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# The Effect of Internal and External Factors on Outstanding Claims of Banks (Case Study of Listed Banks on the Tehran Stock Exchange)

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#### **ABSTRACT**

The purpose of this paper is to examine the impact of internal and external factors on the ratio of outstanding claims in those banks which are accepted in Tehran Stock Exchange. For this purpose, we used the data obtained from 8 banks and credit institution active in the Tehran Stock Exchange and using data regression panel. The present survey was examined over the period 2011 till 2015. The study includes three external variables (inflation, GDP and interest rates) and two internal variables (rate of return on assets and the size of the bank)

The results of the hypothesis study showed that the rate of inflation, GDP and asset returns had significant negative effect on the ratio of outstanding claims. The results also showed a positive significant impact of the interest rates on outstanding claims, but there was no evidence to prove a significant impact of the banks size on outstanding claims.

### 1. Introduction

As the main symbol of the money market, banks and financial institutions, can play an important role in the cash and credit flow and consequently, in economic growth and development, in Iran. What is certain is that, due to the fundamental role of the business, poor performance can lead to negative results and irregularities in macro-economic variables. How to take back granted sources has been one of the main interests of banks and supervisory authorities of these institutions are concerned about this phenomenon. The problem which the banking system currently is facing and bank managers consider it as the main concern is as follow: which remedy is needed for resolving banks needs like increased outstanding claims during recent years. Unfortunately, its adverse effects can be seen clearly in Iran such as lack of liquidity, lack of access to funds business, stopping the production cycle.

Since economy in Iran is a bank-centered one in which bank plays a fundamental role in financing aspect of economy, instability in the banking system could lead to instability and crisis in the economy in general. Hence in our country, the need for careful and thorough scrutiny and Non-Current demands), and outstanding claims and doubtful ones, etc.) is felt. On the other hand, one of the features in the macroeconomic environment is the volatility of macroeconomic

variables and uncertainty caused by it where the economic actors always involved in it. This is also one of the most vulnerable parts of the Iranian economy with the need for scientific and precise studies around it. Banks, Credit and financial institutions are the most important economic sectors that facilitate trade and commerce by leaving guidance and management on payments, and make the development of markets and economic growth and prosperity. Because of the important role of banks, assessing the skills and knowledge on factors affecting the level of banking efficiency and decrease the functional cost of these important institutions and policies in order to improve the economic section, is one of development requirements.

## 2. Problem statement and the importance of the issue

Undoubtedly, one of the basic conditions for economic development in a country is economic stability and creating an atmosphere of confidence in it. In contrast, uncertain macroeconomic will disrupt any related activity by influencing the allocation of resources in the short and longterm horizon. So, the latter economic factors may fluctuate decisions and impair their economic decisions and have to be continuously adjusted. In such circumstances, none of the economic factors had clear view on future. Certainly, this is the most prominent issue in financial and monetary economics, because monetary and financial institutions are highly sensitive to uncertainty because it is a part of the capital market. This is especially evident in developing countries in which the modern financial markets such as the stock market are not well-established and does not reached enough growth, so further economic burden is on the shoulders of bank financing alone. Accordingly, in the prevailing uncertain macroeconomic and fluctuating climate, monetary and banking sector face problems and inefficiencies which will also be an outstanding example of this inefficiency of the growing demands of Non-Current statistics on the banks in developing countries. Although factors such as industrialization of societies beside development and transformation of social activities are the main causes of emergence of new needs as a result of activity of factors in developing effective financial institutions, but economic developments are also one of the most important factors in the development and transformation of these institutions. In fact, financial institutions have been established to facilitate the development of other economic institutions, and therefore, such institutions and financial markets can be developed as well as using new methods which are directly related to the degree of modernization of a country. In this context, the absorption of financial resources and effective competence in absorption of them done by different groups of banks, financial and credit institutions are of the main importance that had been addressed. Of course, even after the revolution of Islamic republic of Iran, by eliminating private banks, all banking groups were under the supervision of the government, they more or less started to compete with each other to attract extra financial resources. Today, except for competition between public and private banking, the creation of new private banks, financial institutions and the new credit and loan institutions in addition to the expansion of the scope and purpose of the banking system, influence the country to absorb the financial resources [14].

The other main issue in the monetary and banking systems is the financial resource mobilization and allocation and distribution of the different economic sectors between economic actors, which routes the volume of available money into the economic system and its turn. According

to the task of mobilizing financial resources and proper allocation of the banking system in the economic system, as more banking system acts efficiently in mobilizing and allocating financial resources to in the competitive environment, reducing production costs and improving production and employment growth in economic occurs; Otherwise, the lack of efficiency of the banking system in mobilizing and allocating financial resources, leads to the waste of resources and aggravating the economic downturn [13]. Investors with a clearly defined purpose program take facilities from banks due to economic conditions and made forecasts. In fact, investors have long-term vision to this subject, because some time should be elapsed since the initial investment plan step up to productivity and profitability. Meanwhile, macroeconomic policies may be adopted in the financial sphere, provide detrimental that conditions to the profitability of investments and the customer fails to meet its obligations to the banking system which is the main reason for lack of timely payment of installments and converting them into outstanding claims. If the facilities became outstanding at the final stage and vanish, the biggest loss is imposed to bank, because if a bank customer wants to cash collateral, it will have to bear the financial costs and time, with the proviso that the initial payment facility is available. In fact, the outstanding claims of banks born in two parts as follow: the first part, which is voluntary and optional of individual borrower and other, are factors outside the control of borrowers affected by the macroeconomic and financial conditions such as inflation, exchange rates, interest rates and .... So minding and management the area of internal and external factors that affect bank facilities and outstanding claims is essential [7]. The perform wide activities in the field of monetary allocation of credit and lending markets in various industries which given the large number of state banks, private financial institutions and their increasing, also due to the efforts of banks to participate in the stock market and public offering of its shares, volatility and political, economic and social problems... it needs accurate and timely conduction of activities particularly in the major field of facilities, also this management faces a considerable amount of the records of past due receivables and deferred receivables with substantial sums which besides the general issues that create them, it has certain circumstances, such as economic deprivation indices and weaknesses evident in many of the financial and economic measures and money. Therefore, any problem that threatens the repayment of loans will cause the banks and financial institutions to face a problem to provide the required loans. If necessary arrangements for collection of pending and past due date loans are put into practice, a significant portion of the financial crisis and bank credit is resolved. Therefore, the role and importance of credit repayment besides the credits appears more than before. Therefore, any problem that threatens the repayment of loans will cause the banks and financial institutions to face a problem to provide the required loans. If necessary arrangements for collection of pending and past due date loans are put into practice, a significant portion of the financial crisis and bank credit is resolved [1]. One of the research gaps in the field of Non-Current receivables demands in Iran, are obtained from internal and external factors and the effect they have on the outstanding claims of banks. On the other hand, as more economics and management scientists admit, the volatility and uncertainty are powerful factors that can compromise the performance of different parts of a country's economic and administrative performance. In this study, we have tried to clarify the influence of internal and external factors, on evaluating outstanding claims of banks, which is not behavioral one and is fully out of voluntary act of customers.

### 3. Research history

In this section, we are few empirical studies that analyzed the factors affecting the ratio of non-performing loans have not expressed:

Gavin & Haussmann marked those macroeconomic factors that affect the banking crisis for Latin America during the 1990s. According to their findings, domestic interest rates, expected inflation, GDP growth, trade balance, domestic income growth of banking facilities and the exchange rate regime, are among other variables which cause more restriction ability to stop banks in lending facilities. In such serious situations, the banking crisis factors are leading to worsening macroeconomic [8]. In his study investigated the causes of outstanding claims and deferred housing bank facilities during the period 1987-1998 and the factors affecting the development of past receivables and divided it as intra system (the number of branches, deposit amount, amount of facilities, annual average number of employees of branches and service branch officials) and extra system (unorganized money market interest rates and inflation). The results show that the performance of subsidiaries, branches and employees per capita, average work experience of high officials of the branches are effective in outstanding claims and each variables of inflation rates, interest rates and market interest rates beside 6% penalty plus market interest rate, has the significant correlation with outstanding claims. The results of this study support the hypothesis has been confirmed that differences in interest rates in leading to a delay in payments from customers [17].

Fofack examined deferred debt issue in a series of African countries where economic crisis was affecting the country's economy and banking efficiency during 1990s. The results of his study, shows causality between these loans with strong economic growth, the real exchange rate, real interest rate and boosting the value of the national currency. Significant increases over the non-current demands confirm those macro-economic fluctuations that reflect the strong influence of external shocks to the economy of these countries. In addition, the findings of this study confirm that macroeconomic stability and economic growth are associated with lower levels of non-current receivables. He also found that along the increase in GDP and people with higher per capita income, non-current receivables of banks will decrease. Also, interest rates and inflation in addition to the amount of non-current receivables is effective in this area. However, its effect is less compared to GDP growth [6].

Babouček and Jančar took monthly data from the Czech banking sector (1993 to 2005), and then used the VAR model to measure the impact of economic shocks on the quality of the loans. The ratio of overdue loans to total loans is considered as an indicator for the quality of them. According to the model, it has been confirmed that there is a strong relationship between economic variables based on the quality of immediate reaction loans. Variables such as unemployment, the consumer price index and credit risk shocks and the real exchange rate whether increasing or decreasing, causes outstanding claims. Also, the stress test was used to measure and limit the effects of fragility in the banking sector in the Czech economy. Acceleration of Non-Current receivables rate (NPL), high unemployment, inflation expectations, were important warning indicators to identify the status of the credit portfolio. Like other stress tests, it is found that the banking system's stability depends on the stability of prices and economic growth [2].

Kroszner has investigated the relationship between loans and macroeconomic factors in 15 banks in Bangladesh. In the so called study, he investigated the relationship between outstanding

loans, macro-economic factors with financial elements in some Bangladeshi banks. The empirical analysis of this study is to assess how non-current loans of the banks affected by economic and financial factors, which include: credit conditions, the priorities of the bank's risk and macroeconomic shocks. According to research results, variable like size and maturity of bank and loans have a negative impact on Non-current loans and the rest of the factors have not significant effect on the dependent variable [5] have done a study on banking crises and financial dependence and economic growth, in his article, he examined the mechanisms that links banking crisis to the real sector of the working economy [11].

Bahmani in his study entitled "Managing the demands of outstanding claims" pointing the negative effects of the monetary system of the country, collects prevention strategies to it. At first he deals with statistical analysis of banks' resources and increasing demands and concludes that outstanding claims lead to a reduction in bank resources. And consequently, reduces credit and at last, creates a gap between demand and supply of money in the banking system which will boost interest rates in the informal money market. This will make extra demands for the facilities and eventually will lead to a further increase in outstanding claims. Berger et al. in examining 8235 banks distributed in 23 countries found that increased market power of banks, improves their loan portfolios quality and reduce their outstanding claims. They were introduced in their analysis although it is true that increasing competition has increased default risk loans, but such banks have a better stability in general. The reasons are considered to increase their reserves, the banks and the use of risk mitigation techniques [3].

Kurdbacheh and Nooshabadi in examining relationship between competition and stability of the banks found that the indicators of bank concentration are inversely related and outstanding claims as a representative of the bank's stability. In this study, the Turkish banking system in the period (2008-1990) was investigated, other indices also are examined to reach stability in this study whose results are appear to be somewhat contradictory [16].

at the "3<sup>rd</sup> International Conference on trade, banking and finance" the survey of Khamraj and Pasha was introduced which provided to the investigate factors influencing the Non-Current demands. This study was done on some number of Guyana banks using a panel data model and was based on fixed effects. The research results will be in consistent with international evidence, and show that a real effective exchange rate has a significant positive effect on non-current receivables, meaning, when an increase in the value of the national currency occurs, the balance of non-current debt in commercial banks increases too. His justification for this state is due to this fact that most of Gvana people earn income from the export of agricultural products, with the increase of national currency coming from foreign exchange value gained from exports, less money incomes reaches the population, resulting in reduced ability to repay their obligations [9]. in their study entitled "determine the factors affecting the banking industry's outstanding claims" used a dynamic panel model for a sample of 12 banks during the period 2003 to 2009. Their estimates showed a significant survival results in outstanding claims treated in such a way that its development has caused the growth of the previous ones [16].

According to the research findings non-performing loans are increasing due to lack of risk management, which threatens the profitability of banks. This study provides suggestion that banking sector can avoid their non-performing loans by adopting methods suggested by the central bank of perspective country [5].

To bit simultaneous equation regression results clearly indicate that higher non-performing loan reduces cost efficiency and lower cost efficiency increases non-performing loans. The result also support the hypothesis of bad management proposed by Berger and De Young that poor management in the banking institutions results in bad quality loans, and therefore, escalates the level of non-performing loans [1].

Haneef and Riaz in an empirical study on bank efficiency found that countries with Islamic banking system do not necessarily display efficiency scores superior to the average. He inferred that the subprime crisis seems to have impacted those banks indirectly. He concluded that Islamic banks do not benefit from scale economy [5].

Beck et al. who compared the business orientation, efficiency and stability between conventional banks and Islamic banks? T test of the Z score between Islamic and conventional banks shows that Islamic banks have significantly lower Z score than conventional banks. However, when other factors are controlled, most of the result shows that no significant difference between these two banking systems. On the other hand, Beck et al used NPL as a proxy of asset quality across these two banking systems. They find that NPL of Islamic banks have consistently lower value than conventional banks, indicating that Islamic banks have lower credit risk [4].

Factors such as inefficient of customer validation system, mismanagement, inefficient of financial management system, inadequate monitoring in collecting financial claims (internal factors), economic sanctions, imperative interest rates, have to pay bank loans, unfavorable business environment and inefficiency of the judicial system (external factors) have tremendous impact on the outstanding claims [1].

#### 4. Purpose of the study

The aim of this study was to evaluate the impact of internal and external factors on the ratio of outstanding bank claims of accepted banks in Tehran Stock Exchange. The ratio of overdue receivables to total is one of the bank health measurements. So, the secondary objectives of this study includes the impact of fluctuations in the rate of inflation, GDP and interest rates as external factors and the size of the bank and the rate of return on assets as internal factors that mentioned to have an effect on banks and increased rates on their outstanding claims. These findings can be useful to economic policy makers and the Board of Directors and the Executive Office in implementing regulations on pending collection and help identify the causes of its increase as well as providing the new index for potential and current shareholders.

### 5. Research Methodology

This article seeks to examine the question of what is the effect of internal and external factors on the ratio of outstanding claims of accepted banks in Tehran Stock Exchange. If there is a relationship, how is it? The study is an empirical research according to data collection in a descriptive manner based on regression analysis, although its goal is considered to be developmental. Research model and variables used in it are as follow:

### 5.1 Definition of concepts and variables:

Based on internal and external research, the present study seeks to examine effect of internal and external factors on the ratio of outstanding claims of accepted banks in Tehran Stock Ex-

change. The variables examined in this study are defined as follow:

- 1. **Proportion of overdue receivables (NPL):** The ratio of paid debt to total outstanding bank loans. Central Bank in a Circular dated February 24<sup>th</sup>, 2007 equal to 2006 divided the assets of banks and non-bank credit institutions into four groups according to their quality such as: current, past due, overdue and bad states.
- A) **Current class:** A demand which its repayment of principal and interest are exactly in maturities or has passed more than 2 months of maturity.
- B) **Maturity class**: claims that over 2 months has passed from due date or the date of cessation of payments of the principal and interest, but the delay in payment is still not exceeding 6 months. In this case, only the amount of matured loans transferred to this class.
- C) **Deferred class**: principal and profit facilities which their due date or the date of payment has passed more than 6 and less than 18 months and the customer has no intention to pay claims nor credits to institutions.
- D) **Bad class**: claims that more than 18 months has passed from all principal and interest of due facilities and the customer has not any will to pay claims and credits to institution yet.
- E) **Opportunity facilities**: such facilities are classified in the past and pending maturity type of categories. According to the decisions of the government cabinet on the all opportunity facilities, they are assigned to deferred class and other facilities are put in to the due or maturity ones according to decisive stages.
- 2. **Gross Domestic Product** (**GDP**): one of the measurement scales in an economy. GDP includes the value of all produced goods and services in a country during a specified period, usually a year. In this definition, the purpose of final goods and services, are those that were produced at the end of the chain and they are not purchased to the production of other services. The index has been calculated using the percentage change from the previous year.
- 3. **Inflation (INFLATION):** inflation is the irregular growing of prices in an economy. It implies a situation in which demand for the product generates money grows. A situation in which because of shortage in effective control, the increase in the price of a unit of produced product is evident. Inflation usually is associated with increasing the general level of prices, actual or potential, or in other words, reducing the purchasing power of the monetary unit. The size of this variable is calculated by the central bank annually.
- 4. Facility interest rate (RATE): Expected interest rate loans announced by the central bank.
- 5. **Return on assets (ROA):** indicates the efficient management of the assets in order to generate profit (productive assets), which is calculated by dividing the annual profit to total assets. This is the ratio of operating profit linking to total resources that are managed by banks or the ratio of net income to assess the functionality and power management will be created using the assessment.

6. (**L.SIZE**): The size of the bank is evaluated by total assets of the bank. Its importance is due to fact of being a relationship between the stock ownership structure and access to capital. Bank access to equity capital could increase the resilience of banks against bankruptcy costs, resulting in larger banks due to easier access to capital markets and having a more diverse portfolio require less capital requirements. Bank assets are measured from the natural logarithm.

### 5.2 Research time and space

The realms of the present research are all banks listed in the Tehran Stock Exchange, and the scope of the research is a 5 years' period from 2011 to 2015.

#### Population and sampling

The population consists of all banks listed on Tehran Stock Exchange from 2011 to 2015, when their shares are selected to actively trade in the stock exchange market.

Sampling is done in FA (screening) model in which the studied sample banks have such features:

- \*Attend in stock in the period from 2011 to 2015.
- \* Has been accepted in Tehran Stock Exchange By the end of March 2011, when their financial year is equivalent to the end of March.
- \*banks should not change their fiscal year during the so called period.
- \* Present financial information needed to carry out research in 2011 to 2015 period and be fully profitable.
- \*sample (banks) should not be losing in two consecutive years.

Due to the restrictions, 8 banks were selected as examples as follows.

Table 1: sample

Row	Bank	Row	Bank
1	Egtesad Novin	5	Tejarat
2	Ansar	6	Saderat
3	Parsian	11 11 17 17 1	Mellat
4	Pasargad	8	Karafarin

# 5-3 Collecting and analyzing data

For this purpose, theoretical discussions and literature of library research (library section, theoretical studies and specialized journals, Persian and Latin books, Journals and articles and previous written thesis selected as agenda) were used. Then the collected data entered in Excel spreadsheet software and classified by EVIEWS econometric analysis and estimates have been made on them, and then using conventional statistical indicators, the results of the analysis estimates were used to test the hypothesis of regression and correlation. Significance of the models was proved using the test F, test T, coefficient of determination, correlation and the Watson camera test measure and because of the type of data and methods of statistical analysis, the method of combined data (panel data) is used . In order to determine the effect of internal and

external factors on outstanding claims of banks, dependent and independent variables are examined from two different perspectives, in one of which, these variables are tested at various 5 years period. Regression model used is as follows:

NPL<sub>it</sub> = 
$$\alpha_0 + \beta_1$$
Inflation +  $\beta_2$ Gdp +  $\beta_3$ Rate +  $\beta_4$ Roa<sub>it</sub> +  $\beta_5$ Size<sub>it</sub> + e<sub>i,t</sub>

Where in:

NPL: the ratio of non-performing loans

Rate: credit rate Roa: return on assets

Size: the natural logarithm of the total assets (size bank)

### **Hypotheses**

According to the theoretical principles presented in the previous parts of review of literature, this study has one main hypothesis and five sub-hypothesis as follow:

### **✓** The main hypothesis:

There is a significant relationship between internal and external factors and outstanding claims.

#### ✓ sub hypothesis:

- There is a significant relationship between inflation and outstanding claims.
- There is a significant relationship between fluctuations in GDP and outstanding claims of banks.
- There is a significant relationship between interest rates and outstanding claims.
- There is a significant relationship between Company Size and outstanding claims.
- There is a significant relationship between return on assets and outstanding claims.

#### 6. Results and analysis of the research

#### **6.1** Analysis of Descriptive statistics:

Features of the variables used in the study, including dependent, independent and control variables are shown in Table 2. Statistical information on data variables during the intended period is calculated using formulas specified to each index. According to the research theory, the study of one main hypothesis and three sub-hypothesis is considered.

Table 2. Summary descriptive statistics used in research

	NPL	INFLATION	GDP	RATES	ROA	L_SIZE
Mean	11.95	23.57	1.25	13.82	2.11	8.48
Median	12.44	21.50	1.26	14.00	2.00	8.00
Maximum	24.58	34.70	6.48	15.00	4.00	9.00
Minimum	2.50	10.80	-6.78	12.00	1.00	8.00
Std. Dev.	6.33	9.23	4.88	1.31	1.27	0.50

According to the descriptive statistics, more than 25.58% of the outstanding issues are related to the Egtesade Novin Bank in 2011 and the lowest amount is 2.5% in 2013 which is related to the Ansar bank.

#### 6.2 Limer F test and Hausman test

In the econometric literature on compilation of patterns, comparing the patterns of common and constant coefficients in which the first one is called co-joint and the second intercepting method variables was held. One of these two models was chosen to analyze the assumptions. To select any of these equations, the possible explanation is using F statistics. If the level of significance (p- value) in F statistics is larger than 05/0 co-intercept method is selected and if the probability of F statistics is smaller than 05/0 it should be used fixed Hausman test and random effect models to analyze them. To choose Common effects between methods (methods of data compilation) and fixed effects (using panel data) Lymer F test is used. According to Table 3, there is a statistical significance level of 0.000 in the sample, meaning that statistics are confirmed by panel data. As a result, Hausman test is used to check whether the estimated fixed effects or random effects model are suitable or not? Given the level of error in Table 4, it is clear that Hausman statistic result is less than 5%, thus the fixed effects will be the most appropriate method for estimating the regression model.

Table 3: Limer F test

Test	Statistic	Prob	Test result
Cross-section F	47.3	0.000	Panel data

Source: Calculations researcher

Table 4: Hausman test

Test	Statistic	prob	Test result
Hausman Test	2.17	0.02	fixed effects

Source: Calculations researcher

# 6.3 Testing and analysing the assumption

In this section the results of any of the assumptions in data Panel regression models are evaluated and the overall result is calculated for each model.

**Table 5:** Hypothesis Results

Dependent Variable: NPL				
Method: Panel EGLS (Cro				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-53.14	22.07	-2.407	0.024
INFLATION	-0.96	0.306	-3.148	0.004
GDP	-0.34	0.131	-2.641	0.014

RATES	6.28	1.957	3.209	0.004
ROA	-1.06	0.347	-3.062	0.005
L_SIZE	0.43	0.851	0.510	0.61
R-squared	0.96	Prob(F-statistic)		0.00
Adjusted R-squared	0.95	Durbin-Watson stat		2.25

According to the table 5 in the research model, the adjusted coefficient of determination is equal to 0.9530 which indicates that 95.30% of the outstanding claims of banks will be explained by the changes occurred in independent and control variables. The significant level of statistic F is equal to 0.000, which represents the meaningfulness of the model. Durbin Watson statistic is 2.25, which indicates the absence of autocorrelation between model wastes.

According to the results of the research and Assumptions secondary research results of the research model it can be concluded That a significant relationship between internal and external factors in the bank's non-performing loans ratio 95% confidence level is so main hypothesis is confirmed. The regression equation is as follows:

$$NPL = -53.14 - 0.96Inflation -0.34Gdp + 6.28Rate -1.06Roa$$

**Testing** the first sub-hypothesis: the presence of a significant relationship between the rate of inflation with the ratio of outstanding claims

The results showed that there is a significant relationship in the rate of inflation less than 5% error level with outstanding claims and given that the negative differential (0.96), it is concluded that the change (increase / decrease) in the rate of inflation by one percent, changes the amount of outstanding claims (0.96), (decrease / increase). So at the 95 percent confidence level it can be argued that there is a significant negative relationship between two variables, so the first hypothesis is confirmed.

**Testing the second sub-hypothesis:** There is a significant relationship between fluctuations in GDP and outstanding claims of banks.

The results showed that there is a significant relationship between the GDP and outstanding claims at the level of error of less than 5%, and given that the negative differential (0.34) is a result of the change (increase / decrease) in GDP by one percent, the amount of outstanding receivables (0.34), (decrease / increase) change too, so at the level of 95 percent it can be argued that there is a significant negative relationship between two variables, so the second hypothesis is confirmed.

**The third sub-hypothesis:** There is a significant relationship between interest rates and outstanding claims

The results suggest that there is a significant relationship between the interest rate on the outstanding claims facility with an error of less than 5%, Since the variable rate is 6.28, it is con-

cluded that by changing (increase / decrease) in interest rates by one percent, the amount equality demands change of 6.28, it can be claim that at 95 percent confidence level , there is a significant positive correlation between the two variables that interest rates increases outstanding claims therefore the third hypothesis is confirmed.

**The fourth sub-hypothesis:** There is a significant relationship between Company Size and outstanding claims.

The first internal variable test results indicate that there is a significant relationship between the rate of return on assets, the ratio of outstanding claims at the level of less than 5%, error and given that the negative differential (1.06) return on assets is a result of the adverse effects of outstanding claims, it will therefore increase the rate of return on decreased assets, the fourth assumption will be confirmed.

**The fifth sub-hypothesis:** There is a significant relationship between return on assets and outstanding claims.

The second local variable test results indicate that there is no significant relationship between the size of banks and outstanding claims in error less than 5% error, and given that the variable factor is(0.43), it can be concluded that the bank size has no impact on the amount of outstanding claims, so the fifth research hypothesis is rejected.

#### 7. Discussion and Conclusion

As the main sources of financing for enterprises in the country, banks are enjoying special place in the capital market. The financial power of banks in meeting financial needs is in the form of significant economic activity will affect the performance of firms. Hence, paying attention to efficiency and effectiveness of such financial system is of particular importance in the economy. Unfortunately, despite the importance of banking financial system, a growing dissatisfaction with the lack of liquidity and inability of producers to banks in meeting their financial needs has been seen in recent years, This is true even though this year the amount of liquidity available in the country is far more than the previous one. Experts believe that one of the most important factors in reducing the banks' loans is the increase in bank outstanding claims which has a significant impact on the country's banking system. It can be said that the outstanding claims are of two parts: The first part, is voluntary and optional o borrower and the other is a factors outside borrowers affect like macroeconomic and financial conditions such as inflation, exchange rates, and interest rates and so on. So, minding and managing the field of internal and external factors that affect the banks' loans and outstanding claims, is essential. Test results showed that there is a significant negative correlation between the rate of inflation and changes in GDP assumptions with the ratio of outstanding claims in banks. This means that the increase in inflation and gross domestic product in the community makes lower decline on the level of outstanding claims. Also the facility avail is a significant positive factor. The rate of interest to granted facilities is one of the factors affecting the increase in outstanding claims. However, in recent years interest rate cuts as the recession into account the facilities, but the decline in interest rates has increased the interest rate gap. So like other researches (Heidari et al., [7]), we can conclude that the decline in interest rates has reduced the outstanding claims. It can be also said that in other macro variables, the rate of inflation has a significant negative coefficient with domestic products' gross changes.

### 8. Proposals based on the results

Internal and external conditions will have different effects on banks' outstanding claims. Results emphasize that with reducing outstanding claims, the stability of the monetary and fiscal policies increases. Also, avoid creating rents in the economy in order to reduce the interest rate on the facility, the independence of the central bank on having more control over liquidity and inflation, leads to reduced outstanding claims or will remain them constant. Alternatively, at the micro level, technical and economic evaluation of the banks project for lending, needs to be considered to change macroeconomic variables. According to forecasts related to the granting of loans, the facilities resources should be made in such a way that expected profit will be reversible.

The government holds a major share of the economy in Iran. One of the main reasons of Non-Current demands on banks is the budget deficit and volatility. When the demands of the private sector will become a Non-Current Assets in the public sector due to government budget deficit, it will affect the ability to repay debts and loans in the private sector. To acknowledgment of many economic authorities, economic actors are not able to repay their debt in many cases because of the inconvenience caused by receiving no demands from government agencies and other economic elements. Consequently, it is recommended that the government in the budget process and annual budgeting make a stable program and adopt the budget in such a way that the reliability and certainty of the non-governmental sector will be inevitable.

Capital levels and their projected trends are important inputs to determining the scope of NPL reduction actions available to banks. Banks should be able to dynamically model the capital implications of the different elements to their NPL strategy, ideally under different economic scenarios. Those implications should also be considered in conjunction with the risk appetite framework (RAF) as well as the internal capital adequacy assessment process (ICAAP).

An NPL strategy should encompass, at a minimum, time-bound quantitative NPL targets supported by a corresponding comprehensive operational plan. It should be based on a self-assessment and an analysis of NPL strategy implementation options. The NPL strategy, including the operational plan, should be approved by the management body and reviewed at least annually.

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