank of the third way is working properly absorb liquidity. Finally, deposits have the lowest priority.

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