

Impacts of Da Afghanistan Bank's Monetary Policy on Inflation and Exchange Rate

Habib Ur Rahman Stanikzai¹, Dawlat Khan Jawhar² and Shafiullah Ghausee³

¹Assistant Professor, Department of BBA, Faculty of Economics, Paktia University, AFGHANISTAN.

²Assistant Professor, Department of Banking & Finance, Faculty of Economics, Paktia University, AFGHANISTAN.

³Assistant Professor, Department of BBA, Faculty of Economics, Paktia University, AFGHANISTAN.

¹Corresponding Author: hs.ms1364@gmail.com



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ABSTRACTS

The Afghanistan Bank monetary policy is primarily used to maintain the stability and value of the Afghani. The Afghanistan Bank aims to remove unnecessary Afghanis from circulation through currency auction. On the one hand it results the amount of money in circulation (Afghani) is controlled to keep the price level stability, which is the main function of the Afghanistan Bank, and on the other hand, it indirectly prevents the depreciation of the Afghani against the dollar. Every year, the Afghanistan Bank sell a large amount of USD, but sometimes purchase take place. The Afghanistan Bank has been very successful in its monetary policy in achieving monetary stability and price stability. For example, in case of inflation we have seen that with an increase of one percent in the currency auction, inflation increases by 0.034 percent, in the exchange rate, increase of one percent in the amount of the currency auction, the value of Afghanis increases by 0.002 percent.

Keywords- Money, Inflation, Exchange Rate, Monetary Policy.

I. INTRODUCTION

As we know that monetary policy includes all those actions, which are carried out by central bank to regulate supply and demand of money, especially effects of exchange rate. One of the main goals of monetary policy is to neutralize the effects of the foreign economy on the internal economy and some other goals are to increase the competition and purchasing power of the people. In developed countries, usually monetary policy (changes in interest rates) and fiscal policy (government revenue and expenses) are used in practice and rarely the sell and purchase of foreign currency take place to affect the exchange rate. This is because its continuous use leads to the destruction of the central bank's currency reserves. This tool is mostly used in countries that follow a fixed exchange rate system. In Afghanistan, unlike other countries, monetary policy is used in the first step to maintain the stability and value of the Afghani. By

auctioning dollars in the market, The Afghanistan Bank wants to avoid the surplus of Afghanis in the market. This process helps in to control the amount of Afghanis and general price level and furthermore it indirectly avoid fluctuations in exchange rate especially Afg/ USD.

II. OBJECTIVES OF RESEARCH

The main purpose of this research is to investigate the monetary policy of Da Afghanistan Bank, increase our knowledge and find the scientific answer to some questions relevant to monetary policy.

1. To specify the amount of selling currency, especially dollars through auction by Da Afghanistan Bank.
2. To find out the effects of currency auction on exchange rate.
3. To determine the effects of currency auction on inflation.

III. IMPORTANCE OF RESEARCH

The results and findings of this study are paramount for monetary policy makers and economists within and outside the country and will assist Da Afghanistan Bank's employees and policy makers to recognize the problems and challenges for making policy effectively. It would also help traders and currency market participants to identify and resolve the fluctuations of the Afghani.

IV. RESEARCH QUESTIONS

In order to get a convincing conclusion from the research, the research questions should be answered throughout this article.

1. How much currency, especially dollars, does Da Afghanistan Bank sell through auction each year?
2. What is the average annual exchange rate of Afghani (AFN/USD)?
3. How does the monetary policy of Da Afghanistan bank affect the inflation rate?
4. How does the monetary policy of Da Afghanistan Bank affect the exchange rate of the Afghani?
5. Is Da Afghanistan Bank successful in its monetary policy?

V. RESEARCH MATERIALS AND PROCEDURES

This study has a field form; the information in this study has been collected from the central and regional offices of Da Afghanistan Bank, World Bank and from the website and bulletins of Afghanistan National Statistics & Information Authority (NISA) to analysis that parts in which Da Afghanistan Bank shares its data and policies with others. Therefore, the biggest limitation in this study is insufficient data, Absence and failure to provide some information by Da Afghanistan Bank.

VI. LITERATURE REVIEW

I couldn't find out anyone's research under this title, but still some researchers have been conducted researches close to this title.

Prof. Dr. Abdul Qayyum Arif, Central Bank and Advanced Monetary Policies, Assistant prof. Ahmed Javed Shoaib, evaluation of monetary policies in Afghanistan, Prof. Ajmal Kakar, factors of instability of the Afghani and plans to stabilize it and Nasir Ahmad Kotwal's, currency and exchange rate are worth mentioning.

VII. AN INTRODUCTION TO FOREIGN EXCHANGE POLICY

As we know that the Currency transactions take place in the currency market. The currency market, like any other market, is a market which determines the Supply and demand and it displayed by the movements of the supply and demand curves or by changing the position of the supply and demand curves. These Movements on the supply and demand curves are caused by changes in the exchange rate, beside the exchange rate there are more other factors that affecting the supply and demand of currencies which cause the position of supply and demand curves to move or change graphically. 123:9

Factors affecting the supply of the foreign currency

- ❖ Export enterprises that exchange foreign currency against domestic currency.
- ❖ Central banks, which are careful to stabilize the exchange rate in case of an increase in the foreign exchange rate central Banks supplies foreign currencies.
- ❖ Investors, who bring capital and convert foreign currency into domestic currency,
- ❖ Tourists bring and convert foreign currency into domestic currency.
- ❖ The demand for domestic currency due to the effect of the interest rate, in which case the domestic interest rate is more than the foreign interest rate.
- ❖ Factors affecting the demand foreign currency
- ❖ Importing enterprises that exchange domestic currency into foreign currency.
- ❖ The demand of Central banks, in case of a decrease in the exchange rate, in order to stabilize this rate, to foreign currencies.
- ❖ Exporters of capital that convert domestic currency into foreign currency.
- ❖ Foreign and domestic enterprises that are waiting for a decrease in the internal exchange rate and for this reason, in short period they want to convert foreign currency into domestic currency.
- ❖ Demand for foreign currency due to interest rate effect, if the foreign interest rate is higher than the domestic interest rate.
- ❖ At last we can conclude that central banks can act as a supplier and a demander in the currency market.

VIII. CURRENCY AUCTION PROCEDURE OF DA AFGHANISTAN BANK

Da Afghanistan Bank sells currency especially US dollars through auctions to reduce the risk of inflation and as well as stabilize the exchange rate through outflow of unnecessary Afghani from the market. Such procedures are carried out based on the instructions of the International Monetary Fund, Da

Afghanistan Bank's Board of Directors, and as well as Afghanistan Bank's Auction Committee.

At the end of every week, the auction committee (usually on Thursday) decides the amount of dollars to be auctioned in the next week. The currency auction is usually held three times a week on Saturday, Monday and Wednesday through the market operation department. After the decision of the committee, the auction will be announced through the media, including Afghanistan Radio and Television, for the sake of the participants' awareness and prepare the list of participants in the auction.

The participants of the auction must fulfill the following conditions

- ❖ Only those money exchangers (domestic and foreign, commercial or private banks) can participate in the auction processes who have obtained a license from the central bank.
- ❖ Participant can participate either as a customer or as a seller and can't participate as both seller and purchaser at same time.
- ❖ The participants have the obligation to deposit ten thousand dollars to the account at least one day before the auction.
- ❖ Each participant must fill the form of sell and purchase and submit it to the relevant staff.
- ❖ A participant can purchase up to 10% of the auction total.
- ❖ Each participant can offer two different exchange rates as seller or purchaser.
- ❖ The winner of the auction is obliged to clear the account within three working days, auctions day and followed by another two days.
- ❖ In case of that the winners of the auction don't pay the amount of dollars at the specified price at the time of delivery and don't clear his account, the guarantee amount will be charged in the form of a fine and deliver to revenue account.

IX. CURRENCY AUCTION AMOUNT

Every year, the Bank of Afghanistan offers a certain amount of its currency, especially US dollars, for auction. In this section, Most of Da Afghanistan Bank's activities are selling dollars against Afghanis.

As shown in the table below, the currency auction by Da Afghanistan Bank from 1385 to 1389.

The change has a downward trend, but in the year 2009, there was a negative 37 percent change in the currency auction, the main reason for this year is global financial crisis.

In 1392, Da Afghanistan Bank's currency auction totaled 3,482 million US dollars, the total reserve currency was 6,715 million US dollars, and the total demand was 4,985 million. Da Afghanistan Bank's assets reached 7,273 million US dollars in the first month of 1393, and increased to 6,812 million US dollars in 1394. Afghanistan Bank has auctioned 2,793

million US dollars in the market during 1394 for the aim of maintaining balance. The main reason for the decrease in Da Afghanistan Bank's currency auction was decrease in currency and gold rates in the international market compared to 1394. Da Afghanistan Bank has auctioned a total of 1926 million US dollars during the fiscal year 1395, which is a 31 percent decrease compared to 1394, due to increase in securities in this year. The main reason for increase in securities was increase of demand to Afghanis in the market and it has enabled Da Afghanistan Bank to lower the auction amount and increase the reserve and in that time the total demand was 2669 million USD. In 1397 Da Afghanistan Bank total Auction Amount was 2415 million USD which shows 24% increase compare to 1396, due to persuade of investment and access of people to financial services, and at the time the demand was 3361 million USD. In 1398 Da Afghanistan Bank the total auctioned amount was 2430 million USD and the total demand was 5779 million USD.

Table1: Currency reserve and Auction amount of Da Afghanistan Bank on million USD 1385-1399.

Year (Hijri Shamsi)	Reserve (Million USD)	% Change	Auction Amount (Million USD)	% Change
1385	2200		565	
1386	2750	25	956	69.2
1387	3637	65.32	1460	52.72
1388	4218	15.97	2059	41.03
1389	5405	28.14	1307	-36.52
1390	6259	15.8	2685	105.43
1391	6435	2.811	2531	-5.74
1392	6715	4.35	3482	37.58
1393	7273	8.30	3305	-5.08
1394	6812	-6.33	2793	-15.52
1395	6824	0.17	1926	-31.04
1396	7350	7.7	1947	1.09
1397	7534	2.5	2415	24.03
1398	7864	4.38	2430	0.62
1399			2127	-12.46

Source: Annual reports of Da Afghanistan Bank (1385-1399).

X. RESULTS & FINDINGS

Da Afghanistan Bank's monetary policy aims to control the money in circulation for the stability in price level or prevent inflation, in addition to this it also aims to decrease the fluctuations in exchange rate especially against USD and it indirectly affects the balance of trade.

10.1. Impacts of monetary policy on inflation

By comparing the changes in the currency auction and inflation, we can conclude that whether the central bank's policy (intervention in the currency

market) of Afghanistan has achieved the goals set in terms of Afghani stability?

Table 2: % Change in inflation rate (1386-1399)

Year (Hijri Shamsi)	% change of inflation rate
1386	23
1387	5
1388	-5
1389	14
1390	8
1391	6
1392	7.39
1393	4.67
1394	-0.66
1395	4.38
1396	4.98
1397	0.63
1398	2.3
1399	5.61

Source: Annual reports of Da Afghanistan Bank (1385-1399).

As we can see in the graph below, Afghanistan Bank has been very successful in its currency policy in terms of Afghani and price stability. In 1386-1388, the inflation and the changes in the currency and the auction moved in parallel. In 1389, deflation caused Da Afghanistan Bank to quickly decrease the auction amount, thus prevented deflation in 1390. In 1390 105% changes in currency amount was due to prevent increasing inflation.

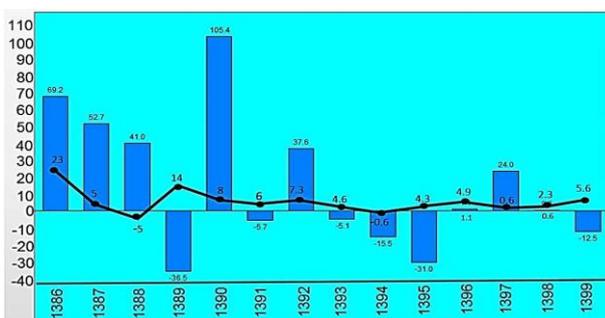


Figure1: Relationship between inflation and Auction amount.

The fear of deflation caused the DA Afghanistan Bank to reduce the currency auction in 2013 to a negative margin compared to the previous year. Also, by increasing the amount of currency auction in 1392, they were able to keep the inflation rate constant compared to the previous year. In order to avoid deflation, Afghanistan Bank once again reduced the amount of currency auction in 1393 and this process

continued until 1395. Based on the increase in inflation, Da Afghanistan Bank increased the amount of currency auction in 1396 and 1397 in order to prevent inflation, on the basis of which the inflation rate fell to 0.63 percent in 1397. In order to prevent deflation in 1398 and 1399, there was a decrease in the amount of auction of currency once again.

Dependent Variable: INF
 Method: Least Squares
 Date: 04/29/21 Time: 04:54
 Sample: 1 14
 Included observations: 14

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.184546	1.951220	2.657078	0.0209
AUC	0.034243	0.046073	0.743242	0.4716
R-squared	0.044008	Mean dependent var	5.735714	
Adjusted R-squared	-0.035658	S.D. dependent var	6.635699	
S.E. of regression	6.752970	Akaike info criterion	6.789406	
Sum squared resid	547.2313	Schwarz criterion	6.880699	
Log likelihood	-45.52584	Hannan-Quinn criter.	6.780955	
F-statistic	0.552408	Durbin-Watson stat	1.992865	
Prob(F-statistic)	0.471637			

Using the EViews program, we can conclude, if Da Afghanistan Bank increases the auction amount of currencies, especially dollars, by one percent, then inflation increases by 0.034 percent. In other words, inflation is increasing at the village level, but it is still under control through the currency auction. So it can be said that Da Afghanistan Bank is successful in its monetary policy in terms of inflation.

10.2. Impacts of Da Afghanistan Bank monetary Policy on exchange rate

In the second step, the Da Afghanistan Bank considers the purpose of the external value of the Afghani besides the internal value of the Afghani. Based on this, the central bank of our country uses the exchange rate managed variable system. By auctioning the currency in the foreign exchange market Central Bank can avoid unwanted fluctuations in the exchange rate i.e. AFN/USD. To compare the changes in the currency auction and the changes in the exchange rate AFN/USD, we come to the conclusion that whether the Bank of Afghanistan is successful in keeping the foreign value of the Afghani stable or not? By auctioning dollars in the currency market, the supply of dollars increases and it leads to the decrease in the value of the dollar and eventually lead to an increase in the value of the Afghani.

As seen in the first graph, this relationship is partially true for the year 1387 and clearly for the years 1391, 1393, 1394 and 1395. In the year 1387 compared to the year 1386, there has been a decrease in the auction of dollars, and this decrease has led to the increase in the value of the dollar and the decrease in the value of the Afghani. In the years 1391, 1393, 1394 and 1395, the amount of dollars auctioned by the Central Bank has decreased by a large amount compared to the previous years, which is due to the increase in the exchange rate in these years compared to the previous years. The increase in the value of the dollar and the decrease in the value of the Afghani have caused. The relationship is inverse from 1388 to 1390, 1392 and from 1396 to 1399.

Although in 1388, 1389 and the years of There has been a decrease in the dollar auction, but the decrease in the value of the dollar has increased in the value of the Afghani. However, there has been an increase in the value of the dollar and a decrease in the value of the Afghani (the exchange rate has fallen). Valid for the years 1392, 1396 and 1397)

Table 3: Exchange rate USD/Afg

Year (Hijri Shamsi)	Exchange rat USD/Afg 1\$= Afg
1386	50
1387	51.78
1388	49.17
1389	45.37
1390	47.76
1391	51.43
1392	55.38
1393	57.47
1394	61.42
1395	67.87
1396	68.12
1397	72.33
1398	77.63
1399	76.81

Source: Annual reports of Da Afghanistan Bank (1385-1399).

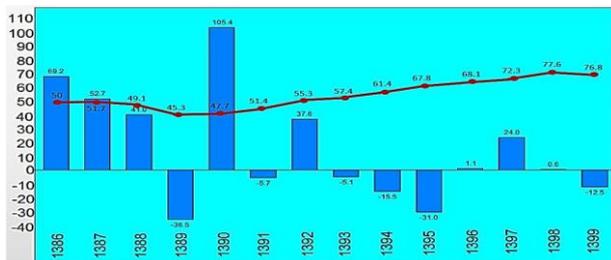


Figure 2: Relationship between Auction amount and exchange rate.

The reasons for such an inverse relationship are the factors that affect the exchange rate in the currency market without the intervention of the central bank. As we mentioned in the foreign exchange section, intervention in the foreign exchange market by the central bank is considered one of the five influencing factors on the supply and demand of the currency, and as a result, it is an important factor in changing the exchange rate considered to be the important factor.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.070181	0.045528	89.39872	0.0000
AUC	-0.001959	0.001075	-1.822351	0.0934
R-squared	0.216759	Mean dependent var	4.038648	
Adjusted R-squared	0.151489	S.D. dependent var	0.171058	
S.E. of regression	0.157569	Akaike info criterion	-0.726342	
Sum squared resid	0.297936	Schwarz criterion	-0.535049	
Log likelihood	7.084397	Hannan-Quinn criter.	-0.734793	
F-statistic	3.320963	Durbin-Watson stat	0.561669	
Prob(F-statistic)	0.093402			

The results tell us clearly, if the Da Afghanistan Bank increases the auction amount of currencies, especially dollars, by one percent, then the value of Afghani increases by 0.002 percent. So it can be said that the Da Afghanistan Bank is successful in its monetary policy in terms of exchange rate.

XI. CONCLUSION

Through the auction of American dollars, on the one hand Da Afghanistan Bank reduces the amount of Afghani in excess of the market requirement, which carries the risk of inflation, and on the other hand, by changing the exchange rate, the foreign value of the Afghani increases.

Such procedures are carried out under the guidance of the International Monetary Fund and Da Afghanistan Bank delegation, as well as on the basis of the decisions of Da Afghanistan Bank Auction Committee. By comparing the changes in the currency auction and inflation, we can conclude that the central bank's monetary policy (intervention in the currency market) in achieving the set goal of stabilizing the Afghani which is used by the central Bank has been more successful in its monetary policy in terms of currency stability and price stability.

In the second step, based on this, the central bank of our country uses the exchange rate managed variable system, so by auctioning currency in the foreign exchange market, they can avoid unwanted fluctuations in the exchange rate i.e., AFG/USD. By comparing the changes in the currency auction and the changes in the exchange rate AFG/USD, we come to the conclusion the increase in supply of Us dollars decrease the value of the Us dollars in the market and it leads to increase the value of the Afghani. So we recommend Da Afghnistan Bank and Policy maker to be careful in the currency auction amount for the purpose of not to decrease the reserve amount.

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