# The Role of Inflation in Financial Repression:
# Evidence from Iran

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**Abstract:** Inflation decreases the real interest rate and increases demands for the loan. In current study which is based on the time series data, the effects of inflation on Iranian banking system performance in terms of absorbing deposits and granting facilities have been studied during 1990 to 2009. The data used in the current study extracted from annual economic reports published by the Central Bank of Iran and from the internet as well. Regression analysis and correlation coefficient were used for data analysis by employing Eviews software. Based on the findings, it can be concluded that firstly, inflation has been an effective factor in the amounts of deposits absorbed by the banking system and secondly, inflation has been effective factor in the amount of facilities granted by the banking system.

**Key words:** Financial repression · Inflation · Absorbed deposits · Granted facilities · Banking sector

## INTRODUCTION

Economic growth, inflation control and employment are the three important purposes of macroeconomics. Inflation in is seen as an economic problem in developed countries in the second half of the 20th century. Inflation with effects on economic growth, employment, income distribution and wealth as well as social and political conditions of a country can influence its entire dignity. During the last three decades, the rate of inflation of Iran has been two digits. Therefore, Inflation, with the two digit value rates, has been among the structural problems of Iranian economy which has affected economic performance in Iran since Iran-Iraq War. Banking system, as an important effective factor in economic performance, has also been under the influence of inflation. Inflation posits negative effects on distribution of incomes, consumption, distribution of resources, productivity and governmental budget; it can also result in decrease of production and deviation of production facilities towards undesirable activities among other things.

As far as the effect of inflation on financial sector is conceived, the literature demonstrates that inflation affects the capacity of financial sector for optimal allocating of resources. That is, as inflation rate increases, true yield rate of money and assets decreases [1]. Also, the increase of inflation rate has a negative effect on the performance of financial sector through the market credits and in turn, on the performances of banks and capital markets and finally on the long-term economic growth [2-3]. With respect to the effects of inflation on savings, it can be mentioned that in general, all individuals who save a part of their incomes in banks are directly damaged by the inflation and their assets decrease in proportion with money value decrease. As a result, people try to change their cashes and savings to more reliable and stable forms such as land, jewelry, antiques, art collections, foreign currencies, etc. that causes decrease in economic growth rate.

**Banking System in Iran:** Banking system in Iran has three categories. Categorization criteria include the applicable rules and regulations and the decision made by Banks General Assembly dated Jan. 2007. Constituents of Iranian banking system are [4] as follows:

- Central Bank of Iran,
- Commercial Banks and
- Specialized Banks.

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**Inflation and Financial Repression:** The state monetary-financial system has a key role in stabilization and efficient performance of the economy, stability of prices, supporting production and facilitation of economic growth and development [5]. The main duty of monetary and financial system is to equip financial resources and to allocate resources to economic systems in an optimal way in order to support and facilitate production and to develop welfare and economic growth. Monetary-financial system includes financial markets and banking systems. In Iran, due to the very young age of the financial markets, the role of banking system has intensified. As a result, Iranian banking system has a significant role in supplying and equipping financial resources and motivating investors to invest optimally and facilitating economic growth.

Financial resources of banking systems are naturally provided from people's deposits [6]. One of the most effective factors in deciding to deposit in banking system is the interest rate [7]. Determination of the interest rate in banking system is among the key variables in economics. The relations of this key variable with national savings, investment and capacity of resources absorption by the banking system, provision of facilities, development and growth of different economic sections, liquidity control, inflation, employment, economic boom and slack have turned the interest rate of banking system to a sensitive case, especially in the developed economies. One of the major reasons of insufficiency of Iranian banking system to stabilize prices, to achieve economic growth and to create jobs is its failure to extract interest rate of banking system correctly.

Interest rate in the banking system is held as investment cost from the investors' viewpoints and opportunity cost from the depositor's viewpoints. Thus, capital market forces balance interest rates. In other words, the just and correct interest rate should be determined through market mechanism, that is, interest rate is balanced in supply and demand conditions in proportion with the inflation rate. In most developing countries, monetary authorities interfere with real interest rate and cause financial repression something which also has happened in Iran [8].

**Financial Repression and its Causes:** Financial repression refers to the notion that a set of government regulations, laws and other non-market restrictions prevent the financial intermediaries of an economy from functioning at their full capacity. McKinnon defines financial repression as follows:

**Bank Credit Remains a Financial Appendage of Certain Enclaves:** exclusively licensed import activities, specialized large-scale mineral exports, highly protected manufacturing, large international corporations and various government agencies. Even ordinary government deficits on current account frequently preempt the limited lending resources of the deposit banks. "Financing the rest of the economy must be met from the meager resources of moneylenders, pawnbrokers and cooperatives; it is this phenomenon that it called financial repression" [9]. In such a system, financial intermediaries do not function at their full capacity and fail to channel saving into investment efficiently, thereby impeding the development of the overall economic system. Before 1970s, economists believed that low interest rates could decrease investment costs and increase economic growth in compliance with Neoclassic and Kinsey theories [10]. McKinnon [11] and Shaw [12] were among the first opponents who believed that increase of interest rate could increase savings and investment.

Some research supposed that decrease in real interest rate could decrease true demands for money (in its extensive definition including savings and time deposits). Also, experimental tests support the significant and positive relationship between national savings to Gross National Product and real interest rates [13]. Fischer showed that in Latin America the effect of inflation on savings and time deposit to GDP was significantly negative [13].

Also, in the last 50 years, developing countries with financial repression policy have experienced failure and have been forced to amend their financial structures and take common policies like avoidance of financial repression and liberalizing interest rate. The reasons are summarized in McKinnon [11] and Shaw [12] and Tirlwall [14]. In Iran, literature (e.g. Naeini, [15]) supports liberalizing interest rate and money supply control.

Ehsani [16] showed that governmental investment in Iranian economy has no significant relationship with long-term interest rates and the most important factors affecting it are oil income and GDP. He also found that changes in long-term interest rate had a significant negative effect on private investment in machinery. He showed that private investment in building had no significant positive relationship with long-term deposit interest rates and it affected the correlation of private investment and the independent variable.

Nazifi [17] suggests that Iranian authorities should emphasize financing from domestic resources and release real interest rate in order to motivate savings and investment.
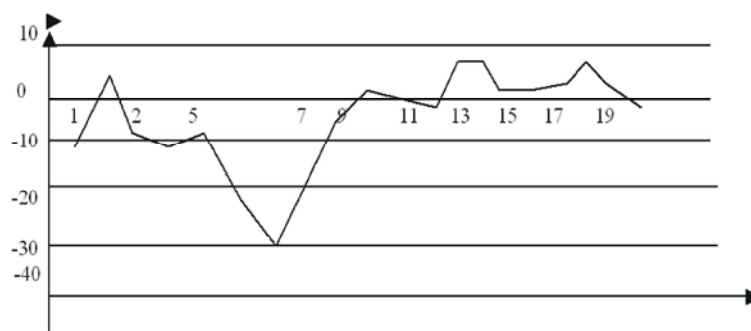
Fig. 1:

**The Effect of Inflation on Financial Repression and Performance of Banking System During 1990 to 2009:** In order to analyze the changes in the true deposits absorbed by the banking systems in the respective period, the researchers introduced a real interest rate, an index which shows the yield of saved resources. Real interest rate is nominal interest rate minus inflation rate.

Figure 1 shows that almost in the entire period under study, the index is negative or near negative. It shows that the real value of the invested resources in banks gradually decreases. What is the public reaction to the condition? In this condition, decision making for investment or withdrawal from banking system depends on other factors. One of the factors is investment in non-official financial markets.

Thus, it can be expected that when real interest rate of bank deposits is negative, investors withdraw their resources from banking system and achieve more yield out of their resources in other forms [18].

Financial transactions in non-official markets show the inefficacy of Iranian banking system [17]. In fact, black market shows imbalance of supply and demand in official market resulted from external factors interfering in its mechanism [17].

Thus, in negative real interest rate condition, people withdraw their resources from banking system. The more the difference between official and non-official interest rates, the more shall be the resources withdrawn from the banking system.

On the other hand, since loan interest rate has been low, demands for bank facilities have been high. Since in this condition credits cannot be afforded out of deposits, resources are supplied through increasing the monetary base. It was expected that usury-free banking system could have caused positive changes by balancing interest rate and production, but impediments have prevented positive consequences [19].

Banks have failed to play their roles in the economy. Banks have been incapable of collecting individual's savings as they have had no powerful competitor [20]. In the developed countries, there are other economic foundations such as stock markets, cooperatives and types of companies that, depending on their profitability and diversity of services, absorb people's savings and the competition between them improves the quality and diversity of their services. The monopoly governing resources equipment in Iranian banks established an inflexible system in the banks with no motivation for the change. The banks have charged more rates for facilities and have paid fewer rates to deposits and this way has exacerbated their conditions. High inflation rate and low real interest rate form another factor preventing banks from absorbing individual's deposits in a successful way. High inflation rate is the outcome of increase of liquidity due to budget deficit supply through banking system. Budget deficit supply through borrowing from banking system is one of the worst methods of budget deficit compensation that increases liquidity by injecting money to the economy. Liquidity level increases several times more than that of the injected money and given its direct relationship to inflation rate, increases inflation.

**Interest Rate Determination in Iran:** Various regulations govern monetary tools including interest rates in different countries. In some countries like Singapore, market mechanism determines the interest rate [21]. Yet, in most countries including Sweden, Belgium, Ireland, Indonesia and Malaysia, Central Bank determines the interest rate. In some countries like Japan the interest rates are determined in the framework of regulations [22]. In any event, interest rate should follow up the economic reality and be determined in a way to motivate generative investments, to increase national income and GDP and to stabilize money value and economy. When using the practice of

any particular country, authorities should take care of the economic realities and existing capacities, facilities and regulations in Iran.

In the interest-free banking system of Iran, interest rates including interest rates of deposits and facilities are determined by the Central Bank [8]. Central Bank determines a ceiling for operating banks in order for them to absorb and equipped their resources and grant facilities according to the prescribed interest rates. Since the rates are not proportionate with the reality of the economy, the effect of interest rate determination on investment, production and economic growth is not desirable. The development results of the false transactions and commerce are also held to be one of the most important reasons for the lack of optimal allocation of resources and justified investment. Banking system insists on continuing in the present way which is an emphasis on financial repression policy led by the Central Bank which runs counter to article 20 of the interest-Free Banking Act and prescribed interference of the parliament in monetary domain is prohibited.

**Review of Literature:** In this study, according to Bafeker [23] who finds the principal factors of inflation in Iranian economy, Results show that 10 percent liquidity growth in long run lead to 2.7 percent growth in inflation rate of retail sale and 3.2 percent in wholesale. On the other hand, 10 percent increase in product growth rate to decrease of 1.7 percent in inflation rate of retail sale and 2.4 percent reduce in wholesale. Finally, he concludes that inflation is not a monetary phenomenon in the Iran.

Dawoodi [24] examined the inflation process in Iran in three dimensional times, short run medium run and long run and concluded that, 1 percent change in liquidity growth rate and exchange rate respectively is 0.95 percent and 0.361 percent change in price. Jalali-Naeini [25] investigated the price trend and rate of inflation in Iranian economy from the year before World War II and then considered the influence of monetary policy on the basis of macroeconomic variables in Iran such as inflation and output. His study on econometric shows the liquidity growth is the most important factors of the increase in general price level. Moradi [26] examined the effective factors on inflation in Iranian economy during the period 1959-1996. In this study he concluded that surplus money supply, exchange rate in free market and price index of foreign goods are effective factors on inflation in long run and also, in short run price changes of exported oil are effective factor on inflation. In other words, there is two-sided relationship between exchange rate and price. Nazifi

[27] provides a model that is concluded from the monetarism theory. She came to the conclusion that in Iranian economy the factor of supply side in creating of inflation is less effective. On the other hand, the inflation in Iran is intensively a monetary phenomenon and impact of monetary variables on real sectors is less. Nili [28] argued that influence of monetary policy on Iranian economy during 1959-1983 is investigated and concluded that, direct relation exist between change in liquidity and rate of inflation. Tabibian and Souri [29] investigated the determinations of inflation in Iran using cointegration techniques. They used an augmented monetarist's model to describe the long run behavior of inflation. Tavakoli and Karimi [30] investigated the effect of import price on inflation, relationship between government expenditure, import price index, money and price index systematically; tested with VAR method. They concluded that inflation of import price has the most effect on inflation in Iran.

**Research Methodology:** Based on annual reports of Central Bank, the present research collected all the information related to inflation rate, amounts of absorbed deposits including deposits in the banking system, deposits in commercial and specialized banks, categorized into sight, time, interest-free, savings and short-term, total facilities granted by the banking system, categorized into commercial and specialized banks, in a 19-year period from 1990 to 2009.

**The Role of Inflation in Iranian Banking System Performance (Models):** Several models for hypotheses "there is a significant positive correlation between inflation and decrease of absorbed deposits in banking system" "there is a significant positive correlation between inflation and decrease in loaning capacities of banks" were fit using Eviews software application all showing that there is a significant positive correlation between inflation and absorbed deposits and also between inflation and granted facilities. But, models with low AdjR-squared ($R^2$) could not be used for overall conclusion and hypothesis testing since low R2 indicates incompleteness of the model and its low explanation capacity. Thus, other explanatory or adjusting variables are to be included in the model. We categorize models with R2 (>0.6) into high significance for inflation, low significance for inflation and insignificant for inflation.

According to the above explanation the following main and sub-hypotheses were postulated in the study.

Main hypothesis: Increase of inflation rate significantly decreases banking system performance.

Table 1: The results of testing first sub-hypothesis

| R-Squared | Slope Significant | Slop Coefficient | Independent variable | Dependent variable | Patterns |
|---|---|---|---|---|---|
| 0.19 | 0.068 | -16.66 | Inflation rate in one year delay | Total deposits | $TD=C(1)+C(2)* INF(-1)$ |
| 0.26 | 0.025 | -0.25 | Inflation rate | Ratio deposits long -term to liquidity | $D_4*100/LIQ = C(1)+C(2)*INF$ |
| 0.22 | 0.041 | -0.18 | Inflation rate | Ratio deposits short- term to liquidity | $D_3*100/LIQ= C(1)+C(2)*INF$ |
| 0.39 | 0.004 | -0.12 | Inflation rate | Ratio deposits money Loaned and savings to liquidity | $D_2*100/LIQ =C(1)+C(2)*INF$ |
| 0.38 | 0.0064 | -0.29 | Inflation rate in one year delay | Ratio deposits long -term to liquidity | $D_4*100/LIQ = C(1)+C(2)*INF(-1)$ |
| 0.47 | 0.0016 | -0.25 | Inflation rate in one year delay | Ratio percent of deposits short - term to liquidity | $D_3*100/LIQ =C(1)+C(2)*INF(-1)$ |
| 0.46 | 0.2 | -0.0013 | Inflation rate in one year delay | Ratio deposits money loaned and savings to Liquidity | $D_2*100/LIQ = C(1)+C(2)*INF(-1)$ |
| 0.28 | 0.024 | +0.16 | Inflation rate in one year delay | Ratio deposits sight to liquidity | $D_1*100/LIQ =C(1)+C(2)*INF(-1)$ |
| 0.24 | 0.039 | -0.32 | Inflation rate | Growth rate deposits long -term | $GD_4=C(1)+C(2)*INF$ |

Table 2: The results of first sub-hypothesis

| R-Squared | Slope significant | Slop Coefficient | independent variables | Dependent variable | PATTERNS |
|---|---|---|---|---|---|
| 0.996 | 0.02 | 36.30 | Width of origin | Total deposit | $TD=C(1)+C(2)*LIQ+C(3)*INF$ |
|  | 0.00 | 0.78 | Liquidity Inflation rate |  |  |
|  | 0.14 | -0.88 |  |  |  |
| 0.999 | 0.97 | 0.39 | Width of origin Liquidity | Total deposit | $TD = C(1) +C(2)* LIQ +C(3) *$ |
|  | 0.00 | 0.73 | Inflation rate Process variable |  | $INF+C(4)*(@TREND)$ |
|  | 0.089 | -0.61 |  |  |  |
|  | 0.00 | 5.75 |  |  |  |
| 0.996 | 0.003 | 44.50 | Width of origin Liquidity | Total deposit Average Mobile | $@MOVAV(TD,4)=$ |
|  | 0.03 | -1.10 | Inflation rate | Four course | $C(1)+C(2)*INF+C(3)*LIQ$ |
|  | 0.00 | 1 0.55 |  |  |  |
| 0.994 | 0.003 | 49.98 | Width of origin Liquidity | Total deposit Near commercial | $@MOVAV(DTJ,3)=$ |
|  | 0.05 | -1.12 | Inflation rate | banks Average Mobile Three | $C(1)+C(2)*INF+C(3)*LIQ$ |
|  | 0.00 | 0.51 |  | course |  |
| 0.98 | 0.00 | 4.02 | Width of origin Inflation | Ratio deposit near specialized | $DTKH*100/LIQ =$ |
|  | 0.002 | -0.06 | rate Growth Liquidity Process | banks to liquidity | $C(1)+C(2)*INF+C(3)*$ |
|  | 0.12 | -0.04 | variable |  | $GLIQ +C(4)*(@TREND)$ |
|  | 0.00 | 0.73 |  |  |  |
| 0.97 | 0.00 | 3.80 | Width of origin Inflation | Ratio percent of deposits near | $DTKH*100/LIQ=C(1)+C(2)*$ |
|  | 0.00 | -0.08 | rate Process variable | specialized banks to liquidity | $INF+C(3)*(@TREND)$ |
|  | 0.00 | 0.67 |  |  |  |

Alternatively the sub-hypotheses are as follow:

$H_1$: There is a significant correlation between inflation and decrease in absorbed deposits in banking system.

$H_0$: There is not significant correlation between inflation and absorbed deposits in banking system.

$H_1$: There is a significant correlation between inflation and absorbed deposits in banking system.

$H_2$: Inflation has a significant correlation with the decrease in banks' loaning capacity.

$H_0$: Inflation has not a significant correlation with the decrease in banks' loaning capacity.

$H_0$: P=0

$H_1$: P=0

$H_0$: P=0

$H_2$: P=0

**Testing of the First Sub-Hypothesis:** Eviews software application was used to test the first sub-hypothesis (reliability=95%, significance=5%). Findings from the statistical test for the first hypothesis in lieu of types of deposits are as follows.

**Summary of Findings Related to the First Sub-hypothesis:** Table 3 summarizes the findings related to the first sub-hypothesis.

**Testing of Second Sub-hypothesis:** Inflation has a significant correlation with the decrease in banks' loaning capacity.

$H_0$: P=0

$H_2$: P=0

Table 3: Correlation coefficient of banking variables and inflation rate

| correlation coefficient of banking variables and inflation rate | banking variables | Row |
|---|---|---|
| - 0.60 | sight deposit | 1 |
| -0.58 | Interest-free and savings deposits | 2 |
| - 0.53 | Short-term investment deposit | 3 |
| - 0.58 | Long-term investment deposit | 4 |
| - 0.58 | Total deposit in commercial banks | 5 |
| -0.58 | Total deposits in specialized banks | 6 |
| - 0.54 | Short-term deposit growth rate | 7 |
| - 0.58 | Bank deposits | 10 |
| - 0.43 | Long-term deposit growth rate | 1 |

Table 4: The results of testing second hypothesis

| R-Squared | Slope significant | Slop coefficient | independent variables | Dependent variable | PATTERNS |
|---|---|---|---|---|---|
| 0.19 | 0.0047 | -16.77 | Inflation rate in one year delay | Total facilities | TL=C(1)+C(2)*INF(-1) |
| 0.21 | 0.048 | -0.46 | Inflation rate | Ratio total facilities to liquidity | TL*100/LIQ=C(1)+C(2)*INF |
| 0.48 | 0.0014 | -0.65 | Inflation rate in one year delay | Ratio total facilities to liquidity | TL*100/LIQ= C(1)+C(2)*INF(-1) |
| 0.82 | 0.66 | -29.1 | Width of origin Inflation rate | Real value facilities commercial | LOTJ*100/CPI =C(1)+C(2)*INF |
|  | 0.009 | -4.86 | delay Growth liquidity Process | banks | (-1)+C(3)*GLIQ+C(4)*(@TREND) |
|  | 0.004 | 8.3 | variable |  |  |
|  | 0.00 | 15 |  |  |  |
| 0.81 | 0.28 | -28 | Width of origin Inflation pure | Real value facilities specialized | 100*LOTKH/CPI=C(1)+C(2)* |
|  | 0.089 | -1.21 | rate Growth liquidity Process | banks | (INF–ST)+C(3)*GLIQ +C |
|  | 0.047 | 2.13 | variable |  | (4)*(@TREND) |
|  | 0.00 | 6.76 |  |  |  |
| 0.89 | 0.99 | -0.34 | Width of origin Inflation rate | Real value facilities specialized | 100*LOTKH/CPI =C(1)+C(2)* |
|  | 0.00 | -1.93 | delay Growth liquidity Variable | banks | INF(-1)+C(3)* |
|  | 0.00 | 2.42 |  |  | GLIQ+C(4)*(@TREND) |
|  | 0.00 | 6.69 |  |  |  |

Table 5: Correlation coefficient of banking variables and inflation rate

| correlation coefficient of banking variables and inflation rate | banking variables | row |
|---|---|---|
| - 0.57 | Total bank facilities | 2 |
| - 0.56 | Facilities granted by commercial banks | 3 |
| - 0.59 | Facilities granted by specialized banks | 4 |

Table 6: The results of main hypothesis

| PATTERNS | Adj.R-Squared | Slope significant | Confidence level | Slops coefficient | Result |
|---|---|---|---|---|---|
| MEANING FUL |  |  |  |  |  |
| DTKH*100/LIQ= C(1) + C(2)*INF + C(3)*(@TREND) | 0.97 | 0.00 | %95 and upper | -0.08 | $H_1$accepted |
| DTKH*100/LIQ= C(1) + C(2)*(INF-ss) +C(3)*(@TREND) | 0.97 | 0.00 |  | -0.08 | $H_1$accepted |
| DTJ*100/CPI=C(1) +C(2)*(INF-SS) + C(3)*GLIQ | 0.57 | 0.00 |  | -7.12 | $H_1$accepted |
| 100*LOTKH/CPI=C(1)+C(2)*INF(-1) +C(3)*GLIQ+C(4)*(@TREND) | 0.89 | 0.00 |  | -1.93 | $H_1$accepted |
| DTKH*100/LIQ=C(1)+C(2)*INF+C(3)*GLIQ+C(4)*(@TREND) | 0.98 | 0.002 |  | -0.06 | $H_1$accepted |
| LOTJ*100/CPI=C(1)+C(2)*INF(-1)+C(3)*GLIQ+C(4)*(@TREND) | 0.82 | 0.009 |  | -1.93 | $H_1$accepted |
| DTJ*100/CPI=C(1)+C(2)*INF(-1)+C(3)*GLIQ+C(4)*(@TREND) | 0.86 | 0.016 |  | -3.6 | $H_1$accepted |
| @MOVAV(TD,4) = C(1)+C(2)*INF+C(3)*LIQ | 0.996 | 0.03 |  | -1.11 | $H_1$accepted |
| @MOVAV(DTJ, 3) = C(1)+C(2)*INF+C(3)*LIQ | 0.994 | 0.05 |  | -1.12 | $H_1$accepted |
|  |  | Weak meaning |  |  |  |
| 100*LOTKH/CPI=C(1)+C(2)*(INF-ST)+C(3)*GLIQ+C(4)*(@TREND) | 0.81 | 0.089 | Amount %90 and less than %95 | -1.21 | $H_1$ weak meaning |
| TD=C(1) + C (2)*LIQ + C(3)*INF +C (4)*(@TREND) | 0.999 | 0.089 |  | -0.61 |  |
| DJT*100/CPI+C(1) +C(2)*INF + C(3)*GLIQ+C(4)*(@TREND) | 0.82 | 0.09 |  | -2.7 |  |
|  |  | Meaning less |  |  |  |
| TD=C(1) + C (2)*LIQ + C(3)*INF | 0.996 | 0.14 | Bottom90 | -0.88 | $H_0$accepted |

Eviews software application was used to test the first hypothesis (reliability=95%, significance=5%). Findings from the statistical test for the first hypothesis in lieu of types of deposits are as follows.

**Summary of Findings of Second Sub-hypothesis:** Table 5 summarizes the findings related to the second hypothesis.

**Testing of the Main Hypothesis:** Increase of inflation rate significantly decreases banking system performance. In order to draw final conclusion and finally to conclude about main hypothesis, first of all, the researchers put aside models with low Adj.R-squared coefficient as a low coefficient shows incompleteness of the model and its low explanation capacity. Thus, other explanatory variables should be included in the model. We categorize models with Adj.R-squared coefficient of above 0.6 into three categories (high significance for inflation, low significance for inflation and insignificance for inflation.

Correlation coefficient of inflation variable with banking performance variables (deposit absorption variable and facilities grant variable) in the above table show indirect, direct or negative correlations between the variables (except deposits at sight).

By virtue of the results gained through the aforementioned fitted models, absorbed deposits including long-term, short-term and interest-free and total deposits in commercial and specialized banks significantly correlate with inflation rate in the first hypothesis. In other words, the more the inflation rate the less will be investor's inclination to deposit in banks. The reason can be that in stabilized conditions of interest rates, increase of inflation rate results in negative real interest rates of banks and investors, instead of depositing in banks, are apt to engage in usury or purchase coins and foreign currency.

By virtue of the results gained through the aforementioned fitted models, facilities granted by commercial and specialized banks significantly correlate with inflation rate. In other words, as inflation rate increases, the people lose their inclination to invest in the banks and no capital is formed to be paid to applicants. Thus, facilities grant is indirectly affected by inflation and decrease of interest rates.

## CONCLUSION

By virtue of the results of fitted models and the above categorization, it can be said that:

Since, first, not all of the models had high significance and second, gradient of fully significant models was low, say in the above fully significant model the highest gradient was 7.12, it can be said that increase of net inflation rate for 1% only decreases 7% of real value of deposits in commercial banks. The results of the present research show that banking system was affected by inflation in terms of deposit absorption and facilities grant during 1990 to 2009, but the correlation cannot robustly be confirmed. Thus, it can be occluded that the effect of inflation on banking system in Iran is not like that in the developed countries where negative correlation between inflation and absorbed deposit and granted facilities has been documented. The reason is comprehensively explained as follows:

From theoretical point of view, if the decreased interest rate of bank deposits due to decrease of overall interest rate cannot suffice money value decrease, that is, it is less than inflation rate, depositors withdraw their deposits from banking system and invest in usury markets where interest rate is high or other markets like foreign currency, gold, housing etc. As a result, resources of banks diminish and their profitability decreases. Although decrease of interest rate of deposits and interest rate of facilities in a simultaneous way has no bearing on the profit margin of banks, but, facilities resources of banks decrease gradually due to withdrawal of deposits and bank's profits decrease. But this logic is correct in a competitive market with an open economy. The study of depositors' behaviors and changes in liquidity components in oil-oriented governmental economy of Iran in post-war era depicts a different picture. According to the statistics of Central Bank, liquidity increased from 18750 billion Rials in 1990 to 1640000 billion Rials till the end of 2009, i.e. it increased 87 times. Naturally, inflation rate during the period, with some ups and downs, had always two digits, mostly more than interest rates. Yet, time deposits increased more than tangible money which shows people's inclination towards time deposits, especially short-term deposits (more than 50% of all the deposits) which had negative interest rates.

Although interest rates of deposits in governmental banks especially that of short-term deposits, were lower than inflation rate, 93% of liquidity was absorbed in banking system and the ration of time deposits to sight deposits permanently increased. Thus, the experience of governmental economy in Iran in 28 years runs counter the cause-effect relationship between depositing and variables of bank interest rate and inflation showing that:

First, during the years under study that inflation rate was higher than interest rate, investments increased and depositors bore loss. This shows the inefficacy of governmental economy that has established monopoly in all the domains, that is, there are no alternatives for people to pass their deposits to other markets. However, in modern banking system and in open and competitive economies interest rate and inflation are defined in terms of each other.

Second, other economic and non-economic factors were effective on the amount of deposits. For example, the relationship between income and depositing volume cannot be ignored. Also, other factors like illegality of usury markets and lack of familiarity of most of the depositors with stock market and the high risk of gold, foreign currency and the like markets should be taken into account. Nowadays, given the comprehensive principle 44 policies and the expectations to have boom in the stock market, if interest rate of deposits and interest rate of facilities are decreased simultaneously, part of deposits shall be transferred to capital and stock markets which in turn can develop capital market and production sector. Of course, large deposits are more tensile than limited ones.

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