

Reduction the Costs of Investigating in Financial Industry Based on Activity-Based Costing and Supply Chain

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Abstract- Responding to the needs of shareholders and investors, earning profit and income and covering current expenses are the hugest goals of each economic unit. Banks and financial institutions also have these rules. Perhaps the most important thing for them is calculating and understanding the cost of money. Because calculating cost reductions and analyzing it can be used to estimate and execute the amount and cost of paying the facility, and also the profits of the deposits in each supply chain system. However, it should be noted that the issue of reducing costs, including goods made, sold goods, services provided or time consumed, is one of the most complex accounting issues. Besides, it is certainly more costly to calculate the cost of services than the calculation of reducing goods costs. Therefore, what is said is a general overview of the very complex process of calculating the expense of money and reducing costs in financial institutions based on the supply chain. In this research, we will consider the reduced costs of investigating in the financial industry based on activity-based costing and supply chain.

Keywords: Bank, Investment, Activity-Based Costing (ABC), supply chain, costs.

1. Introduction

Supply chain activities are oriented to create value to all the entities involved in the process by supplying the right quantity of material, at the right time, on the right place in right price. To realize the required level of customer service at the lowest total cost, it is fundamental to analyses the supply chain activities present in the company and the cost that these activities

generate. Many supply chain operations require cooperation among companies. The costs that the companies pay depends on the decisions that they take about the realization methods of their supply chain activities. The cost recording and analysis system have to help the companies to identify the best collaboration methods, to correctly define economic advantage. To reduce supply chain costs and provide the level of customer service demanded, it is important to know the resources used in every activity through an efficient supply chain cost analysis system [7]. The emergence of events such as the development of global competition, the advancement of information and communication technology and access to cheap information systems over the past two decades and the efforts of economic units to rank global and entry into international markets, has necessitated attitudes such as customer satisfaction and management based on activity [1]. What is certain is the success and continuity of activities in a new competitive environment requires the use of new ways to enable a business to be ranked globally. The banking industry is no exception to this category. One of the most important competitive tools in this area is the pricing and cost reduction of services and products. It is important to determine the correct and actual cost reduction. Reducing costs in sales pricing decisions, determining profit and loss, controlling and reducing costs, deciding whether to provide or remove a service or product, and many more are effective. Therefore, it is necessary to recognize and use the appropriate basis for the pricing of banking services accurately and accurately [2]. Also, with the increase in technology share and other components of overhead costs in the production of goods and services, traditional costing methods do not provide accurate information on the cost of loading and sharing, while information on cost reductions for products, services, and customers with the most important financial information is required for management decisions. Failure to meet the management information required by traditional cost accounting systems has led economic entities to use the Activity-Based Costing and supply chain [3]. Activity-based costing system and supply chain are one of the

new systems of costing products and services that needs such as correct calculation of product costs reduction, improvement of production process, elimination of waste activities, and recognition of cost drivers, operational planning and business strategy determination based on supply chain for the economic unit. Instead of addressing signs and effects, this system dissolves the cause of cost and production, and if the activity does not have a justifying philosophy, an applicant, or even an added value, it provides a means of eliminating, modifying or improving it [4]. Expenditures of money and cost reductions in a bank include expenses incurred in two parts of deposits and banking services. Therefore, in order to calculate the cost reduction in a bank, it is necessary to calculate the costs incurred by the bank separately for the deposits and services of the bank and the actual price of the money. Therefore, in this study, according to these two sections, using the ABC model, the calculation of the finished cost of money and cost reduction in the Eghtesad Novin Bank are examined.

2. Research Methodology

In order to implement the practical and practical aspects of this research, the researcher has described the research hypotheses and executive methods for the research. Because of the descriptiveness, the parametric and nonparametric tests have been used, as well as because of the lack of descriptive means of measuring, and the information in dialogue, interview and observation that the data are analyzed to analyze the data. The researcher has used independent and dependent variables to advance the research objectives that these variables are presented in more detail in the discussion. In terms of methodology, this research is descriptive of survey type. The present research is based on how to obtain the required data and in terms of the classification of research according to their purpose, is a descriptive research. In terms of the type of supervision and degree of control, this research is in the field of field research because the researcher examines the variables in their natural state. Since this research will provide a model for calculating cost reductions in the Eghtesad Novin Bank based on supply chain, it will be "functional". The purpose of applied research is the development of applied knowledge in a particular field [5].

2.1. Research Tools

The measurement criterion in this research is the theoretical basis of accounting. Due to the costing system and ABC methodology in the Eghtesad Novin Bank, the scope of research, information analysis, interpretation, and information processing have been used.

2.2. Activity Based Costing (ABC)

The tremendous changes and developments that have been introduced globally since the early 1980s led many organizations to come to the conclusion that in order to survive in the market for competition and reduce their costs, their own in-house processes and processes. In order to achieve this goal, it was inevitable to reconsider the methods of accounting and finance, and to use new methods, as it was not possible to rely on traditional methods and techniques, in order to achieve this goal. They meet their needs, and these organizations were forced to revisit the Accounting system and its cost. On the one hand, this urgent need and the development of new perspectives on management accounting, on the other hand, led to the transformation of the presentation of new methods for calculating the cost of completion. But serious attention was paid to academic and professional circles in the 1980s. This focus was largely due to the emergence of three main structures: The first structure of the new changes that has taken place in the world to introduce modern technologies, intelligence systems and new operational mechanisms. The second construct was the change in the philosophy of thought of the managers of organizations, which, in order to increase profitability, instead of increasing their service prices, paid attention to the factor of cost reduction. The third factor was the efforts of academic circles and writers of management accounting, which, due to the wide variations and the need for the use of new technologies, developed new cost management and cost management methods. Among them, [2] had a tremendous impact on others, reflecting the failures of the management accounting system. These authors believed that the use of traditional systems not only does not respond to the needs of managers, but the use of their information leads to misleading and inappropriate decision-making. The efforts of these authors led to the emergence of a new method in cost management methods, entitled "Cost-based activity".

2.3. Activity-Based Costing System And Supply Chain Views

In terms of the stages of evolution and formation of a cost-based costing system based on the activity, as well as the type of information needed by managers in decision making, two general viewpoints regarding this system are presented. One of these views is the ABC System Preliminary Model based on supply chain. The purpose of this view is to provide information on the cost of activities and processes in supply chain system. Another point of view in this regard is the ABC's two-dimensional model. In addition to providing information about the cost of activities and processes, the purpose of this view is to provide non-financial information about the activities. Due to the importance of this issue and growing the ABC system, we explain these two perspectives.

2.3.1. Elementary ABC Model

The Elementary ABC Model was used to provide cost data for products and services. But due to the useful capabilities that this system provides, in other areas such as application in strategic decision making, cost analysis, service profitability, improvement of organizational activities, management and management of activities, and determining the priority for reduction costs were used. The widespread use of the ABC system was in fact, due to the benefits that this system could provide for organizations. In addition to the above, the users of this system sought after basic information to help them improve the processes. Although the ABC introductory system solved many of the managerial problems involved in decision making

by providing useful and useful information, the use of this system was also a disadvantage, limiting its use, and its uniqueness. That is, if this system was designed for a specific purpose, such as the internal improvement of the organization, its results did not apply to other purposes. This greatly limited the effectiveness of the Elementary ABC Model [3]. Another limitation of the ABC's initial model was the lack of direct information on costs and activities, especially overhead costs and how these costs were shared. Because in the ABC model, overhead costs are shared on the basis of overall cost areas, so costs are not defined and identified on a per-activity basis, and do not directly affect activities. This issue, while not providing information about activities, will make it impossible to obtain practical information on the improvement of performance and results. These weaknesses in the ABC's initial model led to the presentation of the two-dimensional view of this system.

3. Two-dimensional costing model of ABC system

The expectation of the ABC system to provide operational information about the activities led to the emergence of another perspective, which was called the ABC Double Dimensional Model. This system was designed to provide information aimed at creating a permanent improvement process for activities inside and outside the organization. This method has two main perspectives: 1) Cost Allocation View and 2) Process View. In Fig. 1, these two views are shown.

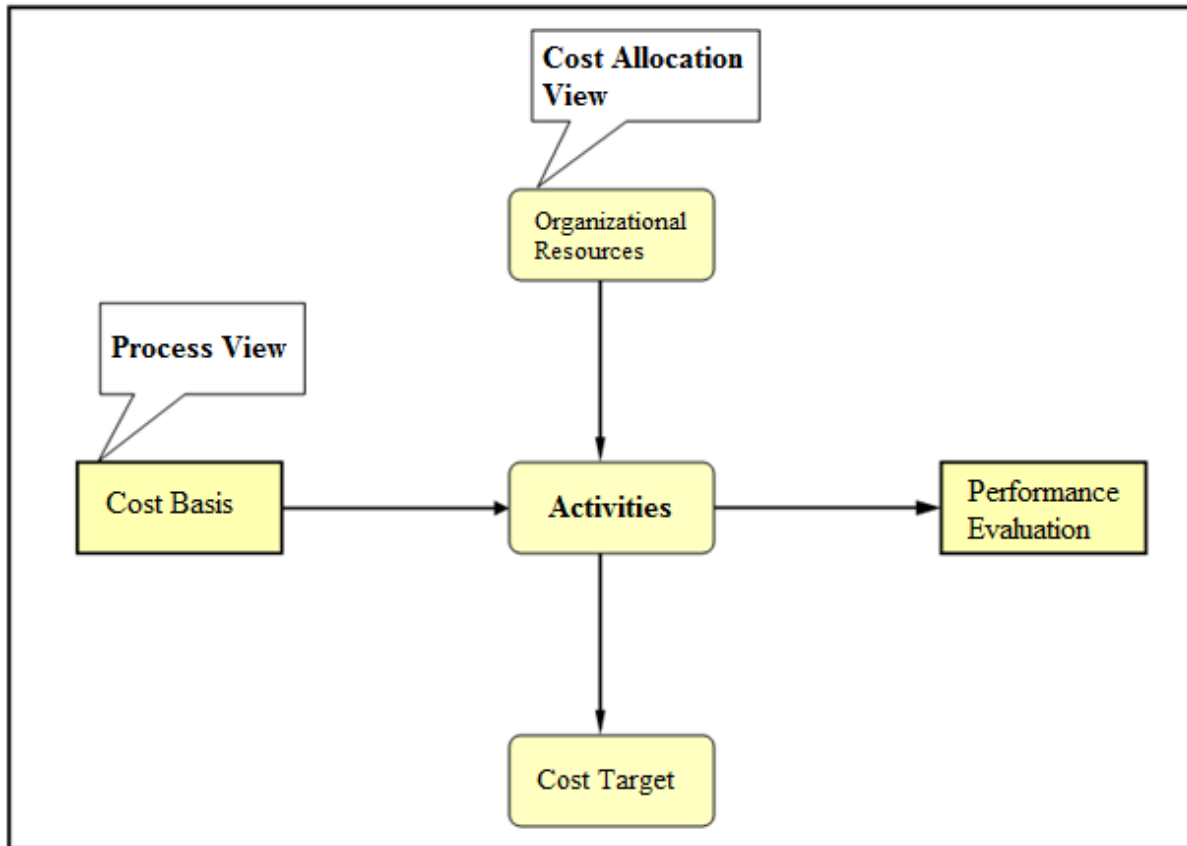


Figure (1): 3- Two-dimensional model of ABC system [3]

4. Results and Analysis

4.1. Calculation Model Cost Reduction of Current Borrowing Loan

Current deposits are not liable to operating costs, but they account for a large portion of non-operational costs because they are not subsidized and are not subject to awards. In the Eghtesad Novin Bank, more than 70 percent of non-operating costs are attributable to the staff's activity, to current deposits. Most of the banking services, such as payments and receipts,

lending, concessional facilities, etc., are granted through these deposits and to the holders of such deposits, and, on the other hand, the provision of appropriate services in this field will result in the transfer of deposits to banks or banks that provide convenient banking services. With regard to the divisions relating to non-operating costs and the allocation rates obtained for each type of deposit, as well as with regard to the other items mentioned, the cost of the current deposits can be paid. The power of the formula is calculated as follows:

$$R_{t,DD} = R_{DD} = \frac{[(C_a \times I_{DD}) + (C_v \times V_{DD}/V_t)] - (V_{DD} \times S_{DD} \times r_s)}{V_{DD} [1 - (S_{DD} + L_{DD})]}$$

Where in:

- R_{t,DD} : Current interest rates on deposits
- R_{DD}: Non-operating expense rate for current deposits
- C_a: Non-operating fee subject to employee activity
- r_{DD}: Assignment rate (C_a) to current borrowings

C_v : Non-operating cost function of deposit volume
 V_{DD} : Average current borrowings
 V_t : Total average deposit balances
 S_{DD} : The ratio of legal deposits for current borrowings
 r_s : Legal deposit interest rate
 L_{DD} : The ratio of holding current borrowings to liquidity

4.2. Calculation of cost reduction model of borrowed deposit of savings

Savings deposits are both operating costs and non-operating costs. Operating costs of these deposits are awards to the owners of these deposits, and their non-operational costs are current deposits due to the services provided and the administrative affairs of the owners of such deposits. Therefore, reducing the cost of savings deposits can be calculated from the following formula:

$$R_{SD} = \frac{[(C_a \times I_{SD}) + (C_v \times V_{SD}/V_t)] - (V_{SD} \times S_{SD} \times I_{SD})}{V_{SD} [1 - (S_{SD} + L_{SD})]}$$

Where in:

r_{SD} : Assignment rate (C_a) to savings deposits
 V_{SD} : Average savings on borrowings
 S_{SD} : The legal deposit ratio for savings deposits
 L_{SD} : The ratio of holding interest deposits is savings for liquidity

4.3. The calculation model reduces the cost of short-term investment deposits

These deposits also have operating costs (interest paid to depositors) and non-operating costs. Reducing costs of this type of deposit can be calculated from the following formula:

$$R_{SHD} = \frac{[(C_a \times I_{SHD}) + (C_v \times V_{SHD}/V_t)] - (V_{SHD} \times S_{SHD} \times I_s)}{V_{SHD} [1 - (S_{SHD} + L_{SHD})]}$$

$$R_{t,SD} = R_{SD} + R'_{SD}$$

Where in:

$R_{t,SD}$: Interest rate on savings deposits
 R_{SD} : Non-operating expense rates on savings deposits
 R'_{SD} : Rate of operating costs of deposits of interest loans

The cost of non-operating costs is also calculated as follows:

$$R_{t,SHD} = R_{SHD} + R'_{SHD}$$

Where in:

$R_{t,SHD}$: Short-term investment deposit rates
 R_{SHD} : Non-operating expense rates for short-term investment deposits
 R'_{SHD} : Operating costs of short-term investment deposits

The cost of non-operating costs is calculated as follows:

Where in:

r_{SHD} : Assignment rate (C_a) to short-term investment deposits

V_{SHD} : Medium-term short-term investment deposits

S_{SHD} : The ratio of legal deposits for short-term investment deposits

L_{SHD} : The ratio of holding short-term investment deposits for liquidity

4.4. The calculation model reduces the cost of long-term investment deposits

Long-term investment deposits (one-year, two-year, three-year, four-year, and five-year), such as short-term investment deposits and borrowings, have two types of operating expenses (pay-as-you-go depositors) and

non-operating costs. The cost of long-term investment deposits is calculated as follows:

$$R_{t,LiD} = R_{LiD} + R'_{LiD} \quad i = 1, 2$$

Where in:

$R_{t,LiD}$: Long-term investment deposit rates

R_{LiD} : Non-operating expense rates for long-term i-year investment deposits

R'_{LiD} : Operating costs of long-term i-year investment deposits

The non-operating costs of long-term investment deposits can also be obtained from the following formula:

$$R_{LiD} = \frac{[(C_a \times I_{LiD}) + (C_v \times V_{LiD}/V_t)] - (V_{LiD} \times S_{LiD} \times I_s)}{V_{LiD} [1 - (S_{LiD} + L_{LiD})]} \quad i=1,2$$

Where in:

r_{LiD} : Assignment rate (C_a) to long-term i-year investment deposits

V_{LiD} : Medium-term i-year investment deposits

S_{LiD} : The ratio of legal deposits for long-term i-year investment deposits

L_{LiD} : The ratio of holding long-term i-year investment deposits for liquidity

4.5. Model of calculating costs reduction other deposits

These deposits, which include items such as the deposit of warranties, prepayment of letters of credit, pre-receipt of transactions, etc., do not include operating costs (direct). In addition, part of non-operational (indirect) costs.

Decreasing costs, other deposits can be calculated from the following formula:

$$R_{t,OD} = R_{OD} = \frac{[(C_a \times I_{OD}) + (C_v \times V_{OD}/V_t)] - (V_{OD} \times S_{OD} \times I_s)}{V_{OD} [1 - (S_{OD} + L_{OD})]}$$

Where in:

R_{OD} : Non-operating fee rates for other deposits

r_{OD} : Allocation rate (C_a) to other deposits

V_{OD} : Average other deposits

$R_{t,OD}$: The cost of other deposits

S_{OD}: The ratio of legal deposits for other deposits

L_{OD}: The ratio of holding other deposits for liquidity

4.6. Calculation of cost savings on deposits

To calculate cost reductions in banks, it should be noted that bank charges should be considered to attract liquidity. Here, the costs incurred by the Eghtesad Novin Bank are considered for attracting deposits and liquidity, and ultimately the cost reduction is calculated.

4.6.1. Calculating the amount of interest expense in reducing the cost of money

In this section effective cost effective costs are reviewed and calculated. This part of the costs is presented in Table (1). The method of calculating these costs is based on the percentage of borrowed funds or borrowed funds that should be used as an acquisition cost. In other words, the Eghtesad Novin Bank will have to pay such expenses as deposit profits, interest payments on loans and other loans to attract various deposits in order to attract the required deposits. In this research, this sector has been calculated as a percentage of the attraction of 10,000 Rials.

For example the Eghtesad Novin Bank should pay 17.3% of the cost to borrow each Rial of current borrowing deposit in the year 2013. The method of calculating this percentage has been shown in the formulas previously described, and a different formula for each deposit is provided. According to the data

obtained from one of the Eghtesad Novin Bank branches, the cost reduction is calculated. In the previous stage, the interest rates on bank deposits were reviewed and their calculation was based on the proposed formulas, in which the results of calculations for each deposit are presented in Table (1).

Table 1: Reduce the cost of each deposit from interest costs

Deposits	Percentage of each deposit from interest expense of 2013
Borrowing current	17.12
Borrowing Savings	17.81
Short term investment	13.43
One year old deposit	16.63
Five-year deposit	23.45
Other deposits	1.82

The numbers represent the cost of each Rials deposit to the bank. In other words, the bank should pay 17.26% of the loan to borrow a deposit in 2013. Table (2) shows the cost of each of the Eghtesad Novin Bank deposits in 2012 and 2013 based on designed models and figures for related years of interest expense. These numbers are in percent. In other words, the cost of each deposit is from the cost of interest to the bank. This means that the five year long-term investment deposit expense from the bank's interest expense in 2013 is 22.4%. In the next section, expenses, etc., the interest on each deposit is also calculated and collected with these costs in order to eventually reduce the cost of the total money.

Table 2: Decrease in the types of deposits at the Eghtesad Novin Bank during 2012-13 (percentages)

Type of deposit		2012		2013	
		Percent	Reduce the cost of each deposit of 10,000 Rials	Percent	Reduce the cost of each deposit of 10,000 Rials
Borrowing current		16.8	1680 Rials	17.4	1740 Rials
Borrowing savings		16.9	1690 Rials	17.91	1791 Rials
Short term investment		12.6	1260 Rials	13.47	1347 Rials
Long-term	One year	16.2	1620 Rials	16.65	1665 Rials

deposits					
	Five years	21.6	2160 Rials	22.46	2246 Rials
Other deposits		1.2	120 Rials	1.83	183 Rials

4.6.2. How to calculate cost savings on deposits from non-interest expenses

In this section, the bank's non-interest charges are calculated to attract deposits. Table (3) shows the rate of absorption of each deposit from non-interest expenses. This rate is based on the opinion of the experts of the bank as well as the allocation of activities related to each process. Also, the non-interest income of the bank that was extracted from the bank's financial statements is presented in Table (4).

Table 3: Non-interest bearing bank interest rates for each deposit

Deposits	Cost absorption rate
Borrowing current	68.47%
Borrowing Savings	17.25%
Short term investment	7.18%
Long-term deposit one year	3.20%
Five-year long-term deposit	2.50%
Other deposits	1.40%

Table 4: Non-interest bearing bank rates

Costs	Personnel	Depreciation	Suspecting claims	Official	Total
Value to Rials	12,658,000,000	75,489,000,000	26,754,000,000	8,675,000,000	123,576,000,000

After identifying and collecting allocable costs and the rate of their allocation to each service or deposit, the allocation of these costs to each deposit must be calculated. At this stage, based on the rate of

absorption, non-interest expenses are assigned to each deposit. For example, the current debt loan should account for 23% of salary costs. The calculations for this step are shown in Table (4-9).

Table 5: The amount of non-interest expenses assigned to each deposit based on the rate of absorption

Deposits	Salary	Depreciation	Demands	Official	Total
Borrowing current	8,666,932,600	51,687,318,300	18,318,463,800	5,939,772,500	84,612,487,200
Borrowing Savings	2,183,505,000	13,021,852,500	4,615,065,000	1,496,437,500	21,316,860,000
Short term deposit	908,844,400	5,420,110,200	1,920,937,200	622,865,000	8,872,756,800
One year	405,056,000	2,415,648,000	856,128,000	277,600,000	3,954,432,000
Biennial	316,450,000	1,887,225,000	668,850,000	216,875,000	3,089,400,000
Other deposits	177,212,000	1,056,846,000	374,556,000	121,450,000	1,730,064,000

After allocating non-interest expenses to each deposit, the cost reduction of each deposit is calculated as a

percentage of each non-interest expense. The results of this step are shown in Table (6).

Table 6: Decrease the cost of each deposit from non-interest expenses (numbers to Rials)

Deposits	Amount of absorbed costs	Percentage of each deposit from non-interest expenses
Borrowing current	84,612,487,200	0.40
Borrowing savings	21,316,860,000	0.10
Short term investment	8,872,756,800	0.04
One year old deposit	3,954,432,000	0.02
Five-year deposit	3,089,400,000	0.01
Other deposits	1,730,064,000	0.01
Other processes	87,654,000,000	0.41
Total costs	211.230 million	100

Finally, with regard to the reduction in the cost of each deposit, the non-interest costs mentioned in Table (6)

and the cost of interest, the reduction of the final cost of each deposit, as presented in Table (7).

Table 7: Decrease the total cost of each deposit

Deposits	Percentage of each deposit from interest expense	Percentage of each deposit from non-interest expenses	Reduce the cost of each deposit
Borrowing current	17.12	0.40	17.4
Borrowing savings	17.81	0.10	17.91
Short term investment	13.43	0.04	13.47
One year old deposit	16.63	0.02	16.65
Five-year deposit	23.45	0.01	22.46
Other deposits	1.82	0.01	1.83

Reducing the cost of each deposit indicates that to raise each deposit of Rials (including savings deposits, current borrowings, short-term investment deposits, long-term investment deposits of one year and five years as well as other deposits) it should pay a few percents. This amount of money is required for each

bank in order to attract deposits. In other words, the cost reduction in Eghtesad Novin Bank varies between 13% and 22%. The results show that private banks are more likely to cut costs than public banks, which means that private banks will be more costly to attract money and deposits.

Table 8: Final cost savings for all types of deposits
(Eghtesad Novin Bank during 2012-2013 (%))

Type of deposit		2012		2013	
		Percent	Reduce the cost of each deposit of 10,000 Rials	Percent	Reduce the cost of each deposit of 10,000 Rials
Borrowing current		16.8	1680 Rials	17.4	1740 Rials
Borrowing savings		16.9	1690 Rials	17.91	1791 Rials
Short term investment		12.6	1260 Rials	13.47	1347 Rials
Long-term deposits	One year	16.2	1620 Rials	16.65	1665 Rials
	Five years	21.6	2160 Rials	22.46	2246 Rials
Other deposits		1.2	120 Rials	1.83	183 Rials

5. Conclusion

Basically, the issue of reducing costs, including goods made, sold goods, services provided or time spent, is one of the most complex issues, and certainly the calculation of the cost of services is more complicated than calculating the cost of goods, and in the banks, too, because of this Limited complexity, with the exception of banks that are looking for an activity-based cost-management system, and the rest of the banks have calculated the cost of finished money and reduced costs, which in their place, this index is also very important and tangible. But the more interesting thing is that in most banks, the way to calculate the price is based on unrealistic rates, and certainly because the mistake in calculating the cost of money and reducing costs in the bank, even if it is very small, leads to wrong decisions at the macro level, the current research will help to explain this. Since the main activity of financial institutions is the collection of public deposits and the provision of facilities, the bank should reduce its main costs (operating costs) and regularly submit the results to the chair of the general assembly of the bank, Therefore, it must make every effort to collect cheaper financial resources. Currently, the bank also processes and sends to the Ministry of

Economic Affairs, on a constant (monthly) basis, the calculation of the finished cost of money and the reduction of its costs and assets as chairman of the General Assembly of the Bank. The emergence of events such as the development of global competition, the advancement of information and communication technology and access to cheap information systems over the past two decades and the efforts of economic units to rank global and entry into international markets, has necessitated attitudes such as customer satisfaction and activity-based management. Also, with the increase in technology share and other components of overhead costs in the production of goods and services, traditional costing methods do not provide accurate information on the cost of loading and sharing, while information on cost reductions for products, services, and customers from the most important information Financial is required for management decisions. The lack of management information required by traditional cost accounting systems has led economic entities to use Activity Based Costing (ABC) and supply chain. Activity based costing system and supply chain are one of the new systems of product and service costing that meets needs such as correct calculation of product cost reduction, production process improvement, elimination of waste activities, recognition of cost drivers, operational planning and business strategy determination For the economic unit. Instead of addressing signs and effects, this system creates an intersection of the cause of cost and production, and if the activity does not have a justifying philosophy, an applicant, or even an added value, it provides a means of eliminating, modifying or improving it. This system instead of addressing the signs and effects, the body divides the cause of cost and production, and if the activity does not have an explanatory philosophy, an applicant, or even an added value, it will eliminate, modify or improve it. In Iran, and especially in financial and credit institutions, the main factor in rising money costs, is the direct costs (saving profits) that, if we want different sectors of the economy and the general public to benefit from low-cost banks' facilities. We need to reduce the cost of money in the banking system, which is to be managed and reduced direct costs. In other words, the benefit to depositors is a function of inflation. But it cannot be accepted that the rate of interest on deposits is high at a high inflation rate, which has a significant impact on the financing of current banks' expenses. As a result, banks cannot bear their own costs, and on this basis, the facility faces a rise in rates. Of course, inflation can also be a function of the cost of the banks, but it does not seem appropriate to reduce the interest rate on deposits to

reduce the inflation rate. Because both the bank and the client will suffer in this way. In this way, reducing inflation and cost of money and reducing costs must be in sync with each other. Of course, it should also be noted that the cost of money in private banks is higher due to the particular circumstances of attracting resources than government banks, as the surveys show: Expenditures on money and cost savings in state-owned banks range from 13% to 15%, while private banks account for 21%. It is also necessary to note that the policy of continuous reduction of bank profits makes private banks re-state, as it will reduce the cost of money and reduce costs in banks. The Eghtesad Novin Bank should not only be able to maintain its customers, but also attract a large number of customers, and, in this way, reduce costs to some extent, by providing more and more banking services than paying more for deposits. Banks carry out savings on deposits in low-cost deposits, and only two percent of the awards are allocated to this category of depositors as the cost of these deposits, but as noted in the fourth quarter and the cost of these deposits in the Eghtesad Novin Bank was higher than other deposits. Banks usually take current deposits into free or unpaid deposits. This is while the cost of these deposits is significant over the years and even more than the cost of short-term investment deposits. Another implicative result in this study is the effect of the contraction and expansionary monetary policies on the rate of deposit spending, so that when reducing the supply of money, the policy of contraction (for example, through increasing the proportion of legal deposit) is reduced. Deposits expense increases due to reduced banks' free resources. On the contrary, when monetary policies are applied to increase the money supply, that is to say, expansionary monetary policies, due to the increase in the volume of free deposits, the reduction in the cost of bank deposits is reduced.

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