Performance of Monetary Policy Under the Interest Free Banking Law in Iran, (1972-2010)*

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Abstract

The conventional wisdom in economic theory prescribes that the major role of the Central Bank is to design and conduct active monetary policy aiming at curbing inflation and achieving the price stability. After half a century of endeavors in attaining this target, Central Bank of the Islamic Republic of Iran has gone through tumultuous periods gaining mixed results in its efforts. The assessment of the performance of the Central Bank of the Islamic Republic of Iran (CBI) is also important from another aspect which is the experience of Central Bank in implementation of Shariah-based Islamic banking in Iran. The Usury (interest) Free Banking Law of Iran was legislated a few years after the Islamic Revolution of 1979 and opened a new horizon in the banking practices in Iran. Since the main purpose of this study is to evaluate and compare the performance of the central Bank of Iran primarily on inflation rate under the two specific Money and Banking Laws, therefore, we will not deal explicitly with the theoretical aspects of the

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issue. In another word, we assume that the monetary authority has attempted to conduct the monetary policy on the basis of theoretical foundations to achieve low and stable inflation rate. We conclude that in the review period (1972-2010), except for the 3rd Plan period (1379-1383 (2000-2005)), Central Bank of the Islamic Republic of Iran has not had an acceptable progress in attaining the aims of monetary policy. Also, in this study we will analyze challenges ahead of efficient implementation of monetary policy in Iran.

Keywords: *MBLI-72, UFBL-83, monetary policy trends. Macroeconomic conditions, Independency of CBI, expansionary fiscal policy, challenges of banking system*

JEL classification: *E5, E50, E51, E52, E58*

Introduction

Sound macroeconomic design and implementation is important in any country for attaining growth and employment targets and low inflation rate. Stable macroeconomic environment and society welfare enhancement are possible only if appropriate fiscal, monetary, and structural policies are formulated and carried out. In recent decades, the design and implementation of monetary policy have been the main responsibility of the central banks which have been pursued mainly through targeting interest rates.

In setting final targets for monetary policy implementation, most central banks also set intermediate targets. In conventional method, controlling and targeting money supply and interest rates are usually conceived as intermediate target of monetary policy and central banks usually try to attain those targets via open market operations in which central banks normally intervene in bond market by sale and purchase of government bonds (participation papers) and try to affect macroeconomic variables (Pierce and Shaw, 1974, p.425).

In Iran, in accordance with the Usury (interest) Free Banking Law and the verdicts of Shariah in abandoning Riba (Usury), banks are obligated to conform their operations to Shariah principles. In the initial phase of Islamization of banks in 1979, banks revised their operations and avoided using fixed interest rate in their deposit-taking and lending operations. After the legislation of the Usury (interest) Free Banking Lawin 1983, banks shifted their lending operations towards participatory modes of contracts. In consequent years, banks operations were totally transformed from those based on fixed interest rates to those based on profit rates which are extracted from banks operations under Shariah Law.

Considering that any change specially in policymaking process requires a careful scrutiny of operational performance and vulnerability assessment, hence in the current study we try to analyze the impacts of Islamic banking on monetary policy instruments and their effectiveness. We also endeavor to compare Islamic banking practices and conventional banking and their effectiveness for monetary policy operations. To this end, we compare the performance and effectiveness of monetary policy before and after the introduction of Islamic banking and conclude with pointing out the challenges ahead of monetary policy in Iran.

The present paper concentrates mainly in the following six sections:

1) At first, we try to review various theoretical views on the conduct of monetary policy and its effectiveness on the macroeconomic target variables. Even though, our attentions are given to the operational aspects of the monetary policy in Iran since 1972, we intend to emphasize that in the decision making process of the monetary policy in Iran no specific reference is made to a certain theories of the monetary policy.
2) In section two, we try to review the main features of the Money and Banking law of Iran approved in 1351 (1972), which is denoted as MBLI-72, and the emphasis is given to the status of monetary policy and its instruments in this law. Within this context, we try to overview the macroeconomic conditions of the Economy of Iran during the period of 1972-79 in terms of the performances of the major macroeconomic variables. Two special events during this period have taken palace in the economy. The first one is related to the huge increase in oil price and oil revenues at the beginning of the period and the second one is related to the political changes at the end of the period which is leading to the victory of the Islamic revolution. Of course, throughout this review section special attention is given to the monetary policy during the pre-revolutionary period.
3) In the third section, the general environment of the monetary and credit policies in line with the decisions of the government in the early years of the Islamic Revolution, the importance of the Usury (Interest) Free Banking law approved in 1362 (1983), which is denoted as UFBL-83, and the trends of monetary policy and its instruments as well as the performances of the macroeconomic variables during the imposed war of Iraq on Iran are analyzed.

4) In the fourth section, the new approaches of policy makers during the 1st, 2nd, 3rd, and 4th five year development plans and the quality of monetary, credit and banking policies as well as the early reforms in exchange rate policies within the context of gradual macroeconomic policy reforms are briefly reviewed. The role of monetary policy will be critically assessed, too.
5) On the basis of analysis conducted in the previous sections, the fifth part of the paper is devoted to the challenges and problems faced by the monetary authority and banking system. Finally, the issue of the independency of the Central Bank in shaping the monetary and credit policies are taken into account.
6) At last, according to the analysis of the present study in line with the general macroeconomic and monetary policies, some necessary policy actions are recommended.

1. Theoretical Views on the Monetary Policy

During the post WWII period, the effectiveness of both fiscal and monetary policies on achieving the macroeconomic targets was analyzed. On the monetary policy issue, the views of the two major macroeconomic school of thoughts; namely, classical and Keynesian, were clearly discussed in academic and policy making circles.

It was generally accepted that the discretionary fiscal and monetary policies can be applied by authorities to achieve certain goals. But, by the end of 1960s in major industrial economies the inflation became a major policy problem. Under the inflationary environment, views on the conduct of monetary policy either through the "money supply" or "interest rates" as intermediate target variables, were heavily discussed (Saving, 1967). Of course, the role of monetary policy along the line of the so called Phillips curve analysis of the trade off between inflation and unemployed rates gained strong policy attentions (Lipsey, 1960). By moving to the mid 1970s and appearances of unsuccessful evidences on the role of monetary policy in solving the problems of inflation - unemployment in one hand, and the rise of new interpretations of

Friedman (1970) and others in theoretical shortcomings of the Phillips curve issue on the other hand, grounds were prepared for the presence of new theories of monetary policy and its mission on controlling inflation by the new classical (Rational expectations) and new Keynesian economists (Froyen, R., 1996). Although, during the 1970s the effectiveness of monetary policy on inflation rate and other macroeconomic variables over the short-run and long-run were heavily analyzed both in theory and in empirical studies, but one major conclusion was drawn that there is a limit for effectiveness of monetary as well as fiscal policies over time (Melltzer, 1987 and Modigliani, 1977). The rational expectation theory of inflation by relying on the long-run view of Friedman (1969) on the optimum quantity of money, suggested that "anticipated" and "unanticipated" monetary increases over the long run will lead only to inflation and no real effects on economic activities are realized. Such views can be traced in the works of Sargent and Wallace (1981), Barro (1981), Gochoco (1980) and Lucas (1980).

However, there is a general consensus among the economists and the policy makers that the unnecessary increases in money supply will cause inflation and inflation uncertainty which at the end will risk the economic growth. Thus, nowadays it is generally accepted that the optimum monetary policy for low and stable inflation is to follow a rule-based money growth. The view has been accepted by most of the central banks and was adopted in the management of the monetary policy in line with the inflation targeting during the last two-three decades. As a result, the inflation rate in the majority of the countries has declined and kept stable. It is important to note that the credibility of monetary policy in controlling inflation rate was due to rational behavior of the central banks and acceptance of long standing fiscal disciplines on behalf of the governments. This, in fact, is the true policy message of the recent macroeconomic school of thoughts.

By bearing in mind the above theoretical interpretations and practical experiences of inflation and monetary policy, we move into the monetary policy direction in Iran.

The first Money and Banking Law of Iran was passed by law makers in 1972, while enormous power is given to the central bank, at the same time the Law is authorizing the central bank to carry out the monetary policy (Article 10 of MBLI-72) in order to achieve desired level of goals, such as full employment, relative price stability, balance of payments equilibrium and higher economic growth.

The nature of goals set by MBLI-72 was to a larger extent consistent with the economic policy thinking at its time. Although, such economic policy views both in theory and in practice have changed since that time, but not only the policy goal of central bank of Iran has not changed, but several developments (increases in oil revenue in 1973, victory of revolution, imposed war of Iraq on Iran, …) in the past four decades have taken place. These developments have caused the monetary policy in Iran to be overshadowed by fiscal policy and the true role of monetary policy has not been defined neither in law nor in practice. Yet, large amount of studies have shown that the major cause of relatively high and unstable inflation in Iran was due to the continuous expansion of money (liquidity). Even though in some occasions the policy makers have tried to address the problem of inflation through disciplining the monetary policy, but the nature of fiscal dominance due to the role of oil revenue, the monetary policy never could achieve the inflation target during the past 40 years of the economic history of Iran. The trends of liquidity growth, inflation and unemployment rates and the economic growth in the present paper will reveal the failure of the monetary policy. Moreover, this issue can be seen in studies, such as in: Komijani (1994) Komijani and Alavi (2000), Alavi (2001), Komijani and Saifipor (2006), Noferesti (2001), Sharifi, Komijani and Shahrestani (2009), Komijani and Bahramirad (2008).

Of course, further studies in the subjects of money demand function and its stability, the monetary transmission mechanism, role of interest rates vs. the monetary growth, availability of credit, sectoral allocation of the banking resources, and etc; have been done by various authors.

Since we intend to review the effectiveness of monetary policy within the context of MBLI-72 and the Usury (Interest) Free Banking Law (UFBL-83) in the present paper, we confine ourselves to the above brief review of the theoretical developments on the role of monetary policy in controlling inflation.

Finally, we argue that both implicitly and explicitly the major reason for relatively higher inflation in Iran is due to the continuous expansion in liquidity growth without defining a clear and a credible mission for monetary policy. The following sections of the paper concentrate on the operational aspects of the monetary policy in the context of Money and Banking Laws.

2. The Money and Banking Law of Iran Approved in 1972 and the Monetary Policy Instruments

Based on the Money and Banking Law of Iran (MBLI-72), the main functions of the Central Bank as stipulated in this Law are maintaining the value of the currency and equilibrium in the balance of payments, facilitating trade transactions, and assisting economic growth of the country. Moreover, the Law asserts that the Bank has the responsibility of issuing notes and coins, supervising banks and credit institutions, and maintaining and controlling foreign exchange, gold and silver transactions, and capital inflows and outflows. Furthermore, the Law gives the authority of the Central Bank (Article 14 of the Law) to intervene in money market and supervise money and banking institutions to secure appropriate and sound working of the monetary system. Article 14 of the Law gives enormous power to the Central Bank to affect the money market through the following means and instruments:

- Conduct of open market operations;
- Use of the official rediscount rate;
- Determination and use of reserve requirement ratio for banks;
- Setting of restrictions on banks' and financial institutions' total and sectoral lending operations.

2.1. Monetary Policy Instruments

Prior to the Islamic Revolution of 1979, banking system in Iran was working on conventional concepts and instruments, this being mainly related to wide use of interest rate as the major instrument for monetary policy through the following means and tools:

- Conduct of open market operations (Article 12, MBLI-72);
- Use of official rediscount rate (Article 14, MBLI-72);
- Determination and use of interest rate (Article 14, MBLI-72);
- Determination and use of reserve requirement ratio for banks (Article 14, MBLI-72);
- Setting of restrictions on banks' and financial institutions' total and sectoral lending operations (Article 14, MBLI-72).

2.2. Monetary Policy Performance before the Islamic Revolution

At the commencement of the 5th Development Plan (before the 1979 Islamic Revolution), Iran faced a relatively high inflation, which was mostly driven by the upward trend in liquidity provision, and surge in aggregate demand from 1350 (1971/72) onwards. This period coincided with rapid economic growth emanating from unprecedented oil price rise in 1974/75 and almost four-fold increase in oil revenues of the country. The effect of such a jump in government revenues was reflected in the economy through government budget operations. During the 5th Plan, sharp increases in financial operations of the public sector provided abundant liquidity for the private and the banking sectors, leading to a highly expansionary monetary policy. This brought about a liquidity supply in excess of the monetary demands of the private sector. In the early years of 1970s, upon the expansion and intensification of inflationary pressures and the lack of any sterilization policy of the excess oil revenue, the elements of an appropriate monetary policy were put on Money and Credit Council (MCC) agenda for further deliberation.

Iran, being a major oil producing and exporting country, has always had difficulties in performing an active monetary policy as fiscal issues always dominated the financial markets of Iran, leading to the so-called fiscal dominance. Besides the amount and quality of government budget, there were other major factors hindering effective use of monetary and credit policy instruments, which were widely needed to be utilized for liquidity volume adjustment and the conduct of monetary policy. For instance, in practice, the Central Bank Law on banks' and credit institutions' large exposures were never implemented effectively. Even cases by which the excessive lending and credits by banks were partly curbed more of a quantitative and administrative nature rather than a qualitative one. Although, use of such instruments as the reserve requirement ratio and sale of bonds to banks absorbed a considerable amount of banks' excess liquidity, banks were able to mobilize more money primarily through foreign financing. Banks' lending rates were lower than inflation; with no noticeable impact on banks' loans adjustment and credits growth on the one hand, and private sector's tendency to save more on the other. Thus, the monetary policy which was primarily for fine tuning, failed in fulfilling the main objective of maintaining economic and financial stability. Consequently, 1350s (1971-1981) was a decade of apparent monetary and credit policy failure, leading to emergence of fiscal dominance upon the surge in the oil revenues of Iran. Table 1 and Figure 1 portray the Iranian macroeconomic condition and variables like economic growth, liquidity growth, and inflation rate[1] during 1351-1357 (1972-1979). In fact, the rising inflation emanating from soaring oil revenues and implementation of expansionary fiscal policy was apparent as of the beginning of 1350s (1971-1981), indicating the passive nature of the monetary policy in Iran.

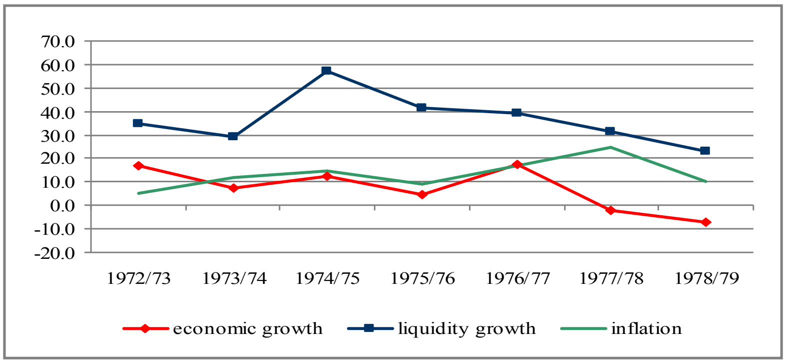
1- Figures for economic growth and investment growth are based on 1376 (1997/98) prices, and those for inflation rate is based on 1383 (2004/05) prices. The latter is calculated on the basis of the consumer price index of goods and services.

Table 1: Selected Economic Indicators (1972-79) (percent)

	Economic growth (1997/98=100)	Monetary base	Liquidity	Inflation (2004/05=100)	Capital formation (1997/98=100)
1972/73	16.7	31.8	34.8	5.0	21.0
1973/74	7.5	33.3	29.2	11.9	12.5
1974/75	12.5	65.1	57.1	14.9	19.8
1975/76	4.8	35.0	41.4	9.3	44.3
1976/77	17.6	35.1	39.1	16.9	33.0
1977/78	-2.3	30.3	31.6	24.6	-13.3
1978/79	-7.4	63.8	23.0	10.5	-17.8

Source: CBI

Figure 1: Selected Economic Indicators (1972-79) (percent)



Source: CBI

3. The Usury (Interest) Free Banking Law (UFBL-83) and Monetary Policy Assessment

Upon the victory of the Islamic revolution in 1979, Central Bank policies were adopted and implemented in accordance with government objectives like employment generation, output growth, appropriate distribution of income and wealth, as well as plans on self-sufficiency and reduction of dependence on other countries. After the nationalization of banks, usury (interest) was abolished from the banking system. This approach continued till the approval of the Usury (Interest) Free Banking Law (UFBL-83). Before the victory of the Islamic revolution, the MBLI-72 governed the banking system. The Usury (Interest) Free Banking Law was approved as a supplement to the Money and Banking Law to reflect the new viewpoints and ideologies dominating the country. On this basis, theoretical policies and views toward banks, banking, and monetary policies were changed from conventional toward Islamic banking, resulting in the approval of the Usury (Interest) Free Banking Law as the first law concerning the economy of the country. It also paved the way for government to intervene heavily in the banking sector in mobilization and allocation of financial resources. Such policy attitudes are indicative of strong financial repression in money market (Maxwell, 1995).

In light of these considerations, the criteria and mechanisms for setting banks' deposit and lending rates were altered dramatically.

3.1. Profit Rate in the Usury (Interest) Free Banking Law

The UFBL-83 has replaced the conventional fixed interest rate with profit rate in banks' mobilization and allocation of financial resources. In accordance with this Law, concepts like deposit and deposit-taking were modified; therefore, the banks were authorized as attorney of their depositors to attract and utilize deposits for extending facilities within the framework of Islamic contracts. At last, upon deduction of commission and fees, banks, pay the realized profit from their participation in projects to depositors.

Banks' profit rates are determined by contracts. The contracts stipulated in the UFBL-83, by nature, are divided into Profit and Loss sharing (PLS) contracts and non-PLS contracts. Banks determine the minimum or the maximum lending rate for non-PLS contracts or contracts with fixed return. In Islamic banking, in case of non-PLS contracts, there is no direct relationship between the lender and the capital. Thus, future developments of probable changes in the financial position of the concerned project do not alter banks' profits and claims. In other words, non-PLS contracts or contracts with fixed return are concluded with a preset lending rate decided by the bank.

PLS contracts are based on non-transfer of ownership by guarantee; therefore, the parties to the contract (agents and partners) do not dispossess their capital. Neither of the parties to the contract acts as a creditor or a debtor. In other words, bank as the financier of whole or part of the capital cannot detach itself from the subject of partnership. Therefore, PLS contracts are concluded on the basis of the real rate of return after implementation of the project, and with the bank's partnership in the profit and loss of the project.

The provisional minimum expected lending rate of extended facilities shall be set by the bank with regard to the average rate of return and the real sector performance. Moreover, inflation rate, changes in the macroeconomic indicators, and policy considerations in support of certain economic sectors are usually emphasized.

Therefore, ratification and declaration of the Usury (Interest) Free Banking Law opened a new horizon in design and implementation of monetary and credit policies in Iran. The main objectives, instruments and performance of this Law are reviewed in the following sections:

3.2. Objectives of the Usury (Interest) Free Banking Law (UFBL-83)

Upon the ratification of the Law for Usury (Interest) Free Banking and based on the principles of Islamic economic system concerning profit and loss sharing, the type and use of monetary policy instruments changed. These principles affected the banking system as well as other areas of capital formation such as the capital market and non-bank financial and monetary intermediations.

The objectives of the Law for Usury (Interest) Free Banking, which were approved in 1362 (1983) and declared for implementation in 1363 (1984), are included in the first chapter of this Law as follows:

1) Establishment of a monetary and credit system based on rightness and justice (as delineated by Islamic jurisprudence) for

the purpose of regulating the sound circulation of money and credit for the enhancement of health and growth of the national economy;

2) Provision of monetary and credit mechanisms, to engage in activities conducive to the attainment of economic goals, as articulated in Government of the Islamic Republic of Iran's plans and policies;
3) Creation of incentives for the extension of cooperation and Gharz-al-hasaneh facilities among the public through the attraction and absorption of surplus funds, reserves, savings and deposits, and the mobilization thereof and for productive opportunities for creation of employment and investment;
4) Maintenance of currency value and equilibrium in the balance of payments and facilitation of trade transactions;
5) Facilitation of payments and receipts, exchanges, transactions and other services to be performed by the Central Bank, as determined by the Law.

3.3. Monetary Policy Instruments

According to Article 19, the Usury (Interest) Free Banking Law, short-term monetary and credit policies shall be adopted upon recommendation by the General Assembly of the Central Bank and approval of the Council of Ministers. The Law also anticipates that long term credit policies should be incorporated in the bills for Five-Year Development Plans which should be submitted to the Parliament for ratification. Moreover, based on Article 20, the Usury (Interest) Free Banking Law, Central Bank is empowered to intervene in, and supervise the monetary and banking activities through the following instruments:

1) Fixing a minimum or maximum ratio of profit for banks in their joint ventures and Mudarabah activities;
2) Determination of various fields for investment and partnership within the framework of government approved economic

policies, and setting a minimum provisional profit rate for various investment and partnership projects;

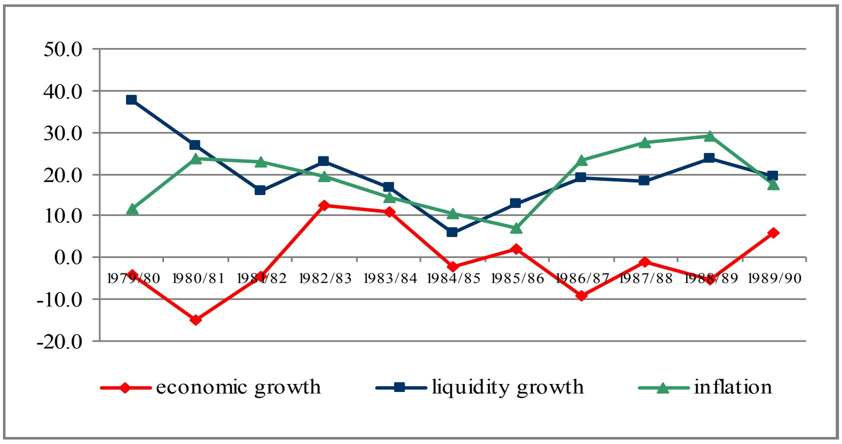
3) Fixing a minimum and maximum profit margin for banks in installment and hire-purchase transactions;
4) Determination of types and the minimum and maximum amounts of commissions and banks' service charges;
5) Determination of types and amounts of bonuses granted by banks for mobilization of deposits;
6) Determination of the minimum and maximum participation ratio for banks in joint ventures, Mudarabah, investment, hire purchase, installment transactions, forward transactions, Muzara'ah, Mosaqat, Joaleh and Gharz-al-hasaneh.

Table 2: Selected Economic Indicators (1979-1990) ***(percent)***

	Economic growth (1997/98=100)	Monetary base	Liquidity	Inflation (2004/05=100)	Capital formation (1997/98=100)
1979/80	-4.2	27.6	37.7	11.6	-30.4
1980/81	-15.1	28.8	27.0	23.6	4.0
1981/82	-4.4	33.5	16.1	22.9	-7.9
1982/83	12.6	28.3	22.8	19.3	7.4
1983/84	11.1	10.2	16.9	14.6	44.1
1984/85	-2.0	12.9	6.0	10.5	-7.4
1985/86	2.0	15.8	13.0	7.0	-19.7
1986/87	-9.1	23.5	19.1	23.5	-15.5
1987/88	-1.0	24.4	18.1	27.7	-2.5
1988/89	-5.5	26.2	23.8	29.0	-19.7
1989/90	5.9	8.3	19.5	17.4	7.4

Source: CBI

Figure 2: Selected Economic Indicators
(1979-1990) ***(percent)***



Source: CBI

From the year 1363 (1984/85) until the beginning of the First Five-Year Development Plan, the banking system in Iran was characterized by wide and intensive government interventions in banking affairs and particularly in setting banks' profit rates and sectoral credit allocations. Considering the prevailing conditions and the imposed war with Iraq, huge government interventions were justifiable at that time; however, the sustainability and soundness of such a practice was a matter of concern. The macroeconomic conditions as displayed within the framework of major economic aggregates in Table 2 and Figure 2 indicate an unfavorable economic condition, the continuation of which has been very costly.

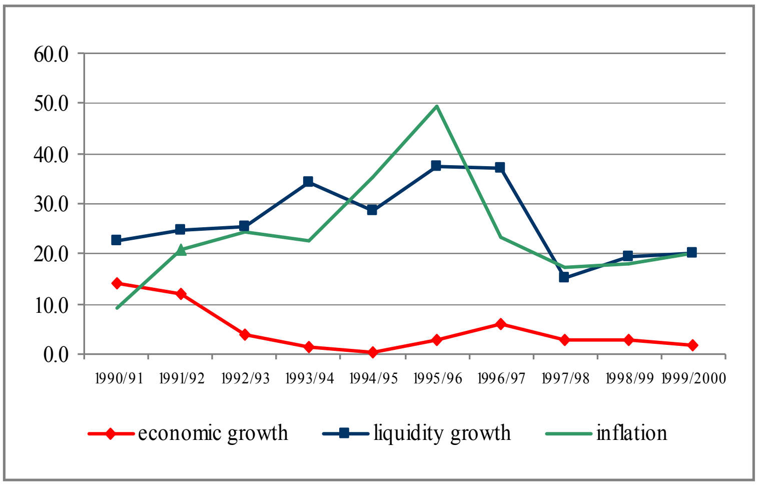
During the 1st and the 2nd development plans, there was no special change in monetary policy and instruments; nevertheless, governments' orientation toward relative reform of fiscal, monetary, exchange, and other economic policies were under the influence of oil revenues. Moreover, the effects of instability in the global crude oil market were apparent in the economy of Iran. Regarding the policies adopted during the 1st Plan, cessation of war with Iraq, highly improved domestic and foreign expectations about the future of the economy of Iran, rise in oil revenues, various countries' and multinational companies' willingness to establish trade relations with Iran relatively improved macroeconomic aggregates. However, the attempt to unify the exchange rates in 1372 (1993/94) changed the environment. The Economy of Iran faced difficulties by the fall in oil prices at the beginning of the 1990s as well as the adoption of economic and political sanctions by the US and western countries. Sharp depreciation of rial against hard currencies and the rise in inflation rate to its record high in 1374 (1995/96) are indicating the unfavorable macroeconomic conditions of Iran. Government took various measures to reduce the socioeconomic costs, but the stagflation continued during the 2nd Plan. Although the inception of the new government raised expectations for a relative improvement in economic conditions, financial crisis in the South-East Asia in 1997 and fall in oil prices to its record low, brought about hardships for the economy of Iran during the final years of the 2nd Plan.

Table 3: Selected Economic Indicators
(1990-2000) ***(percent)***

	Economic growth (1997/98=100)	Monetary base	Liquidity	Inflation (2004/05=100)	Capital formation (1997/98=100)
1990/91	14.1	3.9	22.5	9.0	13.8
1991/92	12.1	15.0	24.6	20.7	46.4
1992/93	4.0	17.4	25.3	24.5	-3.5
1993/94	1.5	24.5	34.2	22.7	-10.3
1994/95	0.5	32.9	28.5	35.3	-14.2
1995/96	2.9	43.7	37.6	49.3	-4.5
1996/97	6.1	37.6	37.0	23.2	25.0
1997/98	2.8	10.9	15.2	17.3	12.5
1998/99	2.9	18.0	19.4	18.1	3.2
1999/2000	1.6	15.9	20.1	20.1	5.8

Source: CBI

Figure 3: Selected Economic Indicators
(1990-2000) (percent)



Source: CBI

4. Third Five-Year Development Plan (3rd Plan), (2000-2005)

The 3rd Plan was prepared and designed with a view to strengthen Iran's banking system and on the basis of the experiences gained from previous years to make a turning point in the implementation of monetary policy in the history of the economy of Iran. During the course of the 3rd Plan, the fall in fiscal deficit and employing financial discipline rules by the government as well as the establishment of Oil Stabilization Fund (OSF) led to a better performance of monetary policy compared with the previous plan periods.

Major monetary policies in the 3rd Plan were as follows:

1) The government was obligated to prepare annual budget in a way that budget deficit would not be financed by Central Bank and the banking system.
2) It was determined that the outstanding scheduled facilities shall be reduced annually by 10 percent over the course of the 3rd Plan as compared with the approved figures of 1378 (1999/2000).

3) It was also determined that government supports in extending facilities to various economic sectors and activities would be in the form of subsidy payment on the lending rate, preferential credits, and accepting repayment collaterals within the framework of annual budget laws.
4) The Central Bank was mandated to utilize Central Bank participation papers (CBPPs) upon the MCC approval.
5) The Central Bank was also authorized to issue license for private credit institutions.
6) The Law authorizing establishment of private banks was approved by the Parliament during the term of the 3rd Plan.

Setting differential lending rates within a specified range for extending facilities to different economic sectors continued till the commencement of the 3rd Plan. These rates were gradually eliminated over the course of the 3rd Plan, and were replaced by a single lending rate for each sector. In the last year of the 3rd Plan, the Law for Regulating the Unofficial Money Market Institutions was approved by the Parliament.

Positive measures such as expansion of electronic banking, reform of the payment settlement system, increase in the share of private banks and privatization of public banks, revision of banks' profit rate, and decline in reserve requirement ratio of banks were taken in the 3rd Plan. These policies were also pursued in the 4th Plan, within the comprehensive Supervisory - Policy packages of the Central Bank. So, the new government did not stick up with the policies and general directions of the 4th development plan. Due to heavy interventions of the government in setting the bank's interest rates, both in deposits and credit facilities sides, the general environment of financial repression restated in banking sector of the economy (Maxwell, 1995).

Reforms in the foreign exchange policy commenced in the 3rd Plan, which brought about favorable results, including:

– Elimination of multiple exchange rates and the unification of exchange rates in 1381 (2002/03) into a single rate.

- Establishment of the OSF[1] in 1379 (2000/01) aiming at a more stable revenue flow and macroeconomic policy condition.

Table 4: Selected Economic Indicators During the 3rd Plan

(percent)

	Economic growth (1997/98=100)	Monetary base	Liquidity	Inflation (2004/05=100)	Capital formation (1997/98=100)	Unemploy-ment rate
2000/01	5.0	17.5	29.3	12.6	4.1	14.3
2001/02	3.3	15.2	28.8	11.4	14.2	14.2
2002/03	8.2	23.1	30.1	15.8	13.8	12.8
2003/04	7.8	7.6	26.1	15.6	12.3	11.8
2004/05	6.4	17.5	30.2	15.2	9.2	10.3

Source: CBI

In light of the implementation of a set of reforms in the national economy as well as the monetary and exchange sectors, continued increase in oil revenues, establishment of the OSF and accumulation of foreign exchange reserves, revision of goods and services pricing policies, amendment of the laws governing capital market, taxation and foreign direct investment, improvement of government policies and general supervision thereof portrayed a better picture with regard to economic variables.

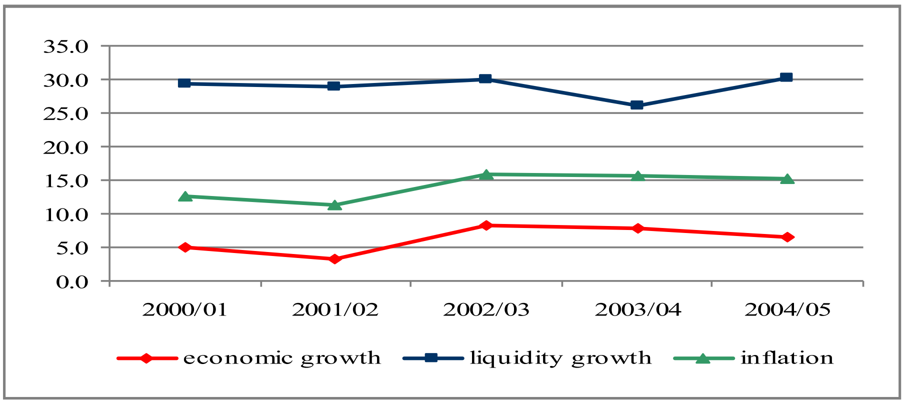
Despite the implementation of relatively disciplined fiscal policies, increase in liquidity growth raised concerns about economic conditions for the years to come. Nevertheless, the set of measures taken to reform the economy helped to reduce inflation rate from about 20 percent at the end of the 2nd Plan to nearly 15 percent by the end of the 3rd Plan. Moreover, the higher economic growth and better investment position, and decline in unemployment rate improved economic situation. At the

1- Oil Stabilization Fund.

end of the 3rd Plan, question was raised about the relationship between the liquidity growth and inflation rate, as contrary to the trends were observed between inflation and liquidity in the past. However, lack of perception about inflation threat, government adopted expansionary fiscal policy during the 4th Plan which led to rising inflationary trends and heating the inflation expectations once again. A deeper analysis of this issue can be seen in Komijani and Boostani (2004) study.

Figure 4: Selected Economic Indicators during 3rd Plan

(percent)



Source: CBI

Review of the Central Bank's performance during the 3rd Plan points to the relative success of monetary and fiscal policies. The Bank succeeded in controlling the impact of liquidity growth on inflation by taking necessary measures together with other requirements prepared by the government, finally lowering the inflation rate at a relatively stable level. Furthermore, the economy of Iran grew well over the course of the 3rd Plan (Figure 4).

4.1. Fourth Five-Year Development Plan (4th Plan), (2005-2010)

The 4th Plan Law was a step toward continuation of the monetary policy, based on the experiences gained from the 3rd Plan Law.

Following the change of the government in the first year of the 4th Plan, the new government did not stick with the text of the plan including in areas like oil income, Oil Stabilization Fund, and energy pricing policies. Moreover, with the abandonment of MCC, the government's intervention in the banks' lending rates increased.

In line with the expansion, quality improvement, and transparency of the banking system activities as well as enhancement of banks' efficiency, the Central Bank of the Islamic Republic of Iran prepared the Supervisory-Policy Packages of the banking system for the years 1387 (2008/09) and 1388 (2009/10), which were a continuation of the efforts made in the 3rd Plan.

Major monetary policies in the 4th Plan were as follows (see the Article 10 of the 4th plan):

1) Since the commencement of the 4th Plan, allocation of banking facilities shall be carried out through giving incentives to the banking system.
2) Obligation of banks to extend facilities at lower rates within the framework of Islamic contracts is permissible provided that they are financed by the government subsidy or administered funds.
3) To attain economic growth, to curb inflation, and to enhance productivity of the banking system resources, the government is obliged to reduce its indebtedness to the Central Bank and banks through inclusion of the repayment amounts in annual budgets.
4) It was determined that during the 4th Plan period, at least 25 percent of the facilities extended by all banks to be allocated to water and agriculture sector (i.e., the rest of the bank's resources was freed to market forces).
5) It was determined that increase in the outstanding scheduled facilities to be reduced by 20 percent per annum on average over the Plan's period compared with the approved figure for 1383 (2004/05).

6) The Central Bank is authorized to place and sell CBPPs[1] in market upon the approval of the Parliament.

Table 5: Selected Economic Indicators During 4th Plan

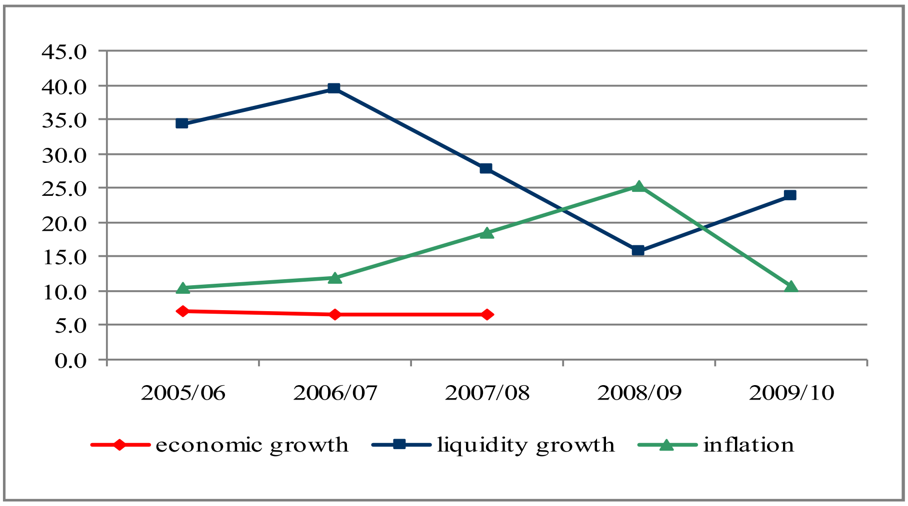
(percent)

	Economic growth (1997/98=100)	Monetary base	Liquidity	Inflation (2004/05=100)	Capital formation (1997/98=100)	Unemploy-ment rate
2005/06	6.9	45.9	34.3	10.4	8.7	11.5
2006/07	6.6	26.9	39.4	11.9	3.0	11.3
2007/08	6.7	30.5	27.7	18.4	6.6	10.5
2008/09	*	47.6	15.9	25.4	*	10.4
2009/10	*	11.9	23.9	10.8	*	11.9

* Figures are unavailable.
Source: CBI

Figure 5: Selected Economic Indicators During 4th Plan

(percent)



Source: CBI

1- Central Bank Participation Papers.

In spite of relatively high economic growth during the initial years of the 4th Plan, expansionary fiscal policies led to rapid growth of monetary base, which in turn led to inflation. Inflation curbing policies on the one hand and global financial recession on the other gradually reduced Iran's economic growth and caused recession in 1387 (2008/09) and 1388 (2009/10). As mentioned in Table 5, monetary base growth during the first four years of the 4th Plan increased sharply, raising inflation rate up to 25.4 percent in 1387 (2008/09).

4.2. General Assessment of Monetary Policy in Post-Revolutionary Era

Previous sections were devoted to the legal foundation and monetary instruments stipulated in the Usury (Interest) Free Banking Law. The present section deals with the performance of monetary instruments in the post-revolutionary era, depicting their performance in figures according to Paragraph 6, Article 20 of the Usury (Interest) Free Banking Law concerning allocation of banking resources within the framework of Islamic contracts. In light of the change in policymakers' viewpoints on the role of banking system in achieving supportive and developmental goals in the country during the post-revolutionary era, performance of the monetary policies is generally reviewed in three periods of 1358-1378 (1979-2000), 3rd Plan, and 4th Plan.

4.2.1. Reserve Requirement Ratio

Upon the victory of the Islamic Revolution, the Central Bank raised the reserve requirement ratio in order to control banks' lending operations to curb inflation. During 1360s and 1370s (1981-2002), utilization of reserve requirement ratio was among the limited instruments at the Central Bank's disposal to contain the liquidity growth emanating from financing government budget deficit through Central Bank reserves.

Raising the reserve requirement ratio of commercial banks continued during 1360s (1981-1991), and reached its maximum level in the 1370s (1991-2001). It should be noted that in order to strictly control liquidity growth, as of the beginning of 1372 (1993), the reserve requirement ratio for advance payments on the opened letters of credit was set at 30 percent for commercial banks, and 10 percent for specialized banks. These payments were not previously subject to reserve requirement ratio.

Since the commencement of the 3rd Plan and reduction of inflationary threats, and to strengthen banks' lending operations, the reserve requirement ratio was decreased. The said ratios were finally unified at 17 percent for commercial banks' deposits and 10 percent for specialized banks' deposits.

During the first three years of the 4th Plan, the reserve requirement ratio remained unchanged. However, in 1387 (2008/09) and 1388 (2009/10), in order to increase sustainability of banking deposits and encourage banks to hold more long-term deposits, the reserve requirement ratio of banks was reduced and determined according to the maturity date of banking deposits. Despite of the reductions in reserve requirement ratio (RRR), the weighted average of RRR is currently around 15 percent which is relatively very high and costly for banks.

4.2.2. Open Market Operations

Upon the victory of the Islamic Revolution, and change in officials' viewpoints regarding elimination of usury from the banking system, open market operations, which involve buying and selling of bonds, were halted. This was due to the usury nature of this instrument. As the elimination of usury was emphasized in the Usury (Interest) Free Banking Law, the monetary policy instrument of open market operations was not used until the commencement of the 3rd Plan.

Upon the commencement of the 3rd Plan, utilization of participation papers instead of bonds, and investors' participation in economic activities as well as payment of real profit rates were put on the Central Bank's agenda. Therefore, during the 3rd Plan and the first three years of the 4th Plan, Central Bank issued participation papers as an instrument to mop up excess liquidity from the market. However, due to a host of factors such as a low preset profit rate and the long process of issuance approval by the Parliament, this instrument was not effective. Moreover, the burden of profit payment on Central Bank's balance sheet as well as the government expansionary fiscal policies made this instrument ineffective in offsetting the effects of such policies.

4.2.3. Banks' Deposit and Lending Rates

Reviewing banks' deposit and lending rates in the post-revolutionary era indicates that the mentioned rates were not reasonable and were determined without due consideration to other indices including the inflation rate. Negative real deposit rates have led to the declining of the value of depositors' money. During 1360s and 1370s (1381-2001), deposit and lending rates on facilities extended to various economic sectors underwent numerous changes and the main approach was toward raising the rates (due to higher inflation rates).

In the post-revolutionary era, lending rates on facilities extended to various economic sectors were set within a range and this trend continued during the course of the 3rd Plan. Since the inception of the 4th Plan, lending rates were unified for all economic sectors. During the 3rd Plan, following the reduction in inflation rate, increase in banks' credit capacity due to reduced reserve requirement ratio, and improved economic condition, banks' lending rates was reduced. Against this backdrop, major objectives of monetary policymakers were appeared in mobilizing investment, reducing production costs, and increasing productive activities.

In the initial year of the 4th Plan, with the MCC approval, and based on the 4th Plan Law, the minimum expected rate of return on facilities extended by public banks to all economic sectors was unified. Based on Article 10 of the 4th Plan Law, allocation of banking facilities by the government (in sectoral or regional form) shall be carried out through subsidy payment and administered funds. During the course of the 4th Plan, lending rates on facilities extended by public and private banks to various economic sectors (within the framework of non-PLS contracts) decreased and stood at 12 percent in the last year of the Plan.

Table 6: Weighted Lending and Deposit Rates in Nominal and Real Terms (Transaction contracts, non-PLS contracts)

(percent)

Year	Nominal		Inflation rate	Real	
	Deposit	Lending		Deposit	Lending
1979/80	7.8	8.3	11.6	-3.8	-3.3
1980/81	7.8	8.3	23.6	-15.8	-15.3
1981/82	7.8	9.0	22.9	-15.2	-13.9
1982/83	7.8	9.5	19.3	-11.5	-9.8
1983/84	7.8	9.3	14.6	-6.8	-5.3
1984/85	7.9	11.1	10.5	-2.5	0.6
1985/86	7.6	10.9	7.0	0.6	3.9
1986/87	6.8	11.0	23.5	-16.6	-12.5
1987/88	6.8	10.5	27.7	-20.9	-17.3
1988/89	6.8	10.1	29.0	-22.2	-18.9
1989/90	6.9	10.9	17.4	-10.5	-6.5
1990/91	8.0	13.7	9.0	-1.0	4.7
1991/92	8.8	12.7	20.7	-11.9	-8.0
1992/93	10.2	13.4	24.5	-14.3	-11.1
1993/94	11.2	16.4	22.7	-11.5	-6.4
1994/95	11.1	16.4	35.3	-24.1	-18.9
1995/96	12.5	16.7	49.4	-36.9	-32.7
1996/97	12.4	17.6	23.2	-10.8	-5.6
1997/98	12.6	17.2	17.3	-4.7	-0.1
1998/99	12.7	17.5	18.1	-5.4	-0.6
1999/2000	12.8	17.1	20.1	-7.3	-3.0

Source: CBI

Table 7: Weighted Lending and Deposit Rates in Nominal and Real Terms (Transaction contracts, non-PLS contracts) During the 3rd and 4th Plans *(percent)*

Year	Nominal		Inflation rate	Real	
	Deposit	Lending		Deposit	Lending
2000/01	12.9	17.8	12.6	0.3	5.2
2001/02	12.0	17.4	11.4	0.6	6.0
2002/03	12.1	17.3	15.8	-3.7	1.5
2003/04	12.2	17.5	15.6	-3.4	1.9
2004/05	12.6	18.3	15.2	-2.6	3.1
2005/06	12.9	18.5	10.4	2.5	8.2
2006/07	11.5	14.5	11.9	-0.4	2.6
2007/08	12.9	12.0	18.4	-5.5	-6.4
2008/09	14.4	12.0	25.4	-11.0	-13.4
2009/10	13.3	12.0	10.8	2.6	1.2

Source: CBI

Reviewing the weighted deposit rates and nominal lending rates mentioned in Tables 6 and 7 and their subtraction from inflation rate reveals that the mentioned rates were not reasonable, and except for a few years, they were negative. This indicates that depositors were taxed and credit recipients enjoyed the advantage of lending rates. Unfortunately, this approach toward administrative setting of deposit rates is still taken by the government and to some extent by the Parliament. Enactment of the Law on Rationalization of Banks' Deposit and Lending Rates by the Parliament in 1385 (2006/07) is indicative of non-expert monetary policymaking, revision of which is deemed absolutely necessary. Further analysis of the impact of the negative real bank's rates can be seen in Komijani and Bahramirad (2008) study.

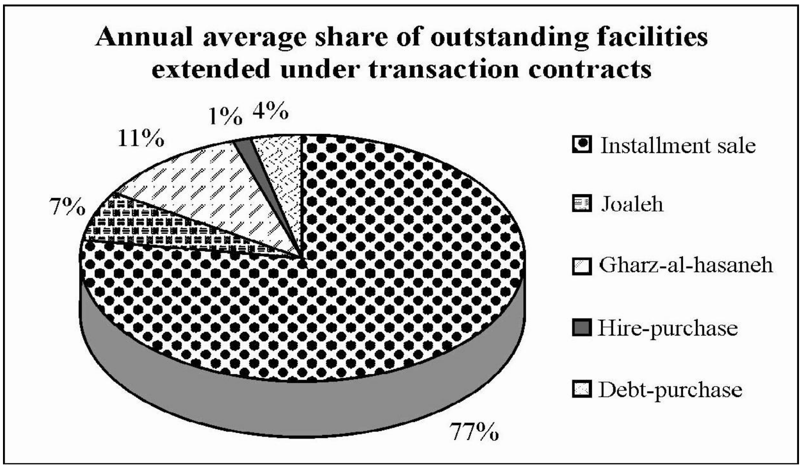
4.2.4. Credits Extended by the Banking System to Non-Public Sector According to Islamic Contracts

Upon declaration of the Usury (Interest) Free Banking Law in 1362 (1983/84), all facilities were extended to non-public sector within the framework of transactions and PLS contracts. According to statistics, on average, 39.5 percent of the Islamic contracts concluded by banks during 1363-1378 (1984-2000) were in the form of PLS and 60.5 percent were transaction contracts.

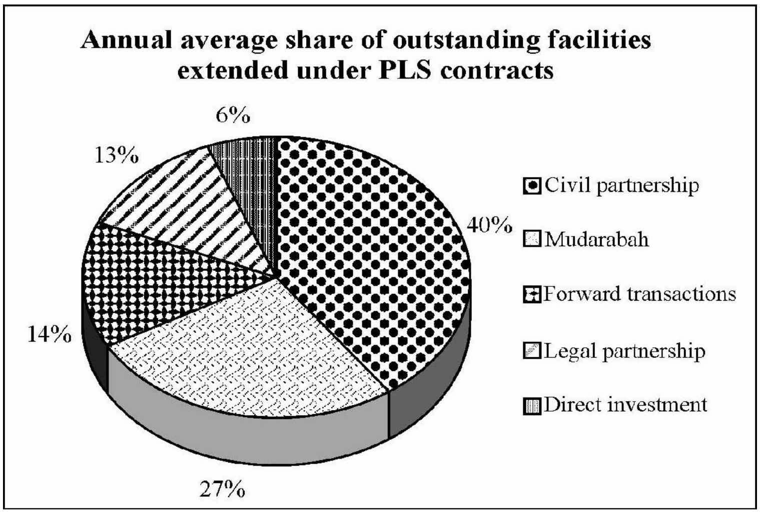
Over the mentioned period, civil partnership contracts, with an average share of 14.8 percent in total outstanding extended facilities, held the lion's share in PLS contracts, followed by Mudarabah with an average share of 10.0 percent. Ranking first in respect of transaction contracts, installment sale held a share of 45.9 percent, on average per annum, in total outstanding facilities extended to the non-public sector, followed by Gharz-al-hasaneh facilities with 6.7 percent.

Among PLS contracts, the highest shares belonged to civil partnership by 40 percent and Mudarabah 27 percent, while installment sale by 77 percent and Gharz-al-hasaneh by 11 percent had respectively the greatest shares among transactions contracts.

Figure 6: Performance of Islamic Contracts (1984-2000)



Source: CBI



Source: CBI

During the first four years of the 3rd Plan, share of non-PLS contracts in total change in the outstanding facilities extended by banks and credit institutions to the non-public sector almost had an upward trend. In 1383 (2004/05), the last year of the 3rd Plan; however, share of PLS contracts in total change in outstanding facilities extended by banks and credit institutions to the non-public sector decreased to 20.9 percent from 30.9 percent in 1378 year-end (2000). During the mentioned period, non-PLS contracts held a 79.1 percent share in total change in outstanding Islamic contracts and PLS contracts 20.9 percent (see tables 8 and 9).

During the first four years of the 4th Plan, non-PLS contracts held a higher share than the PLS ones in total change in outstanding facilities extended by banks and credit institutions to private sector. This, in tandem with the approval of the Law for Rationalization of Banks' Deposit and Lending Rates in 1385 (2006/07) and the similar approach taken by the government as of the beginning of the 4th Plan, led to extension of a major part of banking resources within the framework of PLS contracts by a relatively more liberalized lending rate as of 1386

(2007/08). Therefore, share of PLS contracts in total change in outstanding extended facilities surpassed that of non-PLS contracts, reaching 79.9 percent in 1388 (2009/10). This was mainly due to fixing of the lending rate for non-PLS contracts at 12 percent during 1386-1388 (2007-2010), raising banks' willingness toward implementation of PLS contracts. Of course, the approval of the Law for Rationalization of Banks' Deposit and Lending Rates in 1385 (2006/07) played a key role in the mentioned shift. It should be emphasized that the movement of banks toward PLS contracts does not have to be necessarily interpreted as a true implementation of the PLS contracts.

Table 8: Shares of PLS and Non-PLS Contracts in Change of the Outstanding Facilities During the 3rd Plan

(percent)

	1379 (2000/01)	**1380 (2001/02)**	**1381 (2002/03)**	**1382 (2003/04)**	**1383 (2004/05)**
PLS contracts	**23.5**	**24.2**	**17.4**	**17.4**	**20.9**
Civil partnership	37.2	27.4	2.4	32.9	30.9
Mudarabah	24.8	21.0	52.2	33.2	25.5
Direct investment	0.9	1.2	3.8	4.3	5.1
Legal partnership	3.0	-0.4	3.0	10.4	17.9
Forward transactions	34.0	50.8	38.5	19.2	20.6
Non-PLS contracts	**76.5**	**75.8**	**82.6**	**82.6**	**79.1**
Installment sale[1]	39.7	47.4	42.5	54.4	54.0
Gharz-al-hasaneh	4.3	6.3	16.8	3.0	2.4
Hire-purchase	0.9	0.9	2.5	2.0	3.2
Joaleh	1.5	2.0	1.2	2.4	4.8
Debt-purchase	0.0	0.0	0.0	0.2	0.1
Other	53.6	43.4	36.9	38.0	35.6
Total	**100**	**100**	**100**	**100**	**100**

1-Includes facilities extended to the housing sector as well.
Source: CBI

Table 9: Shares of PLS and Non-PLS Contracts in Change of the Outstanding facilities during the 4th Plan

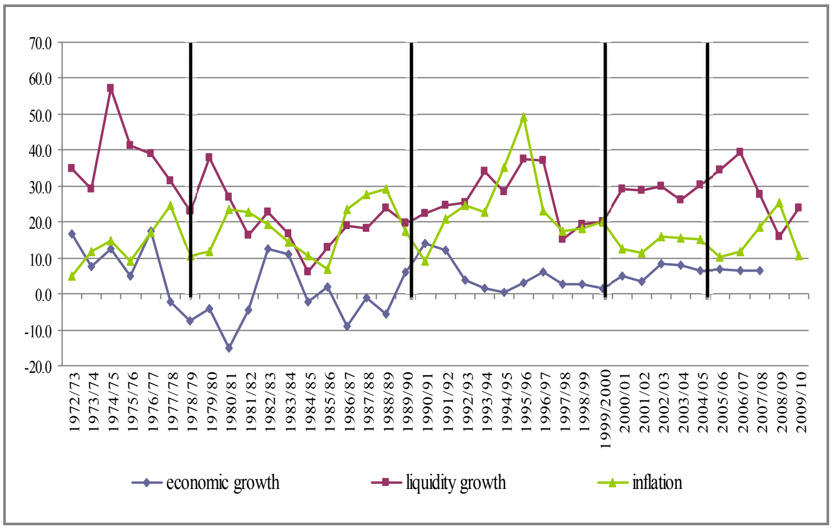
(percent)

	1384 (2005/06)	1385 (2006/07)	1386 (2007/08)	1387 (2008/09)	1388 (2009/10)
PLS contracts	**24.8**	**38.9**	**33.5**	**12.0**	**79.9**
Civil partnership	55.5	61.6	56.1	203.3	116.9
Mudarabah	34.9	24.7	37.1	-94.7	-6.6
Direct investment	3.9	2.6	1.8	-4.5	0.8
Legal partnership	10.8	0.7	0.8	22.8	1.8
Forward ransactions	13.9	10.5	4.2	-26.9	-12.9
Non-PLS contracts	**75.2**	**61.1**	**66.5**	**88.0**	**20.1**
Installment sale	56.9	71.9	74.6	19.1	-78.5
Gharz-al-hasaneh	4.6	1.8	3.5	7.3	49.8
Hire-purchase	6.8	1.8	-1.9	-1.9	-8.0
Joaleh	6.3	3.5	3.7	4.5	-5.5
Debt-purchase	0.4	0.4	0.1	-0.3	12.5
Other	18.3	20.7	20.0	71.3	129.8
Total	**100**	**100**	**100**	**100**	**100**

Source: CBI

The following figure shows the trend of selected economic indicators during the review period, including the pre-revolutionary era, 1358-1368 (1979-1990), 1369-1378 (1990-2000), and 3rd and 4th Plans.

Figure 7: Selected Economic Indicators
(1351-1388 (1972-2010))



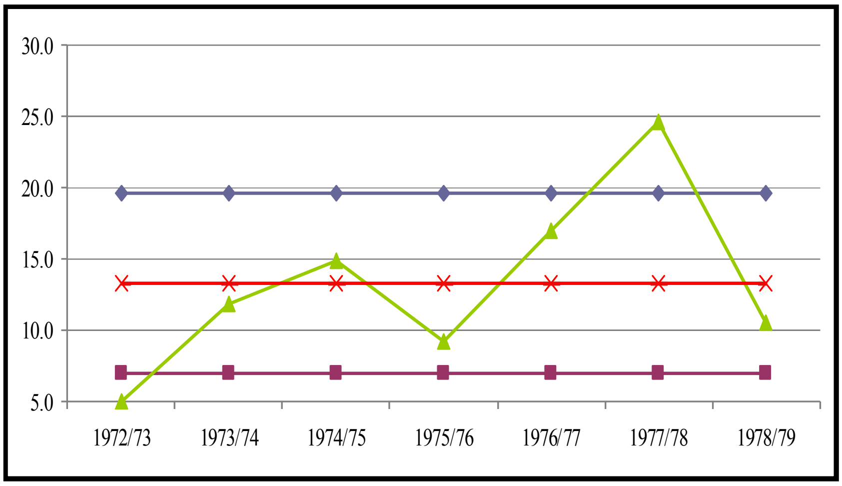
Source: CBI

4.3. Monetary Policy and Inflation[1]

One of the criteria for evaluating the efficiency of monetary policy is the trend of macroeconomic variables in different periods and their growth sustainability. In fact, having reviewed the sustainability and stability of inflation rate during the periods under study, one may have a general evaluation of the implementation of the monetary policy. To this end, we can use inflation fluctuations in the range of standard deviation. The changes of inflation in the mentioned period do not experience sharp fluctuations and these fluctuations are convergent towards the inflation rate average, fluctuations of general level of prices is relatively controlled, which is one of the most important objectives of the Central Bank. The following figures show the status of inflation rate in different periods.

1- My special thanks go to Dr. Farhad Nili for proposing this subject. It is noteworthy that he mentioned other valuable points as well which are discussed in the paper.

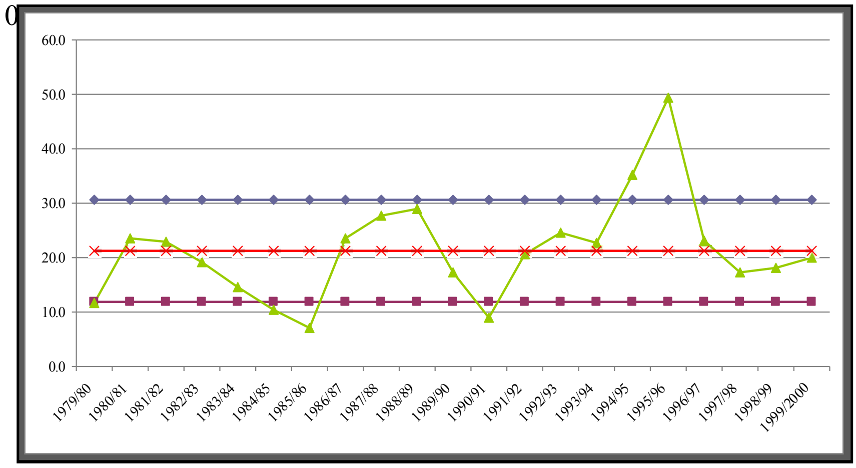
Figure 8: Inflation Fluctuations in the Range of Standard Deviation (1351-1357 (1972-1979))



Source: CBI

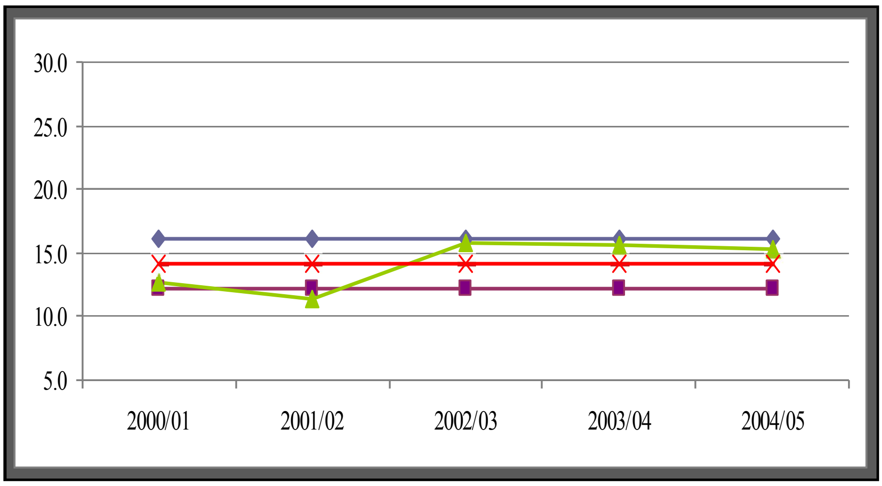
Figures 8 through 11 reveal that the monetary policies of the periods under study (excluding the 3rd Plan) did not lead to inflation stability and sustainability. This means that the relative stability of the inflation rate only occurred during the 3rd Plan. In other words, monetary policies implemented during 1351-1389 (1972-2010) were mostly expansionary and contributed to inflation, mainly affected by the government fiscal policy. The study by Hosseininasab and Rezagholizadeh (2010) is providing empirical evidences for inflation in Iran during the period 1973-2006.

Figure 9: Inflation Fluctuations in the Range of Standard Deviation (1358-1378 (1979-2000))



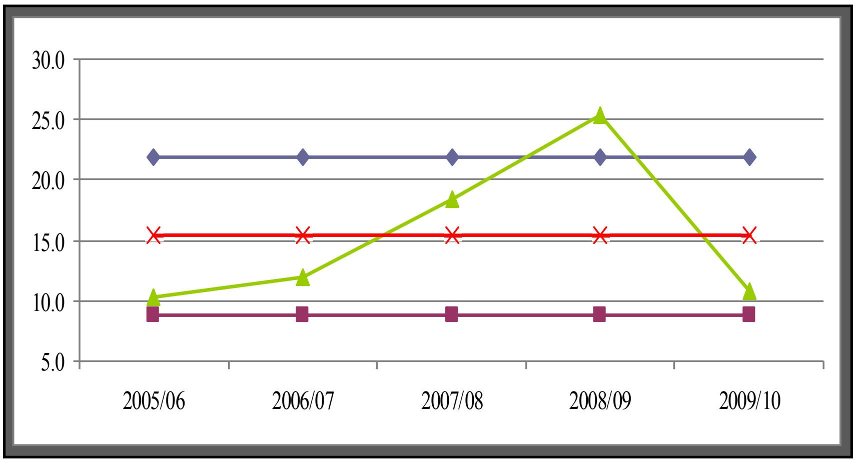
Source: CBI

Figure 10: Inflation Fluctuations in the Range of Standard Deviation in the 3rd Plan



Source: CBI

Figure 11: Inflation Fluctuations in the Range of Standard Deviation in the 4th Plan



Source: CBI

5. Challenges for the Effective Implementation of the Monetary Policy

Among core objectives of the Central Bank are to maintain the value of currency and equilibrium in the balance of payments, to facilitate trade transactions, and to assist the economic growth of the country. However, Central Bank, as the body responsible for the formulation and implementation of the monetary policy has constantly faced obstacles. Some of these difficulties are related to the overall structure of the economy of Iran and inflow of oil revenue into the budget and some others are attributable to the lack of efficient monetary policy instruments which have a legal basis. A turning point, nevertheless, is the amendment of relevant rules and regulations aimed at independency of the Central Bank which started as of the 3rd Plan and was pursued more seriously during the 4th Plan. In practice, Central Bank has been weakened during the recent years, which has had a lot of negative consequences for the economy of Iran. In the formulation of the 4th Plan, the Parliament did not pursue the process of revising monetary policy regulations seriously; however, in the process of approving the 5th Plan, more revolutionizing proposals are approved by the Parliament. This is indicative of the fact that the necessity of setting boundaries between monetary policy and fiscal policy is recognized by the policy makers.

As a matter of fact, the desired outcome which could have been reached on the basis of policy decisions in the short time, is finally realized after a long years of incurring high costs due to excess liquidity and price instability.

The following points are numbers of challenges in the way of implementing monetary policy:

5.1. Fiscal Dominance

Fiscal dominance is an undesired phenomenon in the Economy of Iran over the recent years, mainly owing to the fluctuations of the oil revenue with their ensuing effect on liquidity. Fiscal dominance occurs as a result of government reliance on oil revenue, Central Bank's incapability in offsetting sudden changes in liquidity, and lack of appropriate instruments to control liquidity. In order to reach the monetary basic objective, large-scale sale of foreign exchange, significant rise in foreign exchange sterilization by the Central Bank, or a combination of both is necessary.

It is of special note that Central Bank has a minimum power to sterilize oil income which is mainly attributable to liquidity pressures arising from the injection of the oil revenue into the economy of Iran. Therefore, the sterilization measures adopted by the Central Bank are less efficient upon the purchase of foreign exchange from the government.

Over the past years, measures have been taken to restrict the effects of the fiscal dominance and reduce its direct influence on the fiscal policy. One of these measures was the establishment of the OSF in 1379 (2000/01) with the aim of reducing the pressures of oil price fluctuations on government expenses and eliminating the effects of foreign exchange revenues fluctuations on the economy. This Fund was primarily aiming at diminishing the effects of fiscal dominance on the monetary policy indirectly; however, due to the change in the manner of utilization by the government and Parliament, and the frequent withdrawals, this aim was not fulfilled. During the recent years, the government has frequently included budget supplements in its plans, which is contrary to the objectives of the OSF.

5.2. Members of the Money and Credit Council (MCC)

The Money and Credit Council is an important organ of the Central Bank and plays a key role in Central Bank's independence and monetary policymaking. Based on the Money and Banking Law of Iran, the MCC is in the position to consider and decide on the general policy of the Central Bank and to supervise the monetary and banking affairs of the country.

As Five-Year development plans were formulated, changes in the composition of the MCC led to the weakening of the Central Bank position. With the approval of the 3rd Plan, the MCC underwent minimal changes, which did not contribute to the independency of the Central Bank. The only positive change in the 3rd Plan was the selection of two experts at the recommendation of the Governor and approval of the President. The Council was still chaired by the Minister of Economic Affairs and Finance. At the termination of the 3rd Plan in 1383 (2004/05) and commencement of the 4th Plan, the Governor of the Central Bank was re-appointed as the chairman of the Council. This, to some extent, was the recognition of the significant role of the Central Bank in monetary and credit policies. However, the government still has the dominant role in monetary and credit policymaking process. Despite the recent improvements in the MCC, the current composition of the members in the MCC is still government oriented and this limits the power of the central bank

5.3. Appointment of Central Bank Governor

The procedure followed for the appointment of the Central Bank Governor contradicts the independence of the Central Bank. The extent of Central Bank independence depends on the manner of the appointment of the Central Bank Governor, the conferring of the appointment order by the Minister of Economic Affairs and Finance, and the validity term of the appointment. According to the 4th Plan, the appointment of the Central Bank Governor is at the recommendation of the President and the approval of the banks' General Assembly. To sum up, the appointment and removal of the Governor is at the discretion of the President. This indicates that the Central Bank may not perform independent of government fiscal policy in implementing monetary policies that aim at mopping up excess liquidity and curbing inflation.

5.4. Structural and Legal Challenges of the Monetary Policy Instruments

In past years and particularly during the Five-Year development plans, the banking system of Iran has constantly faced structural and legal challenges that have led to the inefficiency of monetary policy in controlling liquidity and inflation rates. The following sections are devoted to the presentation of these challenges and the problems associated with the execution of the banking contracts.

5.4.1. Law on Rationalization of Banks' Lending Rates Approved in 1385 (2006/07)

Weakening of the existing mechanism in money market in the form of certain Parliament approvals, without considering other efficient macroeconomic variables creates imbalances in this market. Rationalization of banks' lending rates[1] was among laws that put a barricade in the way of fulfillment of Central Bank policy objectives. This Law obliged the Central Bank to set a single-digit lending rate on banking facilities extended to various economic sectors by the end of the

1- Single Article- Government and the Central Bank are obliged to administer the mechanisms to mobilize and allocate banking resources in such a manner that the expected lending rate on banking facilities for contracts with fixed return decreases during the 4th Plan. Such a decrease shall lead to realization of a single-digit lending rate on banking facilities before the end of the said Plan.

4th Plan. This is against the backdrop of a constant double-digit inflation rate during the mentioned period. One of the negative ramifications of the said Law was making banks more inclined towards implementing PLS contracts as they had a higher lending rate than fixed-rate contracts.

5.4.2. 4th Plan Law

The 4th Plan Law was a step towards the implementation of the monetary policy based on the experiences gained from the implementation of the 3rd Plan Law. However, some of the Articles of this Law, like Article 10, and the ones pointing to the composition of the MCC led to the inefficiency of the monetary policy. Due to several changes in the government bill implemented by the Parliament, Article 10 of the 4th Plan Law authorized the Parliament to issue participation papers which as one of the few monetary instruments at the disposal of the Central Bank lost its effect. Therefore, considering the short-term nature of monetary and foreign exchange policy instruments and the lengthy procedures of obtaining a permit from the Parliament along with the substitution of issued participation papers, efficiency of Central Bank participation papers decreased. Nonetheless, in the final years of the 4th plan, with the rise in inflation rate, the Central Bank and the government managed to regain the right to issue participation papers.

5.5. Problems Emanating from the Implementation of Islamic Contracts

The Usury (Interest) Free Banking Law was aimed at implementing PLS contracts; however, as time passed, problems associated with the implementation of PLS contracts led banks more inclined towards transaction contracts. Thus far, the banking system of the country has not been successful in solving these problems and setting the ground for the right implementation of PLS contracts (due to lack of operational ability of banks to follow the cost-benefit process in various projects financed by PLS contracts).

5.6. Reserve Requirement Ratio

Utilization of reserve requirement ratio is among the limited instruments at the disposal of the Central Bank. A comparison of this ratio in Iran with the conventional banking of other countries indicates that this instrument lacks efficiency in terms of monetary policy. Due to high reserve requirement ratios in Iran, the cost of banking resources is high. This leads to high lending rates and points to inflexibility of reserve requirement ratio as an instrument. In case of an innovation by the Central Bank in terms of an effective monetary instrument which is commensurate with the Usury (Interest) Free Banking Law, the reserve requirement ratio may diminish or be totally eliminated.

5.7. Supervisory-Policy Packages of the Banking System

Supervisory-policy packages of the banking system which have been formulated since 1387 (2008/09), have a number of shortcomings associated with them. These packages form a one-year commitment for the Central Bank to implement the monetary policy, which is not an advisable trend as the Central Bank is supposed to adopt the necessary monetary policies with due regard to the economic conditions of the country. In addition to setting the scheduled credit policy, the mentioned supervisory-policy packages allow the government to utilize banking resources, which is contrary to monetary policy orientations of the 3^{rd} and 4^{th} Plans.

5.8. Relationship between Inflation and Foreign Exchange Rate

Of other macroeconomic and monetary policy challenges of the country is the setting and controlling of the nominal exchange rate (e.g. IRR/US$). With the unification of the exchange rate in 1381 (2002/03), an attempt was made to set the nominal exchange rate proportionate to the difference between the domestic inflation and the inflation rates in trade partners of Iran. This would contribute to the stability of the real exchange rate and competitiveness of Iranian exportable goods in the international market. As due attention was not devoted to this important matter during 1380s (2001-2010), economic policies and balance of payments of the country were adversely affected. As long as governments do not observe discipline in the formulation of the fiscal policy, adjustment of the nominal exchange rate with inflation could lead to a further rise in inflation rate. This could cause larger instability in the real exchange rate which will in turn decrease the competitiveness of domestic goods both in domestic and international markets.

5.9. Banks' Non-Performing Loans

Last but not the least challenge is the non-performing loans of the banks. This situation which poses a serious threat to the banking system of Iran is attributable to: the policy of extending scheduled and sectoral facilities, determination of unreasonable lending rates, banking managers' weakness regarding the consequences of the extension of scheduled facilities, and non-appraisal of economic projects prior to the extension of facilities.

6. Policy Recommendations

Analysis of the current study reveals that the monetary and credit policies during the period of study were heavily overshadowed by continuous fiscal expansions and government controls for various reasons. Even though, it was optimistically expected that the quality of the monetary policy during the five years development plans would be corrected. Unfortunately such expectations in general were not realized due to mainly oil revenues during the last decade of study. Only during the 3rd development plans a partial reforms allowed the inflation expectations to be corrected. But, by the beginning of the 4th development plan the monetary trend was reversed and with some lag caused relatively larger inflation in the final years of the study period. These observations eventually lead us to draw the following conclusions:

(A) lack of strong and reliable monetary instruments from legal points of view; (B), lack of fiscal disciplines and the will to correct the fiscal dominance records of the government and parliament and (C), lack of even a partial independency of CBI in monetary policy decisions process and heavily overshadowed role of the monetary and credit council (MCC) by government representatives in the MCC, are among the others providing the current environment of the monetary policy and banking system in Iran.

In order to turn around the above picture, we strongly believe that we need a Memorandum of Understanding (MOU) among the government, parliament and the CBI, in which the responsibility of these three decision making authorities must be defined transparently and each of which must be held responsible for its actions to general public. Of course, such step can not be taken unless a new thinking among the policy makers are developed and it will hopefully pave the ways for modifications in rules, regulations, laws of money and banking and above all, the attitudes of the authorities toward inflation and other macroeconomic goals are corrected.

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