



British Journal of Economics, Management & Trade
2(2): 24-38, 2012

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The Effect of Banks' Liquidity on Grant Facilities

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Research Article

Received 27th November 2011
Accepted 11th January 2012
Online Ready 6th March 2012

ABSTRACT

Managing huge amounts of assets in large banks require regular and constant control, as the slightest weakness in one of such bank's various fields of activity can affect its assets in the long term. On the other hand, the increasing and expanding private banks and competitions between public and private banks further denote the importance of appropriate credit allocations and swiftness in granting facilities prompted the researcher to investigate and analyze credit and facility system of BSI, as large public bank in Iran. For this purpose, this study evaluates the relationship between changes in liquidity (increase/decrease) and capability to grant facilities in BSI by OLS (Ordinary Least Squares) econometric model which utilizes the data from 1984 to 2007 time series and considers the factors affecting the allocation of facilities including liquidity, capital, assets and deposits. The findings demonstrate that the amount of BSI liquidity has positive and significant effect on the capability of this bank to grant facilities, meaning that increase in liquidity results in increase in capability to grant bank facilities.

Keywords: Liquidity; bank facilities; deposits; ordinary least squares.

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1. INTRODUCTION

Estimation of the function of granted facilities is an important tool to plan effective financial balancing policies. Economists have had different approaches and viewpoints to modeling monetary demand and based various models on such approaches (Bahmand and Bahmani, 2006). The financial sector is one of the most important sectors in economy as any prosperity or recession in this sector quickly spread to others in the economy, a phenomenon observed in the current global crisis which began from financial sectors of the USA and quickly affected other sectors and even other countries (Bronson, 2005).

This paper investigates the factors that affect the facilities in Bank Saderat Iran (BSI). It determines the effect of short term fluctuations in variables affecting facilities. According to the Research Centre of Bank Saderat Iran, we are witnessing that there was a continuous and constant process of liquidity from 1984 to 1997. But suddenly, liquidity in the banks has increased positively from 1998 to 1999. In 2000, it decreased and had some fluctuations. Due to several studies, the total deposits, bank assets and liquidity have a positive impact on loan and facilities granting. We have seen so many positive and upward changes from 2000 to 2007.

According to the Table 1, there is an increasing trend in facilities granted to the public sector in BSI which has doubled in years such as 1987, 1991, 1997 and even quadruple in 2000. This trend continues, which may have been due to assisting reconstructions in 1990s caused by deteriorations and destructions brought upon the country in the War, up to 2005 and in 2006 there is sudden decline in loans granted to the public sector. This increasing and decreasing trend can also be noted in the private sector as in 1986 the amount has doubled when compared to the previous year and in 1991 and 1997 there is a sudden upsurge of loans granted to the private sector that was caused probably by the aforesaid reason and as of then there is a moderate increase. In other sectors a decrease in loans granted can be seen from 1984 but this trend suddenly reverses in 1994. From 1998 to 2005 temporarily no loans were granted to this sector until as of 2005 the previous trend is restored.

Considering the previous studies in banking and financial fields, currently no study has been carried out by this subject and as case study which uses econometrics methods. Therefore we are motivated to use economic modeling to examine the effects of liquidity on capability of the Iranian banks to grant facilities (Case study of Bank Saderat Iran).

Therefore the current research seeks to determine that whether the changes in the amount of liquidity affect the total facilities of BSI. For this purpose, after reviewing the related literature and background of the study, the analytical model is presented and in the end conclusions and suggestions are made.

Table 1. Facilities granted to various sectors in BSI from 1984 to 2007

Year	Public Sector	Private Sector	Other Sectors	Total
1984	49,344	43,998	203,090	296,432
1985	11,691	80,681	177,963	281,335
1986	113,645	184,539	157,524	455,708
1987	120,130	245,531	142,193	508,054
1988	208,126	368,136	151,663	727,925
1989	288,662	550,262	108,504	947,428
1990	272,184	826,920	100,618	1,199,722
1991	503,578	37,284	115,582	656,444
1992	425,219	1,590,165	124,882	2,140,266
1993	947,690	2,056,932	926,686	3,931,308
1994	504,511	2,450,434	1,082,102	4,037,047
1995	455,995	2,910,829	1,119,846	4,486,670
1996	735,482	3,647,390	1,203,857	5,586,729
1997	1,297,980	11,958,155	3,034,075	16,290,210
1998	1,238,083	8,700,020	-	9,938,103
1999	1,885,153	11,512,401	-	13,397,554
2000	7,191,300	25,723,750	-	32,915,050
2001	8,159,278	31,950,877	-	40,110,155
2002	7,749,200	56,454,022	-	64,203,222
2003	7,158,131	69,204,067	-	76,362,198
2004	7,896,113	85,007,766	-	92,903,879
2005	10,638,411	54,242,468	-	64,880,879
2006	6,453,391	76,502,538	19,391,231	102,347,160
2007	10,965,984	85,730,549	20,332,426	117,028,959

Source: Bank Saderat Iran, 2009

2. REVIEW OF RELEVANT LITERATURE

This section provides a general review on concepts, factors, theories and approaches on liquidity towards some of the available or accessible models in liquidity management. It is noteworthy that many of the liquidity models with liquidity management approach in trade units are somewhat different from liquidity management models for commercial banks or in general, credit and finance institutes.

The local studies are often implemented as theses of university graduates and Iran Banking Institute and mostly investigate the quantitative distribution of facilities granted by banks and their effect on various economic sectors and macro variables of the economy. A number of these are presented as follows:

Shahrokhi (1993) in a study entitled "Quantitative Study of the Distribution Method of Facilities Granted in Country's Provinces from 1984 to 1991" uses cost-benefit analysis to describe the method of granting facilities in the banks of various provinces in the country from 1984 to 1991 and in this study the researcher investigates the effect of facility distribution policies in reducing deprivation and regional/provincial imbalances and also supplying fundamental needs and job creation. The findings are as follows:

Reducing current imbalances and coordinated development of provinces require complete recognition of economic capacities and relative advantages and determining the role and tasks of banking system as an integral part of Islamic economic system.

For deprived provinces which apparently cannot attract bank facilities, budgets must be ratified to lay down infrastructural investments so that increasing returns to scale which is positively present in some of their economic sectors can attract such facilities.

Yarnia (1995) in a study entitled "Investigating the Effect of Supervised Granted Facilities in Industrial, Mining and Agriculture Sectors on Employment Level and Value Added in East Azerbaijan Province from 1984 to 1989" investigates the effects of facilities on economic variables. The researcher states the objectives of the study to be investigating the effects of facilities granted by one of the banks in the country on employment level and value added created in producing economic sectors including industrial and mining, agriculture and husbandry. Independent variables of this study are: amount of facilities in economic sectors and bank resources, and dependant variables are created jobs and bank consumptions. The results of hypothesis testing of this study are as follows:

A linear correlation was found between resources and bank consumptions.

A positive relation between facilities granted and employment level in units enjoying bank facilities was observed.

Javanmardi (1995) in a study entitled "Effects of Bank Keshavarzi Facilities in the Increasing the Development of Farming Sector from 1984 to 1991" investigates the effect of bank facilities in agriculture sector. The objective of this research is to study the performance of Bank Keshavarzi facilities in the development of farming and horticulture sector. The independent variables are facilities granted by Bank Keshavarzi to farming and horticulture subsector and dependant variable is the value of farming and horticulture subsector products. The results of hypothesis testing are:

Results of R1 and t Test proves the first hypothesis of bank facilities being effective on development in farming sector.

Same statistical methods also confirm the second hypothesis of bank facilities being effective on development in horticulture sector.

Gheraati (2001) in a study entitled "Investigating the Effect of Macro Economic Variables on Total Facilities and Facilities of the Imports Sector of State Banking System from 1986 to 1999" which has been performed in the Supreme State Banking Institute in 2001 examines the effect of macroeconomic variables on total facilities and facilities of the imports sector of the country's banking system 1986 to 1999. The researcher uses econometric tools to determine the coefficient of each variable and comes to the following conclusions:

1. Variations in oil revenue directly affect total granted facilities and those of the imports sector.
2. Variations in price index conversely affect total granted facilities and those of imports sector.
3. Fluctuations in exchange rate conversely affect the granted facilities to imports sector.
4. Amount of liquidity directly affects total granted facilities and those of imports sector.
5. Gross Domestic Production directly affects total granted facilities and those of imports sector.

Dinc (1997) states the competition in loaning between banks. The researcher shows that many banking competition methods in loaning causes information gathering about loan applicants by the banks. Also loaning strategies depend upon the number of rival banks and as the number of banks increases, firstly the banks become more conservative in granting loans and secondly the interest rate paid by the applicant varies according to the quality of the received credit. Furthermore the researcher proves that loaning strategies depends upon the number of rival banks and the limited capability of the banks in the world of banking would result in their low profits. Also any changes in the bank funds expenses will change the interest rate of the paid loans and will have negative effects on low credit loan applicants. The prediction of the researcher's theory is not only compatible with experimental conditions, but also with economical calculations.

Blackwell and Winters (1997) investigate a sample of bank loans paid to small companies. In this study they first examine the relation between interest rate and paid loans and also the scrutiny banks implement when granting loans to their customers. In addition they emphasize on constant and regular communications between banks and customers because in this method, companies provide the bank with their complete financial data and it's not often that banks doubts their status, therefore demand less interest rates.

Elsas and Krahnem (1998) explicate the bank-customer relation when entering into a loan contract. The objective of this study is to provide a comparison between real estate and normal banks regarding their policies on loan granting. Analyzed data was obtained from a random sample of loan applicants who received loans from five German banks in a 5 year period. This research prefers the data derived from the credit files of the customer rather than industrial data, therefore the focus of the indirect analysis relates to real credit decisions. This research clearly uses the data relating to ranking the credit status of customers to evaluate credit quality and the evaluations of bank from real estate bank standpoint in order to control information relations.

The main findings of this research show that real estate banks can establish a distinct behavioral pattern which adapts to long term credit financing. Also, in case of adverse credit rank of the customers they provide them with liquidity insurance.

Another study performed by Auria D. Claudio (1999) shows that in evaluating the performance of financial systems when financing the financial sectors of a company, there is usually a distinction between market sector which was previously defined through long term communication between banks and industrial sector. Theoretical studies and experimental results apparently agree that loaning relation increases capital resources of the companies. However, these results can hardly be used to determine bank credits rate, thus this research states that whether a close relationship with a main bank would result in payment of a low rate from the loan applicant or it would establish an exclusive gain for the person in question. This study utilizes a data set of detailed information about significant changes in relationships between banks and loan applicants in Italy for its analysis. The findings of the research shows that a main bank provides credits with lower costs and also states that competition between companies will reinforce the bond and obligation between the loan applicant and bank.

Christensen et al. (2009), in a study "Do Central Bank Liquidity Facilities Affect Interbank Lending Rates?" estimated a six-factor arbitrage-free model of U.S. To analyze the effectiveness of the central bank liquidity facilities in reducing interbank lending pressures, they use a multifactor arbitrage-free (AF) representation of the term structure of interest rates and bank credit risk. Specifically, they estimate an affine arbitrage-free term structure representation of U.S. Treasury yields, the yields on bonds issued by financial institutions, and term LIBOR rates using weekly data from 1995 to midyear 2008. For tractability, the model uses the arbitrage-free Nelson-Siegel (AFNS) structure. Treasury yields, financial corporate bond yields, and term interbank rates. The model can account for fluctuations in the term structure of credit risk and liquidity risk. A significant shift in model estimates after the announcement of the liquidity facilities suggests that these central bank actions did help lower the liquidity premium in term interbank rates.

As seen in domestic and foreign studies, no research with same title or theme as the present one has been conducted; therefore it can be assumed that the current study is a new work. But roughly similar studies have briefly considered the variables such as liquidity, gross domestic production, exchange rate, bank capital, total deposit and assets in bank loans and facilities and have concluded that liquidity, capital and GDP had positive and exchange rate had negative effect on granting of bank facilities. But no study directly addresses the effect of the aforesaid variables on the total bank facilities and mainly this was the reason which prompted the researcher to conduct this study. Therefore in the next chapter the modeling of the study based on the previous works will be presented.

As expected, according to bank deposit structure, each commercial bank maintains a specific amount of total assets in liquid form and short term securities. The total amount of these funds is a function of bank size. Increase in bank size mirrors increase in the ratio of liquid assets. The relation of this ratio with bank size signifies the important role of larger banks in liquidating and collecting cheques and drafts (Reed, Gill, 1998).

Commercial Loan Theory of Liquidity (eighteen to nineteen centuries up to 1910) which results from the development of British banks considers ideal assets to be short term and self liquidating or guaranteed current accounts. These assets are the only type advisable for banks because of their large demands and considerable amounts of quasi-demand {ad

libitum) liabilities. Nowadays such loans are called working capital or inventory capital loans. Historical experiences show that it is not appropriate for our banks to grant loans to be expended on securities, real properties or consumable goods or to grant long term agricultural loans (Reed and Gill, 1989).

Based on the Funds Transfer Theory (1910), development of stocks market and banks inclination to grant long term loans prompted this theory that by maintaining secondary reserves including short term higher quality and marketable securities, the bank can supply its liquidity requirements. Secondary reserves can be sold or transferred without incurring any loss for deposit outflows. By having a high quality and marketable stock, the bank can establish such *ad libitum* loans without concerns about liquidity or maturity. Based on this theory if bank maintains assets which are transferable or marketable to loan lenders or investors instead of their cash funds, bank liquidity would be adequately supplied. If the loans are not redeemed, the collaterals of guaranteed loans (such as marketable securities) can be sold to the market in order to supply liquidity. Therefore individual commercial banks would be able to supply their liquidity requirements by considering the fact that marketable assets are always accessible (Reed and Gill, 1989).

Expected income theory of commercial banking expresses that bank liquidity can be planned if loan payments are planned based on the future income of the borrowers. This theory does not reject the capabilities of commercial loan and funds transfer theories and states that bank liquidity can be affected by maturity model of loan and investment portfolios.

With rapid and reasonable development of medium and large banks, Liability Management Theory (1960) was proposed that liquidity can be achieved through diffusion of liabilities instead of selling assets. Banks can borrow from the central bank to supply their funding requirements, issue negotiable deposit certificates, sell deposit certificate based on customer type and increase funds in Europe dollar market (Reed and Gill, 1989).

Finally we define Criteria and Terms for Bank Facilities as follows:

Reliability: one of the fundamental criteria for bank facilities is trustworthy applicant and verifying his/her ethical qualifications and commitments towards his/her obligations.

Technical capability and competence: technical and management know-how and experience are essential for success. The applicant must be competent in attracting and applying investments and banks must grant facilities after ensuring his/her capability, knowledge and experience in the intended affair.

Financial capacity and credit elasticity: Financial facilities must be proportionate with the financial capacity of the applicant so that there would be no risks involved in return of resources. Therefore the financial endurance and commercial credit of the customer must be evaluated and precise information from various sources about his/her financial status must be acquired before granting them any facilities, because if the applicant lacks financial resources to implement the intended project or preliminary commercial measures, his/her financial weakness and reliance on the bank in particular economic conditions can produce problems in the future especially in the collection of debts (Mehrappour, 2000).

3. MATERIALS & METHODS

Econometric is systematic study of methods which experimentally estimate and deduce economic relationships. The most basic and important tool used for the study of relations between variables is regression. By principal, the study should estimate the intended model based on theories and literature available of granting bank facilities, but considering the lack for such topic, similar studies are used. Therefore:

$$L = F(CASH, DEP, CAP, A, GDP, E)$$

Where L is dependant variable and represents the BSI facilities. Cash and DEP denote the bank liquidity and BSI total deposits. CAP and A are bank capital and bank assets. In addition, GDP and E indicate gross domestic production and exchange rate of the official market.

It is noteworthy that for modeling we have used information and date of Bank Saderat Iran, Iran Central Bank and Iran Statistics Center during 2004-2007. Also, in order to figure out how to select variables we referred to previous studies but there are very few performed in this subject. We can only mention Gheraati's (2001) study entitled "Investigating the Effect of Macroeconomic Variables on Total Bank Facilities of Iran" in which one independent variables was liquidity of banks and it is shown that liquidity has positive and direct effect on granting of bank loans. Afterwards, we used time series econometrics methods and OLS to evaluate and estimate and then in order to verify the model we used classic assumptions violation tests (e.g. Heteroskedasticity, autocorrelation, Normal Distribution for Error Term, Actual Specification Test, Engle-Granger Cointegration Test) and afterwards proceeded to discuss the proposed model.

4. RESULTS

Before model evaluating, we apply panel unit root test as follows:

4.1 Unit Root Test

Dickey Fuller test used in this study is the augmented version of Unit Root Test, one of the most common tests for determining the stationary of a time series process. Considering that some of the variables are not at stationary level, they must be differentiated so that they would become stationary. As Table 1 shows, some variables of the model have the same root and become stationary when once differenced, therefore are first degree cumulative I(1) and a variable such as GDP becomes stationary by twice differencing I(1).

Table 2. Augmented Dickey Fuller Unit Root Test

Remarks	Prob	MacKinnon critical values			Augmented Dickey Fuller statistic	Series name
		10%	5%	1%		
Stationary in one difference	0.0033	-3.26	-3.64	-4.46	-5.02	<i>LNL</i>
Stationary in one difference	0.0001	-1.60	-1.95	-2.67	-4.58	<i>LNCAP</i>
Stationary in one difference	0.0029	-3.25	-3.63	-4.44	-5.03	<i>LNDEP</i>
Stationary in one difference	0.0000	-1.06	-1.95	-2.67	-5.25	<i>LNA</i>
Stationary in one difference	0.0003	-1.60	-1.95	-2.67	-4.04	<i>LNCASH</i>
Stationary in two difference	0.0000	-1.60	-1.96	-2.70	-5.47	<i>LNGDP</i>
Stationary in one difference	0.0001	-1.60	-1.95	-2.67	-4.38	<i>LNE</i>

Now Granger cointegration test of the data level in estimation of regression is used and finally unit root test is performed on the residual of estimated model which if stationary, would prove that the model is reliable.

Considering the results of ADF test as shown in Table 2, model evaluation is performed by OLS method and in order to prevent biased results, the findings of the evaluated model was examined by autocorrelation, heteroskedasticity and specification error and the results are shown below. Also according to the equation, below all variables are considered in logarithms so that elasticity can be assessed.

$$LNL = F(LNCASH, LNDEP, LNCAP, LNA, LNGDP, LNE)$$

The researcher aims to utilize macro economical variables such as gross domestic production and exchange rate but these two variables are not significant and also affects other variables which would result in an incorrect model; therefore the two variables (GDP and E) were omitted from the model.

As demonstrated, all coefficients (CASH, CAP, DEP, A) are significant and below 5% and the absolute value of t statistic is greater than 2 which confirms the significance of the coefficients. On the other hand, R-squared has been estimated to be 96%, meaning that 96% of the variations of the dependant variable are explained by independent variables which are an acceptable amount. Dummy variable (D1) is used, that is the number 1 is considered for war years and the rest 0 which everything considered resulted in better findings. In order to verify the presented regression, classic assumptions violation test is performed to avoid spurious regression.

Table 3. Model evaluation regression

Probability	Coefficient (Elasticity)	Variable
0.0058	0.08	LNCAP(-1)
0.0260	0.39	LNDEP(-1)
0.0075	0.42	LNA
0.0040	0.13	LNCASH(-1)
0.1940	0.31	D1
0.0000	-0.99	MA(1)
$R^2 = 98\%$	$\overline{R}^2 = 98\%$	DW=1.9

4.2 Classic Assumptions

Generally, the classic model of linear regression contains a set of hypotheses called “classic hypotheses” which most of them are considered among error terms of the model. These assumptions are:

- I. Zero conditional mean of error terms (u_i) given a specific value of the explanatory variable X is zero.
- II. The variance of the Error terms are constant ($E(u_i^2) = \delta^2$)
- III. The error terms are independently distributed so that their covariance is 0 ($E(u_i u_j) = Cov(u_i, u_j) = 0$)
- IV. Explanatory variables are not random (e.g. determined in repeating sampling), even if they are random, they are independently distributed from error terms
- V. The error terms are normally distributed by the variance and mean of assumptions numbers 1 and 2
- VI. Regression model is correctly specified, meaning that specification is unbiased.

Tests are used to verify non-violation of these assumptions in linear regression models which will be explained in the following:

4.2.1 Heteroskedasticity

The second assumption of the classic regression model explains that regression error terms of the population have a constant variance and the violation of this assumption is $E(u_i^2) = \delta_i^2$.

In order to check whether our model is heteroskedasticity or not, we perform White Test.

As seen with the higher than 5% probability it can be safely assumed that the estimated regression contains no heteroskedasticity (Abrishami, 2009).

Table 4. White Test

F-statistic	2.965861	Prob. F(15,6)	0.0934
Obs*R-squared	19.38551	Prob. Chi-Square(15)	0.1968
Scaled explained SS	5.581358	Prob. Chi-Square(15)	0.9860

4.2.2 Autocorrelation in error terms

The third assumption of the classic regression model states that there is no autocorrelation between the error terms. If this assumption is violated, the covariance between *i* and *j* error terms will not be zero.

There are various tests to investigate autocorrelation between error terms of model but in this study we used Breusch-Godfrey Serial Correlation LM test. This test can detect autocorrelations in all AR modes and also if there is lagged dependent variable in the model. In this test the counter assumption of *k* value autoregressive and counter assumption of *r* value moving average can be tested (Hojabrakiani, 1989).

As seen with the higher than 5% probability it can be safely assumed that the estimated regression contains no Correlation.

Table 5. Breusch-Godfrey Serial Correlation LM test

F-statistic	1.116111	Prob. F(1,15)	0.1654
Log likelihood ratio	1.916318	Prob. Chi-Square(1)	0.0877

4.2.3 Co-linearity

Considering the significance of the coefficients in the estimated model it can be positively stated that there is no significant co-linearity in the function (Abrishami, 2009).

4.2.4 Normal Distribution for Error Term (U)

The important property of normal distribution is to have skewness coefficient of zero and elasticity coefficient of 3. Therefore based on *K*, *S* deviation, for the residuals of regression, a test function can be constructed from numbers 0 and 3 which because the distribution of LM test function is chi-square, this deviation will be squared. Thus dropping in the critical zone or under 5% PROB will reject the null hypothesis and shows that the distribution of the error term is not normal.

Therefore, higher than 5% probability indicates normal error term:

Table 6. Jarque - Bera test result

Jarque-Bera	0.85
probability	0.65

4.2.5 Specification error in the model

A tests used in detecting specification error in the model is Ramsey’s reset test which is a general test for detecting various specifications errors in the model. If the calculated F is greater than that of the table, the model contains specification error (Abrishami, 2009).

Higher than 5% probability shows that the estimated model for facilities is well evaluated.

Table 7. Ramsey Reset Test

F-statistic	2.126212	Prob. F(1,15)	0.1654
Log likelihood ratio	2.916318	Prob. Chi-Square(1)	0.0877

Therefore considering the estimated equation and the classic assumption violations tests it can be safely stated that the estimated model is well fitted and the existing regression is not spurious. But it must be noted that in this estimation we used data levels and in order to solve this problem we must conduct Granger cointegration test.

4.2.6 Engle-Granger cointegration test

The main objective in evaluating stationary of time series variables is to achieve cointegration function. If the variables of the model are a sum of zero degrees, the model can be estimated through OLS method. Engle-granger test simply requires running an OLS regression and obtaining the error terms. Afterwards, by running the ADF to test the stability of the error terms, if the error terms are stable, it can be concluded that the variables are cointegrated. Also if the residuals of the models are stationary, it can be relied upon as long term stable model (Nofarasti, 1999).

Table 8. Stationary test of error terms of estimated functions

Test Result	Critical values			Augmented Dickey Fuller statistic	Description
	10%	5%	1%		
Stationary	-3.26	-3.64	-4.46	-5.02	Resid01 error term

As can be seen in the above table, the error terms of equations are stationary therefore the variables are cointegrated. It can be safely assumed that disregarding the stationary or non-stationary of the variables, there are long term relationships between the variables of the model therefore they can be used in policy making and the results are completely adaptable.

5. CONCLUSION

The following examines and analyses the estimated model. In the current study the research seeks to answer questions such as whether liquidity variation has effect on total facilities granted by BSI and not, or if these effects are positive or negative, and what about the total deposits, capital and bank assets? Now we proceed to answer these questions:

- i. As liquidity coefficient (CASH) is significant (PROB<5%), it can be concluded that this coefficient affects the granting of facilities by BSI and because it is

positive (+0.13) it has a direct relationship with loan granting (L), meaning that as bank liquidity increases, so will the loaning capability of BSI and vice versa. On the other hand, the logarithmic model of the related coefficient implies elasticity thus if the liquidity of BSI in the previous period increases one unit, the facilities in the current period will increase 0.13%. Therefore the hypothesis of the study in this regard is not rejected.

- ii. As seen in the estimate output page, total deposit variable (DEP) coefficient is positive (+0.39) and significant and has been correctly integrated into the model. Being positive, this coefficient demonstrates positive and significant relationship on loan and facilities granting and it can be stated that if the total deposits of BSI in the previous period increases one unit, the facilities in the current period will increase 0.39%. Therefore the hypothesis of the study in this regard is not rejected.
- iii. Also the total bank capital (CAP) coefficient has a significant and positive (+0.08) effect on the facilities granted throughout state banking system (especially BSI), so that if total bank capital in the previous period increases one unit, the facilities in the current period will increase 0.08%.
- iv. The effect of bank assets (A) on the BSI granting of facilities is significant and positive (+0.42). Therefore, if BSI assets in the previous period increase one unit, the facilities in the current period will increase 0.42% which is greater than other coefficients and demonstrates the important of BSI assets in capability to grant bank facilities. After assets, total deposits and bank liquidity respectively are the most importance in loan and facility granting.

It seems that policies enforced by the government in recent years has somewhat proved to be troublesome for the banks regarding mobilization and allocation of resources and the rate of administered facilities has wavered the direction and intensity of monetary policies.

Regarding the findings of this study, the following recommendations are made:

Considering the insignificant effect of monetary policy through changes in legal deposits, continuing this trend cannot assist the central bank to achieve the ultimate and foremost objective of controlling inflation. Therefore for a short term remedy it is recommended that central bank utilizes other tool such as participation bonds, determining liquidity ratio and allocating credit rations and limits for banks. But because in long term credit limits and rations would result in inefficiency in allocating credits rations and there is also the possibility of deviation from the allocated rations, this tool will not have the required performance.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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