

Analysis of Inflation Determinants in Afghanistan: An Empirical Evaluation

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Abstract

This paper employ econometric techniques Ordinary Least Square Method (OLS) to analyze the determinants of inflation in Afghanistan, focusing particularly on the relationships that exist between the Afghanistan consumer price index (CPI, as the dependent variable, and the Currency in Circulation (CIC), and nominal USD/Af exchange rate, being the explanatory variables and probable determinants of inflation rate in Afghanistan. Inflation equations that were estimated used monthly data from March 2004-to August 2017 for Afghanistan, and it was found that in the short run, domestic prices are influenced by currency in circulation and fluctuation of exchange rate. This conclusion shows that domestic variables are very effective on inflation but other studies found that Afghanistan inflation mostly is determined by external shocks such as world oil and commodity price and world food price because Afghanistan is one of highly imported oil and food country in the world. However, external variables are not considered in this study.

JEL Classification: L12, M7, M5

Keywords: Afghanistan, Exchange rate, Inflation

1. Introduction

The current study aims at studying the determinants of inflation in Afghanistan during the period March 2004 and August 2017. Inflation has been one of the principal macroeconomic challenges facing many developing countries including Afghanistan. Inflation, which is a sustained increase in general price level in an area over a certain period of time (Samuelson and Nordhaus, 1995). In Afghanistan it is measured by using the Consumer Price Index (CPI) compiled by the Central Statistics Office (CSO). As inflation is a necessary evil like friction in physics, so for an economy it is important

to understand its behavior. Modeling exercise based on econometrics attempts to identify those factors that cause inflation in an economy. The models employed in this study help us to know the effects of domestic factors of inflation in Afghanistan economy. To control inflation in an economy, policy makers should study the factors that determine the inflation process in the economy especially domestic factors. The paper sets out to analyze and estimate the coefficients of the inflation model of Afghanistan. In this study the Inflation function of Afghanistan comprises of mainly two important factors which determine its path and these are; Money Supply and nominal Exchange rate. The ultimate goal of this paper is establishing which variables are more significant within the model so that they can be used for anti- inflationary policies. The analysis is based on monthly time series data of these variables covering the period 2004-2017. The figure of inflation in Afghanistan shows four phases in the first phase from March 2004 till June 2007 its trend is somehow steady fluctuating between 2.79 and 12.51. It accelerated from July 2007 till May 2008. The CPI rose by 30.63 percent in 2008/09 (period average, based on data for Kabul) because of the drought and high international commodity prices. From July 2008 Prices decreases and turned from inflation to deflation in March 2009/10. However, inflation started to decelerate in late 2008 and turned negative in April 2009, following the decline in world prices and promise of a bumper harvest. CPI growth rates during 2009/10 were -12.15 percent Food prices fell by 18.9 percent, while non-food prices increased by 2.38 percent. Starting from February 2010 till March of 2015 inflation recorded 6.03 in average. Inflation dropped significantly in 2014, driven by both domestic factors and global price trends. Consumer price inflation dropped in 2014, as both food and non-food inflation softened. The average period inflation was recorded at 4.6 percent in 2014 compared to 7.4 percent in 2013. Both food and non-food prices contributed to the drop in inflation. The end-year numbers show an even larger decline, with headline inflation dropping from 7.3 percent in December 2013 to 1.4 percent in December 2014. The inflation turned to deflation again in March 2015 which was recorded- 0.7 per cent (Afghanistan

Economic Update, April 2014). In 2016 on CPI recorded 2 percent whereas, average CPI show a figure 0.8% in 2017 with a deflation of 0.4% in second quarter.

1.1 Statement of the Problem

Inflation stated as a general rise in the price level in an area over a certain period of time leading to serious effects on the economy, thus becomes a worrying phenomenon. Higher inflation rates than the rest of the world, for instance will make domestic goods and services become relatively more expensive, when this happens, a country will lose its competitiveness capacity. Being a country that is heavily depended on external trade, a loss in competitiveness would harm the economy seriously. Highly variable inflation rate has the tendency to distort price mechanism because people find it difficult to distinguish price movements associated with changes in the demand and supply for particular goods and services from general increases in the price level, resulting in an inefficient allocation of resources. Constantly changing prices leads to uncertainty in future prices, and uncertainty about future prices makes it difficult for individual and firms to plan correctly. Unpredictable price movements cause expectations, which can further fuel inflation; thus, wage-spiral or labor unrest may occur as workers seek wage rises to maintain real income. Studies have shown that the mostly affected groups of people in the economy are those on fixed incomes since they stand to lose out e.g. pensioners. The high rates of inflation lead to a lower and sometimes negative real deposit rates of interest which in turn discourages savings and consequently slows down the savings-investment growth process, as suggested by Odada et al in 2002. Historical trends in savings and investment given by Ipunbu and Kadhikwa (1999) supports this statement that shows evidences of declining Gross National Savings (GNS).

1.2 Hypothesis

H₀= Inflation is effected by CIC fluctuation in Afghanistan

H₁= inflation is not effected by CIC fluctuation in Afghanistan

H_0 = inflation is effected by USD/Afs exchange rate fluctuation in Afghanistan

H_1 = inflation is not effected by USD/Afs exchange rate fluctuation in Afghanistan

1.3 Objectives

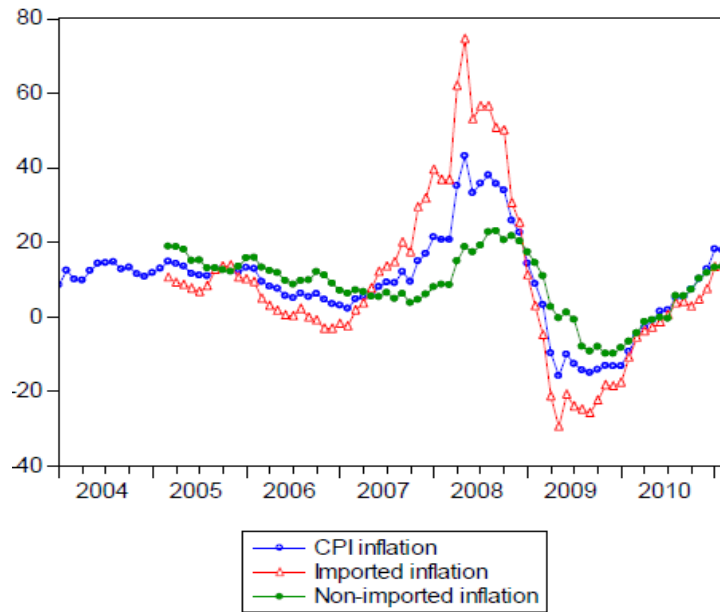
- To examine the relevant internal variables influencing inflation in Afghanistan, using both theoretical and empirical analytical frameworks.
- To determine which explanatory variables are significant determinants of Afghanistan.
- To present and discuss economic policy implications and draw some conclusions.

2. Literature Review

Inflation has been the most hotly debated macroeconomic issue during the past two decades and numerous theories have been advanced to explain this phenomenon. Many have turned to economic theory for answers, but unfortunately, even economic theory does not offer an exact remedy to the problem of inflation. The main reason why economic theory cannot offer them an exact remedy is because many economists still holds different and sometimes conflicting view on what could be the possible causes of inflation (Fry, 2014). It is for this reason that when one turns to a discussion of the causes of inflation, one usually finds that the literature contains two major competing propositions which attempt to explain the phenomenon. First there is a monetarist model which sees inflation as essentially a monetary phenomenon the control of which requires as a necessary and sufficient condition control of the money supply in such a way that it grows consistent with the growth of demand for money at stable prices. Second, a structuralism model which looks at the structural set up of an economy and the supply side . The idea linking inflation to country-specific structural factors dates back to the influential studies of Hasan Khan and Bahshah (1995), Streeten (1962) and Baumol (1967). The structuralism distinguishes between the autonomous and the propagation elements in inflation in

developing countries. The autonomous elements represent shocks that impinge on the system initiating or accentuating inflation. There are the four major autonomous elements: output mix between agricultural and non-agricultural origins of gross domestic product, export instability, rigidity of food supply and scarcity of foreign exchange. The propagation elements represent the ways that system responds to or accommodate shocks. The major propagation elements are the wage-price spiral, “induced” budget deficits and exchange rate changes. The structuralism argues that price stability can only be achieved through selective and managed policies for economic growth. In this section, empirical work that was done in the area of inflation in Afghanistan and its neighboring countries is presented. The literature review which was conducted for this study has revealed to us that there is indeed a considerable body of empirical work on inflation in different Asian countries. These studies have attempted to examine the phenomenon by through various approach and many of these further attempted to estimate the causes of inflation from structural and monetarist perspective. In Afghanistan perspective, prices have been more volatile than growth. Between May 2008 and May 2009, the CPI inflation dropped from its peak of 43.2 percent to -15.8 percent. Its standard deviation amounts to 12.3 percent. The first type of question to ask is to whether this inflation is imported or it is generated domestically. Looking at the decomposition of CPI inflation to imported and non-imported elements, as illustrated in Figure 2, one could easily observe that the large fluctuations in level of prices are generated by external shocks transmitted through the trade channel. Given the high degree of openness of the Afghan economy, imported items constitute 47.9 percent of overall CPI basket. Imported inflation reached as high as 74.5 percent in May 2008 and plunged to as low 54 as -29.4 per cent in May 2009. While over the same period, non-imported inflation fluctuated very narrowly between 18.8 and -0.3 per cents. The standard deviation of imported and non-imported inflation thus differ remarkably; 21.7 and 8.3 per cents, respectively.

Figure 1: CPI decomposition to imported and non-imported inflation



Source: Imported and non-imported inflation is calculated by author based on disaggregated CPI data available at central statistic organization of Afghanistan

To study the relationship between price volatility and internal and external shocks, following econometric model is employed for estimation purposes as follows:

$$\ln\left(\frac{CPI_t}{CPI_{t-1}}\right) = \beta_0 + \beta_1 \ln\left(\frac{M_t}{M_{t-1}}\right) + \beta_2 \ln\left(\frac{NEER_t}{NEER_{t-1}}\right) + \beta_3 \ln(NTT_t) + \beta_4 \ln\left(\frac{OIL_{t-1}}{OIL_{t-2}}\right) + \beta_5 \ln\left(\frac{WCRL_{t-1}}{WCRL_{t-2}}\right) + \varepsilon_t$$

where M is the stock of money in circulation (Mo), NEER the nominal effective exchange rate (expressed as units of foreign currencies per unit of Afghani), NTT the ratio of prices of non-tradable goods to tradable, OIL the average world price of crude oil (calculated by IMF), and WCRL the FAO world price index of cereals. In order to study the volatility in domestic prices and its relationship with “shocks” to other variables, the model uses the ‘growth in level’ of each variable, except for the variable NTT. By using the logarithmic growth rate of variables, the model captures the shocks and volatility in each variable and will tell us how much of a shock to a given ex-

planatory variable may cause volatility in the dependent variable. However, since we are not concerned with the shock and variability in the ‘price ratio of non-tradable to tradable’ rather with the association between the ratio itself and the price volatility, I use the level of ratio instead of its variation.

The stock of money in circulation and the effective exchange rate are the two variables linked to internal factors. World prices of oil and cereals are the external variables which can have significant impact on the Afghan economy. That is because, first, Afghanistan is totally an oil-importing country, and secondly, it imports a large amount of cereals each year and is not yet self-sufficient in cereal production. The impact of these variables on the Afghan economy is transmitted after a quarter due to lags in transportation and other trade barriers. An important variable in the model is the price ratio of non-tradable to tradable (NTT). It contains an enormous amount of information as to whether inflation-generating shocks come from the internal sources or from the external ones. If these are the internal sources which drive inflation up or down, then there should be a positive correlation between the prices of non-tradable goods and the overall CPI inflation. But if the shocks are of external nature, then we should expect that the prices of tradable goods will increase and fall much faster than the prices of non-tradable goods. In this case, there will be a negative correlation between CPI inflation and the price ratio of non-tradable to tradable.

The model is regressed using quarterly data. The choice of the frequency of data is not made randomly. In fact, high frequency data such as monthly series include other temporary and transitory shocks which will affect our estimation results. While, on the contrary, low frequency data (i.e. annual) will not allow us to study the short-term cyclical behavior of our variables of concern. Therefore, the choice of quarterly data has been made carefully.

Table 1: Estimation Results of the Model

dependent variable : DLOG (CPI)				
Method: Least Square				
Sample (adjusted) 2003Q2 2011Q1				

Included observation :32 after adjustment				
Variables	Coefficient	Std. Error	t-statistics	Prob.
C	0.688377	0.314421	2.189344	0.03370
DLOG (CIC)	0.1309590	0.123749	1.058271	0.29970
DLOG(NEER)	-0.1027830	0.128100	-0.802365	0.42960
LOD(NTT)	-0.1445800	0.066391	-2.17771	0.03870
DLOG(OIL(-1))	0.0656290	0.031167	2.105716	0.04500
DLOG(WCRL(-1))	0.1840060	0.052288	3.519097	0.00160
R-Squared	0.5998640	Mean dependent var		0.02210
Adjusted R squared	0.5229150	S.D. dependent var		0.04018
S.E of Regression	0.0277530	Akiake info criterion		-4.16355
Sum Squared resid	0.0200700	Schwarz criterion		-3.88873
Log likelihood	72.6168500	Hannan-Quinn criterion		-4.07246
F-Statistics	7.7955880	Durbin-Watson Stat		1.86193
Prob(F-statistic	0.0000136			

Source: Output generated from E-Views

Table 1 shows the estimation results of the model. The overall specification of the model seems to be acceptable, as more than half of the variance of dependent variable is explained by the model, the signs of all variables are theoretically consistent, and the Durbin-Watson statistic indicates no autocorrelation.¹ The results show that money growth and shocks to exchange rate do not have any impact on the volatility of prices, as they are both statistically insignificant. This may support the argument that the relationship between money growth and the level of prices is not stable in developing countries in the short-run. Particularly in an economy undergoing rapid financial liberalization, – which is the case in Afghanistan – the parameters characterizing the demand for money (notably the interest elasticity of money demand) and the relation between the monetary aggregate and inflation may be *highly unstable* (Agénor, 2004). Moreover, other empirical studies have found that monetary aggregates cannot be optimally used as information variables for inflation or nominal income.

Mishkin in 2007 stated that despite the fact that almost half of consumer spending items in Afghanistan is imports and that any shock to the ex-

change rate will have a significant impact on prices, the observed data since 2003 does not show such an incident; the nominal exchange rate has been almost stable and has never experienced any serious shocks which could have produced volatility in the prices.

Joya (2011) in his study concluded that *terms-of-trade shocks* explain “significant” portion of price volatility in Afghanistan. Furthermore, *low degree of diversification* in the production structure is another factor which has exposed the Afghan economy to external shocks, especially to shocks in world prices.

Niaz et al (2013) depicted the prime reasons and sources of inflation in Pakistan by using the annual time series data from 1980 to 2012. An Autoregressive Distributed Lag (ARDL) approach was followed for model construction to calculate the coefficients for the short run and long run. Based on the results, the exchange rate plays a significant role in determining inflation as one percent rise in exchange rate leads to 2.12 percent rise in inflation. The total reserve affects inflation in the long run while in the short run they don't exert any effect. Gross national expenditure significantly affects the inflation in the short run while in the long run reports no any impact. According to the results of this study, one percent rise in money supply invites 0.16 per cent points increase in inflation (Olcott, 2004). The results state that one percent rise in liquidity invites 0.16% points increase in inflation. Following previous reports in Pakistan, budget deficit leads to excess money supply and thus inflation rises.

Thus the main factors of inflation are money supply, total reserve, imports, gross domestic product, and gross national expenditure that can be considered for the large sample size with maximum frequency in the future.

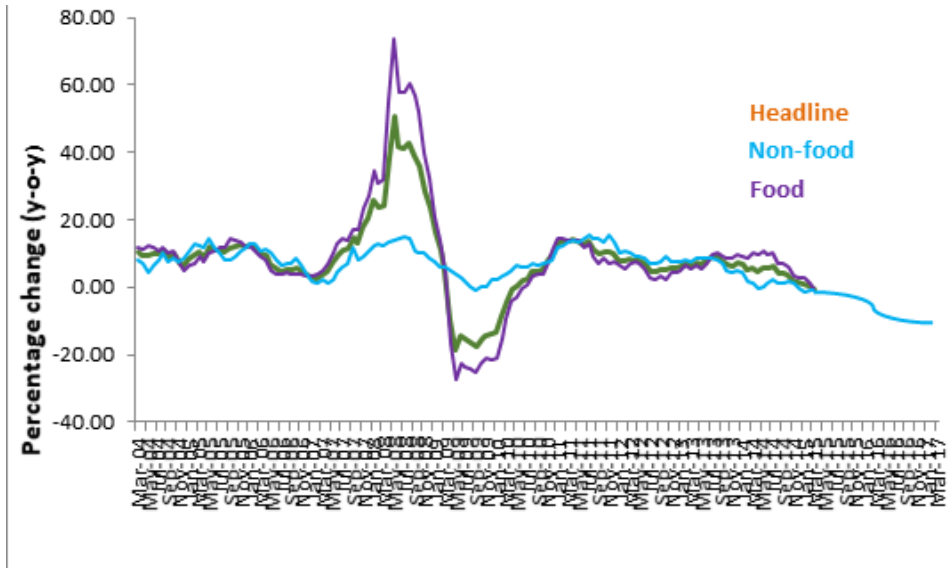
3. Methodology

This study follows both qualitative and quantitative approach to estimate the determinants of inflation in Afghanistan. The study is based on monthly data from March 2004 to August 2017.

3.1 Trends of Inflation in Afghanistan

a) Evolution of Inflation during the period 2004-2017

Figure 2: Inflation from 2004-2017



Source: CSO and DAB Calculation

Figure 1 show the inflation rate in Afghanistan was recorded at -3.70 percent in August of 2015. Inflation Rate in Afghanistan averaged 8.73 percent from 2004 until 2017, reaching an all-time high of 50.5percent in 2008 and a record low of -18.39 percent in May of 2009.

Table 2. Annual inflation from 2004 -2017

Year	Headline	Food	Noon Food
2004	9.48	10.93	7.37
2005	10.75	10.64	11.05
2006	11.34	14.92	8.66
2007	6.79	6.95	4.96
2008	10.94	12.51	3.33
2009	48.12	81.5	4.52
2010	-9.26	-15.32	3.7
2011	-4.52	-11.48	9.43
2012	7.31	5.97	9.7
2013	7.4	7.56	7.25

2014	4.65	7.78	1.31
2015	-1.86	-2	-1.71
2016	-1.83	-2.15	-1.69
2017	-1.47	-2.09	-1.67

Source: Author's Compilation

Domestic inflation follows trends in global commodity prices. In particular, international prices for cereal and fuel have a strong impact on food and energy prices in Afghanistan. Two major factors explain this pattern of inflation. Firstly cereals and fuel together attract approximately 22.5 percent of consumer spending and thus have strong influence on the overall price level in the country. Secondly, Afghanistan is not self-sufficient in cereal; with poor weather conditions and harvest, the country imports most of its cereal requirements from abroad. Similarly, there is a strong dependence on fuel and oil imports resulting in deeper shocks of inflation. Another peculiarity of Afghanistan's inflation pattern is that the pass-through of changes in international commodity prices is significant not only in size but also in speed.

Considering that international price development have such a large and swift impact on national inflation, can core inflation (CPI excluding food and cereals) be used to predict long-term inflation? An analysis of past trends shows that in years where prices of cereals and fuel were exposed to large fluctuations i.e., between 2007 and 2010—core inflation followed a rather smooth trend. For example, headline inflation reached a record high of 30.5 percent in 2008 and subsequently dropped to -8.3 percent in 2009, which was primarily driven by the 2008 world commodity price crisis. Yet core inflation remained at 10.6 percent and 3.3 percent in these two years. However, in 2011 where non-food and non-energy prices increased more sharply and the prices of cereals and fuel remained stable, core inflation was higher than headline inflation (15.9 percent compared to 12.8 percent). This implies that core inflation can be a good indicator of the level of prices, but only during times of strong volatility in cereal and fuel prices. (Afghanistan Economic Update, 2013).

4. Data Analysis and Findings

In consistency with the primary objective of this paper, our main intention for analyzing time-series is essentially to be able to describe, explain, predict data and use it to control economic situations i.e. anti-inflationary policies. This section comprises of the empirical estimations of inflation in Afghanistan. By specifying the model and the model is estimated with data from March 2004 to August 2017.

a. Model specification

Based on our theoretical discussions in chapter 3 we have specified the long run equation as follows:

$$P = \alpha + \beta_1 CIC + \beta_2 EX \dots \dots \dots (1)$$

In the above equation, P represents the Afghanistan Consumer Price Index, CIC is the money supply; and EX is the nominal exchange rates USD/ Afs. Furthermore for the full definition of variables and expected signs of variables as both of the coefficients on the variables are expected to have a positive sign, and expect to have a positive relation, thus Table 2 provides the information.

Table 3: Definition and expected signs of variables

Variables	Definition
P	Afghanistan Consumer Price Index (at 2000=100)
CIC	Total notes and coins issued minus total cash in central bank vault(+sign)
EX	Afghani/ United State Dollar(+sign)

4.1 Data Analysis

• Data sources and transformation

The data in this study were collected from diverse sources and were all expressed in millions of Afghanistan Afghani, unless otherwise stated. The data are monthly, covering the period March 2004 to August 2017, or a total of 13 observations. The data on CPI were obtained from the CSO of Afghanistan.

The data of CIC has taken form the Monetary and Financial Statistics data base of Monetary Policy Department of Da Afghanistan Bank and the nominal Afghani and USD take from the exchange rate section of the MPD department of Da Afghanistan Bank.

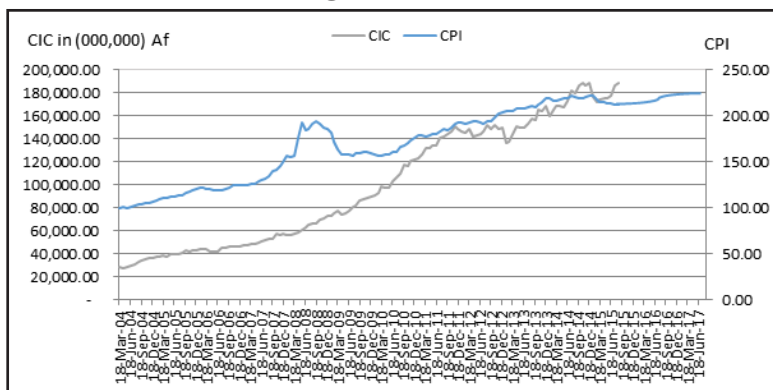
- **Data Trends**

Although a concise review of the inflation trend was provided in previous section, so it is necessary to reproduce the inflation rate trends for analytical purposes when comparing it with the trends of other variables. (See Figure 2)

- **Currency in Circulation (CIC) or money supply**

One of the key variables used in this analysis is currency in circulation (CIC). CIC is defined as total notes and coins issued minus total cash in central bank vault. Fig 4.1 illustrates the relationship between the inflation rate (as measured by the rate of change in the consumer price index) and the growth rate of the CIC. According to economic theory, if the money supply grows faster than the real GDP, then accelerated inflation can occur due to more money chasing a given quantity of goods and services. Thus we might expect a direct relationship between M2 and inflation rate. CIC or money supply data in Fig 4.1 shows considerable expansion in the first quarter of 2011, and also 2014. However, money supply showed a low growth rate in 2006 and 2007.

Figure 3: Comparative trends between inflation rate and monetary growth



Source: Author's Compilation, 2017

The graph indicates that periods of high monetary growth were followed by high inflationary trends. Thus, confirming our expectation in line with the economic theory; that there is a positive relationship between money supply growth and inflation rate throughout the period under study.

- **Exchange Rate**

Exchange rate is defined as the number of units of foreign currency that can be purchased with one unit of domestic currency (Gottheil, 1996). This analysis uses the Afghanistan and USA exchange rate; this is the number of US dollar that can be purchased with one Afghanistan, Afghani. Monetary Policy Department of Da Afghanistan bank is following managed floating exchange rate and the rate of exchange between currencies mostly determines by the demand and supply for the nation's currency. This study is concerned with the effect that movements in the exchange rate could have on the levels of price in the country. These movements are often referred to as either an appreciation or depreciation. An appreciation occurs when there is a rise in the price of a nation's currency relative to a foreign currency. And depreciation occurs if there is a fall in the price of a nation's currency relative to a foreign currency.

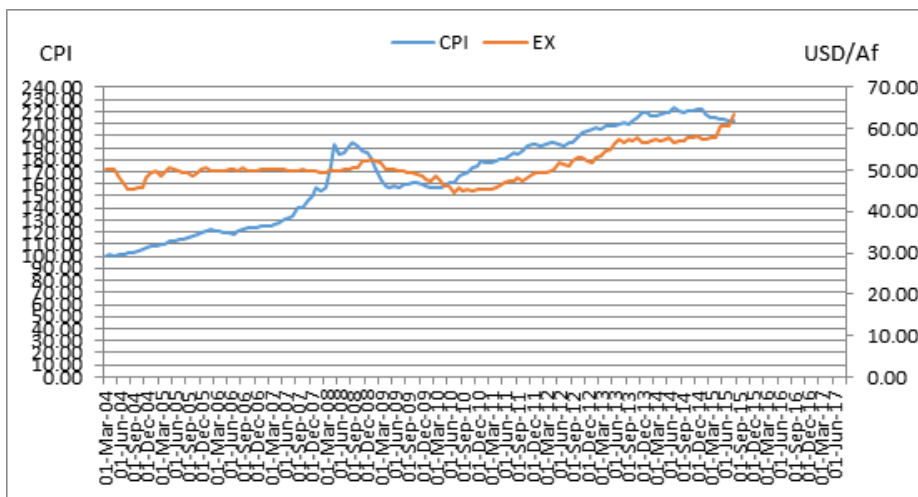
According to theory, depreciation could have both positive and negative effects on the economy. On the negative side, a depreciating currency results in high import prices and these high import prices leads to increases in domestic prices and eventually inflation.

On the positive side also, a depreciating currency makes domestically produced goods more competitive on the export market and could increase the demand for those goods. There are more benefits to this movement, such as increases in employment among others According to the Afghanistan balance of payment our country is one of highly imported contraries in the world according to Da Afghanistan Bank and Central Statistical Office total yearly export reached 620.9 million USD while the import was 6437.71 million USD.

The import makes the 90 per cent of total trade of Afghanistan. Due to this facts the currency exchange rate fluctuation play and a key and leading role on Afghan economy and its important indicators especially inflation rate. This has been the objective of the monetary policy department of DAB over the years and has proved to be effective in attaining the ultimate objective of price stability. The data indicate that the change in the Afghani

exchange rate against the United States remained relatively stable from 2004 to 2007 but appreciated during 2008 -2010, after that it depreciated slowly till end of 2014 and fatly during first six months of 2015 and 2016. Fig. 4 shows an existence of a positive relationship though out the period of the study

Figure 4: Comparative trend between inflation rate and exchange rate growth



Source: Author’s Compilation

• **Modeling Strategy of this study**

A comparison of inflation and other variable that was provided in the previous section helped us establish the nature and signs of relationships that exist among them. This subsection further extends the previous framework; by bringing in some econometrics techniques that are used to estimate the model. In my model CPI considered as independent variable and currency in circulation (CIC) and exchanger rate (EX) taken as dependent variables which its mathematical equation is:

$$CPI = C (1) + C (2)*CIC + C (3)*EX$$

The data for CPI is taken form CSO and the Data for CIC is taken from monthly monetary and financial survey statistics of monetary policy department of DAB while exchange rate data taken from the exchange rate

section of MPD. The total observation is 138 and E-Views has been used for data analysis.

Table 4: Regression analysis

Dependent Variable: CPI				
Method: Least Squares				
Date: 10/26/15 Time: 08:44				
Sample: 2004M03 2015M08				
Included observations: 138				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	49.55649	18.48398	2.681051	0.0083
CIC	0.000637	2.99E-05	21.29332	0.0000
EX	1.040587	0.393773	2.642605	0.0092
R-squared	0.859985	Mean dependent var		166.1973
Adjusted R-squared	0.857911	S.D. dependent var		38.94798
S.E. of regression	14.68134	Akaike info criterion		8.232531
Sum squared resid	29098.12	Schwarz criterion		8.296166
Log likelihood	-565.0446	Hannan-Quinn criter.		8.258391
F-statistic	414.5912	Durbin-Watson stat		0.069023
Prob(F-statistic)	0.000000			

Source: Data Output from E-Views

From the above table 4, the size of the coefficient for each independent variable gives the size of the effect that variable is having on dependent variable, and the sign on the coefficient (positive or negative) gives you the direction of the effect. In regression with a single independent variable, the coefficient describes how much the dependent variable is expected to increase (if the coefficient is positive) or decrease (if the coefficient is negative) when that independent variable increases by one. In regression with multiple independent variables, the coefficient describes how much the dependent variable is expected to increase when that independent variable increases by one, *holding all the other independent variables constant*. From the results of the model, the constant value (C) is 49.55649, the coefficient for CIC is (0.000637) with positive sign which shows direct relationship between CIC and CPI. This coefficient means that 1 unit change in CIC will cause (0.000637) change in CPI. The coefficient for EX is (1.040587), which means that 1 unit change in USD/Af exchange rate will bring a change of (1.040587)

in CPI. Thus rewriting the final equation as:

$$\text{CPI} = 49.5564927273 + 0.00063741527283 \text{ CIC} + 1.04058688579 * \text{EX}$$

The R-squared of the regression is the fraction of the variation in dependent variable that is accounted for (or predicted by) independent variables. (In regression with a single independent variable, it is the same as the square of the correlation between dependent and independent variable.) The R-squared is generally of secondary importance, unless the main concern is using the regression equation to make accurate predictions. The R-Square is taking value between 0 and 1 which 0 shows no relationship between variable and 1 should a complete relationship between the variables. The adjusted R Square of this model is (0.86) which means that CPI fluctuation and changes are determined 86 % by CIC and USD/Af exchange rate fluctuations.

Based on the regression result of our model we accept our null hypothesis (H₀) and reject the alternative hypothesis (H₁). H₀= Inflation is effected by CIC fluctuation in Afghanistan. **(Accepted)**

H₁= inflation is not effected by CIC fluctuation in Afghanistan **(Rejected)**

H₀ = inflation is effected by USD/Afs exchange rate fluctuation in Afghanistan. **(Accepted)**

H₁= inflation is not effected by USD/Afs exchange rate fluctuation in Afghanistan **(Rejected)**.

5. Conclusion and Recommendations

In this paper, simple econometric technique has been employed to examine and explain the main internal determinants of inflation both in the long run and in the short run. To this effect, one equation was estimated and the results were to some extent comparable with the results obtained by other researchers like Joya (2011, Najib, 2011 etc). Even though this study did not consider openness as a variable in the model, the findings which led to this conclusion suggests that Afghanistan is an open and import dependent economy. Consequently, the country remains vulnerable to foreign price development, especially from neighbor countries.

• Recommendations

The key policy implication from this study is the need to reduce the country's dependency on imports by placing more emphasis on promoting the manufacturing base in the country. This will not only help to reduce its dependency on import but it will also help to protect itself against changes in prices of these imports and depreciation of Afghani against USD and neighbor countries. It is suggested that inflation in Afghanistan is influenced by money supply or CIC and Exchange rate. Therefore the monetary authority (Da Afghanistan Bank) should continue to manage money supply or CIC relevant to other macroeconomics phenomenon such as prices, GDP growth rate and unemployment level. In addition government should consider policies and programs to promote national products specially in agriculture and mining sectors to balance between import and export in order to stabilize the currency exchange rate in long term. Monetary authorities also should keep an eye in foreign exchange market to avoid currency abnormal fluctuation in order to catch its ultimate goal which is price stability in Afghanistan.

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