The Challenges of Changing Monetary Policy Setup. What Should Concern the Bank of Albania?

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The views expressed in this paper are those of the author and do not necessary represent or reflect the views of the Bank of Albania

Abstract

During the last 3 and half years Bank of Albania has produced a vast literature on the characteristics of Albanian monetary policy, its transmission mechanism and possible future developments. The center of this research is the new setup of monetary policy as the Bank of Albania prepares to depart from its current regime of monetary targeting and most probably adopt an inflation targeting regime. While the shift implied by such terminology involves substantial change in the model and implementation of monetary policy, in practice this is less so. Broadly speaking, the operational procedures and the decision making process of the current policy are not different from implicit inflation targeting regime. This paper will not appraise or justify the reasons which motivate such change, but will discuss several important challenges that monetary policy might face in this new phase and suggest possible solutions when possible. This material builds upon existing empirical literature and uses it to identify potential challenges to monetary policy.

JEL Classification: E4, E5

During the last 15 years monetary policy in Albania is designed and implemented under the framework of the International Monetary Fund (IMF) economic programs. January 2009 will mark the end of the current program and for the first time Bank of Albania will de juro assume full ownership and responsibility to design monetary policy on a solo basis. While the formulation and implementation of monetary policy de facto has developed within the framework of a monetary targeting regime, a new setup has prospered under the binding constraints of the IMF program. The new monetary policy setup has the characteristics of implicit inflation targeting regime. This new setup was implemented and has operated in the presence of favorable economic conditions in domestic economy as well as in the world financial and commodity markets. Current developments in the international financial and commodity markets indicate that such favorable conditions have come to an end and might pose challenges for the monetary policy operational framework.

This material will try to discuss upon few elements of this policy setup that have the potential to challenge the success of the new regime. This research builds upon a vast literature that has been produced during the last three years, and tries to identify and transmit to the Bank of Albania and other involved parties the limitations that they have to face, and the effect of their actions over the success of the monetary policy and therefore long run macroeconomic stability. The general finding is that the success of monetary policy depends heavily on the ability of the Bank of Albania and third parties to understand these limitations and constraints.

Current monetary policy in Albania is designed around an annual inflation target of 3 ± 1 percent for the CPI inflation. However, Albania officially follows a monetary targeting regime where the growth rate of M3 and the level of Net International Reserves are used as intermediate targets. This regime is paired with a free floating exchange rate regime. Such arrangement has been in place since 1993 aiming to support economic transition under IMF ESAF/PRGF program. The fact that Bank of Albania develops projections on monetary targets did not necessary constrained the policy decision making. The operational structure of monetary policy and its instruments have undergone significant changes during transition and have currently assumed the characteristics of an inflation targeting regime.

Bank of Albania has conducted its monetary policy using indirect instruments of monetary control since 2000, relying mostly on the base rate and open market operations.[1] Its final objective has remained unchanged since 1994 when it was mandated to safeguard and promote long run price stability.

As a matter of fact, regardless of the prevailing setup of monetary control, Bank of Albania in general has successfully achieved its final objective. During two different periods 1992–1996 and 1997–1999, the Bank of Albania has succeeded to restore macroeconomic stability. In addition to reducing inflation to the desired target, monetary management has not constrained the growth rate of economic activity. Since 2001

[1] The interest rate of one week repurchase agreement based on which banks borrow funds from the Bank of Albania serves as the main instrument of monetary control.

monetary management has promoted a serene period of price and economic stability. Inflation has been within the target zone and economy has grown at a rate of around 6 percent. Exchange rates have been stable with a slight but persistent trend of appreciation of domestic currency, the Lek. Such achievements are supported by the fiscal sector consolidation and a continuous improvement in its financing and operating procedures.

Over this period Bank of Albania has worked to improve its legal and real independence not only through the legal framework improvements but also by developing a better coordination with ministry of finance and the markets. Bank of Albania has developed and improved banking laws and financial regulation and supervisory practices to promote soundness of the banking system and to develop profitable, efficient, and sound financial institutions. Banking system is profitable, its efficiency and stable macro and financial conditions have attracted in the county big European and global players. Despite a separate episode which was mainly a product of misunderstanding generated by rudimentary financial literacy among economic agents, public confidence on the banking sector has not shaken.

Ironically, the introduction of the deposit insurance scheme an institution that was established to protect small and medium depositors form unexpected events in the financial market, sparked fears among depositors who started to withdraw their deposits from banks in 2001. In response to this episode the Bank of Albania has undertaken a campaign to attack financial illiteracy. Later such campaign is intensified and incorporated in the broader communication strategy that aims to develop a better communication with the public to deliver the objective of inflation and increase communication in the context of inflation targeting. The soundness of financial system has never come into question.

It is important to stress that these achievements have been collected in the framework of IMF programs and the requirements of the benchmark criteria's listed under IMF economic programs. In this respect, IMF programs have provided an important anchor in the form of binding economic and politic constraints for monetary, fiscal and legal behavior of Albanian authorities.

Current Monetary policy setup

Inflation targets were first introduced in 1999. Inflation target was specified at that time in the form of an inflation range between 2 and 4 percent. The Bank of Albania indicated in its midterm development strategy that it intended to adopt inflation targeting as operating procedure of monetary policy by 2005. The decision was followed by a gradual transformation of its monetary management instruments and latter operational procedures so that they would create the prerequisites for inflation targeting. Changes in the monetary policy setup were not followed by a formal announcement of Inflation Targeting regime as planned, mostly because Bank of Albania felt that a better investigation of the economy, its transmission mechanism and preconditions both in theory and practice was necessary before making that decision and change the monetary policy setup. At the time there Bank of Albania did not have much empirical evidence to support a regime change but existing research had suggested two mayor conclusions: first, developments in monetary aggregates are not necessary related with developments in inflation in the short run see Luci and Ibrahimi, 2005; and second, exchange rate is the most important channel of the transmission mechanism see Muço *et al* 2003.

Based on the inadequate understanding of the Albanian economy and to avoid possible mistakes, the Bank of Albania opened up a debate with academia and experts in the field of central banking. The purpose of this debate was to empirically investigate the characteristics of Albanian economy, discuss the characteristics and preconditions of inflation targeting regime and finally, investigate the possibility of adopting inflation targeting regime. The name and scope of this debate was later changed to: find optimal regime of monetary policy.

After three years of dedicated research, the Bank of Albania developed several inflation forecasting models and a macroeconomic model. In addition to empirical research, institutional aspects and the legal and operational framework of monetary policy have also been covered[2]. At the end, the Bank of Albania has developed a clear bias towards adopting inflation targeting as the next regime of monetary policy. Fullani, 2007 summarizes and explains this bias in three main arguments: first, the inability of monetary targets to provide information on price development in short run; second, the role of inflation targeting as a strong commitment to promote responsible economic behavior; and third, the ability of inflation targeting to introduce an important policy channel and it is a clear strategy of communication with public.

The main focus of the current monetary policy is the deviation from the target objective of the inflation expectation for a period of 12 months, as forecasted by Bank of Albania models. Kolasi Hoda and Note (2007) provide a comprehensive picture of the monetary policy decision making process. This process incorporates comprehensive assessment economic information organized in the following main steps:

1. Analyze latest trends in inflation headline and core inflation;
2. Analyze the developments in economic activity and employment by sectors of the economy;
3. Discuss monetary conditions, developments of monetary aggregates and credit developments mainly;
4. Analyze developments in the foreign sector of the economy and exchange rate expectations;
5. Discuss expectations of consumers, business, and financial sector with regard to expected inflation, economic activity, and interest rates;
6. The Bank of Albania experts provide an assessment of aggregate demand and aggregate supply;

[2] For detailed description of this work see Themeli and Kolasi (2006) and Kolasi and Hoda and Note (2007)

7. All information is finally incorporated into inflation forecast models to generate the forecasted inflation figures for 12 months ahead and the path of inflation during this period;[3]
8. A proposal is made based on this information whether to change the base rate or not;

This extensive work has transformed the monetary management and has yielded predicted results, making it easier for the Bank of Albania to announce explicitly and guarantee a smooth transition to the next regime of monetary policy. This will require that the role of money is replaced by the expected inflation 12 months ahead as estimated by Bank of Albania inflation forecast.

The Challenges Ahead

The research conducted as part of this process has touched upon all known elements of monetary policy and inflation targeting regime. It has provided recommendations, based on empirical investigation and the study of best practices of other inflation targeting countries.

The current monetary policy setup has brought a "steady state" of low inflation. Annual reports and declarations of monetary policy of the Bank of Albania show that for most of this period inflationary pressures have been mounting on the demand side, supported by a strong growth of credit to economy, and appreciation of domestic currency. Bank of Albania has been successful to control these pressures by tightening its monetary policy. Nevertheless despite this success, the first wave of increase commodities prices in the world markets during 2007, pushed inflation above the target by the end of the year for the first time since 2000[4]. In addition, the Bank of Albania's analyses based on our macro economic model and inflation forecast models indicate that increased pressures from the demand side and/or a another increase of the commodity prices abroad not only could set inflation rate above the target, but can hold it there for prolonged periods that could go beyond 12 months. This can result in negative effects on the inflation expectations.

These are two possible macro challenges under which the Bank of Albania could stress test its monetary policy setup. Szeleky (2006) provides a broad discussion of these and other macroeconomic related risks, describing them as future challenges to monetary policy. Another important challenge relates to changing nature of the problems in the international financial markets. Recent developments in these markets have emphasized the importance of financial stability, suggesting that financial stability deserves more attention. This conclusion might have implications for objective of monetary policy and might pose challenges to the specification of this objective as discussed by Fullani (2008)

[3] Bank of Albania is recently using the Macro-econometric model for simulating shock scenarios to evaluate their impact on inflation, GDP, employment, and the exchange rate. The results are used in the decision making process.

[4] Inflation target was set as discrete end-year (December 31) target until December 2005.

and Deroose (2005). The challenge in this respect relates not only to the weight that financial stability deserves in the final objective of a central bank but also to the form and the identification of the financial stability variable. This paper acknowledges these challenges but does not focus on the discussion of the above mentioned issues. It reviews the existing research on the inflation targeting and current monetary policy operational framework in Albania and aims to constraint the discussion on challenges that emerge from potential gaps or misinterpretations in the existing literature. It evaluates the soundness of the future policy actions based on the current knowledge from empirical models.

In spite of a missing explicit commitment and a date for implementation of inflation targeting regime, I will embrace the prevailing bias of the Bank of Albania and the current monetary policy setup as a commitment to adopt Inflation targeting and discuss the future challenges from this point of view. It is necessary for the parties involved in this transformation process to understand respective constraints and the responsibility to respond to potential challenges as I will try to explain below.

Among other variables price stability depends on the way and frequency the objective is set.

Several authors have discussed the nature of the relationship between the Central Bank and the Government in Albania. The issue is discussed by Klockers (2005), Lybek (2005), Luci, Gjermeni, Gazidede (2006), Kolasi, Hoda, Note (2007). The most important recommendation provided by these authors is that direct financing for the government poses a threat to inflation targeting. Another important finding is the need for coordination between monetary and fiscal policy. However these authors take different positions with regard to the nature of cooperation between the Bank and the Government. Klockers (2005) makes a brief description of the central banks autonomy and classifies Bank of Albania under “Targeted Autonomy”, which means that it has the autonomy to define and quantify it own objective. Lybek (2005) suggests that the only form of cooperation should be focused in the exchange of information. Lybek does not see the need for an *ex ante* agreement between the two institutions. He points out that the Bank of Albania must have full responsibility for the objective of inflation.

Luci, Gjermeni, and Gazidede (2006) suggest a different approach toward institutional relationships. They propose an agreement between the Central Bank and the Ministry of Finance in the form of a Memorandum of Macroeconomic Stability (MMS), among others. With respect to MMS authors suggest that this document should coordinate monetary and fiscal policy requiring the consensus of the other party for the respective objectives. They add: “If assumptions on which forecasts are based were correct then the consensus over respective objectives will be achieved easily”.[5] However they do not forget to also indicate that Bank of Albania enjoys the autonomy to rebuff such agreements if they were to risk the achievement of inflation target. I completely agree with this conclusion but do not fell comfortable with the soft language or the general

[5] Luci, Germeni, Gazidede (2006), pp. 323

definition, for it does not explicitly state that the value of the target is not a negotiable argument despite the importance of cooperation and the need for flexibility. It is necessary to avoid any misunderstanding or misinterpretation of this argument and its consequences. The purpose of this discussion is to stress once more the importance of central bank independence to set the numeric inflation target and keep it unchanged in the long run. Failing to recognize this fact will become a challenge for monetary policy under inflation targeting.

Without questioning the current government's commitment to price stability and the objective chosen by the Bank of Albania, the issue of the target might rise any time that a new government is elected. New governments come with new political and economic agenda which might not be served best by a 3 percent inflation target. In this respect a misinterpretation of the MMS as an opportunity to renegotiate the target and require that Bank of Albania achieves the new target accordingly, poses a threat to price stability in the long run. Increased credibility of achieving the inflation target will mean nothing to the public as long as there is uncertainty about the value of the next target. In other words, inflation expectations will be formed by the best guess for the next inflation target rather than the existing objective. Therefore they will not be anchored to the Bank of Albania objective as long as inflation target is not anchored to a certain number in the long run. Such intuition could be understood in the context of the work of Svensson (1997) who describes price stability in the form of low and stable inflation as oppose to price index target. Such definition makes price level a trend stationary process with drift.[6] This definition of inflation targeting would mean that inflation grows each year by an average of 3 percent.

This statistical interpretation does require that the CPI price level increases each year by an average of three percent, with the value of the target deciding the trend in the consumer price level. Changing the value of the target will change the trend of the inflation process and by statistical definition will introduce instability. The importance of this argument is stressed by Morande and Schmidt-Hebbel (2000). Their description of the process of implementation of inflation targeting in the case oh Chile, says: "In September 1999 the central bank announced a point target of 3.5 percent for 2000 and a stationary target range of 2-4 percent for the indefinite future"[7]. This discussion and the fact that Albania has already set a numerical target and inflation expectations are anchored to this target the only relevant conclusion is that Albanian authorities and public should accept and support the existing objective of 3 percent plus minus one.

What is the optimal inflation objective?

With the objective set for the indefinite future, the only concern over the chosen policy should be whether the central bank chosen numerical inflation target is the optimal one. Albania is one of the transition economies which are undergoing significant structural

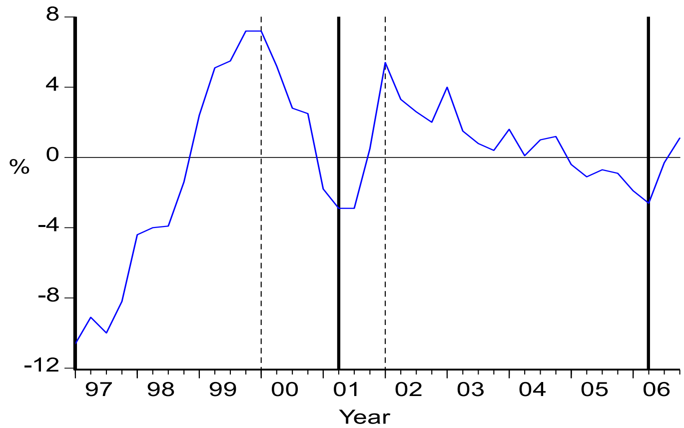
[6] Bank of Albania Objective of price stability is defined as low and stable inflation rather than price level Stability, see Svensson 1997.
[7] Morande and Schmidt-Hebbel (2000) pp. 65

economic and legal changes that improve its openness, productivity, and market functioning. Theory predicts that these changes allow our economy to grow at a faster rate than the more advanced European economies which are at the same time our major trading partners. In such situation price inflation in Albania should be higher than the Euro zone to account for the catching up process. The issue is discussed by Kolasi, Hoda and Note (2007) who argue that the target is about 1 percent point higher than the value of the target of the Euro-zone, Albania's main trading partner, due to the supposed differences in the productivity between it and Albania. However due to this characteristics and possible strong Balasa-Samuelson effects the real difference in inflation between Euro zone and Albania could be more than 1 percent. If that were true the current objective might be putting pressures on the economic potential of Albanian economy.

The assumed Balasa Samuelson effect has been hard to prove empirically in Albania. Olters (2005) discusses the issue and concludes that lack of time series in addition to theoretic and empirical difficulties make the study of Balasa Samuelson effect in Albania very difficult. Celiku and Haxholli (2008) make a more sophisticated and more comprehensive attempt to estimate Balasa Samuelson effects in Albanian economy. They find evidence of Balasa Samuelson effect, but it is very small and clearly not large enough to justify the 1 percentage point over the ECB inflation objective. However the main conclusion that derives from studding their work reinforces the conclusion of Olters (2005) that there are no suitable statistics and long enough time series that will permit serious investigation of the effect. Therefore the value of the objective in itself will represent a reasonable assumption, and the empirical investigation of the phenomenon will remain a challenge unless data become available.

Despite empirical difficulties there might be evidence which shows that the chosen objective of inflation is not to low and therefore is not repressing growth. Kota (2007) investigates the output gap in Albania. She suggests three different methods among which one is based on the estimation of the production function of the Albanian economy. The rest are simply estimations based on trend of output growth. General wisdom will suggest that if the Bank of Albania objective were lower than the real differential in the growth rates as described by Balassa-Samuelson effect, than the observed GDP will be persistently below the potential one. The results of Kota (2007) based on the estimation of production function show that all methods including the production function one indicate presence of the business cycles around potential GDP see Graph 1, below. While this intuitive approach can be object to the same critique with regards to the accuracy of the database and the methodology of estimation, it provides an additional element of comparison in this discussion however weak it can be.

Graph 1. *Output gap based on the production function method*



Source Kota 2007, Measuring potential output and output gap in Albania

In this respect I will suggest that the work for the improvement of the database and re-estimation of the models and effects in Albanian economy should continue and compare existing policies with such results until we gain a better understanding of the economy and build reliable databases that will permit empirical investigation.

The role of money

The best way to justify the coexistence of the formal and applied setup of current monetary policy setup is to describe it like the ECB two pillars approach. However while the ECB clearly states the role of money in its policy, none of the research to this moment discusses or redefines the role of money in the new setup. The correct question is: should there be any prominent or secondary role for money in the new monetary policy setup?

In general studies that have focused on discussion of inflation developments in Albanian economy have concluded that money might not contain information for expected inflation. Luci and Ibrahimi (2005) conclude that the rate of growth of M3 does not provide information for inflation developments. In addition Themeli and Kolasi (2006) observe that velocity of M3 has been highly volatile in the short run and therefore is not a practical target for monetary policy. This lack of information from money to inflation in the short run is in fact one of the motivations for the change in the policy setup as explained by Fullani (2007).

The research by Kolasi, Hoda and Note (2007) shows that money is present in the current policy discussion presumably via the assessment of the monetary conditions, but its role is not well defined. Celiku *et al* (2006) investigates the role of money empirically in the context of inflation forecasting models. They find that impact of money on inflation, as measured by models estimated coefficients for monetary aggregates, is relatively small compared to the other explanatory variables. Most importantly, their effect on inflation materializes well beyond the 12 months period set as the time horizon for monetary policy inflation objective. This conclusion will make monetary targeting an unlikely solution and will not require a prominent role for money in the short run monetary management.

However there exists strong enough theoretical rationale for assigning a role to monetary aggregates. These arguments are embodied in the theoretic works of monetarists. Woodford (2006) makes an excellent discussion of the relationship between money and inflation based on four main arguments as follows: the monetarist theory; comparison of inflation models that do not include money to economic principles; empirical evidence of long-run relationship between money growth and inflation; and finally argues the reliability of monetary policy based on short run Philips Curve inflation forecasts. Despite its final conclusion that none of these considerations justifies a prominent role for money in the conduct of monetary policy, this research provides compelling reasons that expose the role of money in explaining inflation developments which might very well justify the arguments of incorporating the growth of monetary aggregates in the monetary policy decision making. This is particularly important when information that comes from other economic indicators like output gap, wages, employment, productivity, etc, is either inexistent or poor like in Albania. In addition the backward looking information incorporated in money becomes important when faster supply of money supply feed into prices of commodities which are not included in the CPI basket like asset prices. ***Currently monetary statistics are one of the most reliable and accurate sources of statistical information in Albania***.

In practice money plays an important role in the ECB via its two pillar strategy. The main argument for such choice are explained in Issing (2006) which states that money provides important information for the long run trend of inflation, and a robust base for cross-checking analyses. He relates the disappearance of money form macroeconomics in the 1950-s as prelude of great inflation of the 1970-s indicating that “neglecting money might not be a wise choice”.

The empiric research of Bank of Albania on demand for money provides evidence that money demand is stable in the long run. Tanku (2006) investigates the behavior of monetary aggregates during 1995-2005 period using cointegration and finds that money demand is cointegrated with output, interest rate inflation and exchange rate in a stable long run relationship. Therefore Tanku (2006) suggests that under such circumstances exist the possibility that developments in monetary aggregates might provide useful information regarding long run trends in inflation. This finding confirms the hypothesis of Themeli and Kolasi (2006) who also predict that monetary aggregates might provide useful information for long run analyses. More support for this argument comes from the fact that neither Bank of Albania macro-econometric model nor inflation forecasting models have a prominent role for money. All this suggests that Bank of Albania must retain at least some informative role of money in the long run. In addition this requires that the role of money is defined precisely and announced to the public as part of the new policy regime.

Yet a there are two more issues that Bank of Albania will have to be aware before assigning a role for money. First as indicated by the models of money demand and inflation forecasting models different monetary aggregates have different behavior, indicating that the bank of Albania has to make a choice regarding the monetary aggregate which provides better information in the long run.[8] Secondly, be aware of any structural change in money demand. Empirical investigation of COB suggests that money demand is reacting to financial innovation and formalization of the economy. Recent empirical investigation of a slowdown in the growth rate of currency outside banks (COB) reveals that some change is already taking place. I tried to replicate the ARDL model of Tanku (2006) for currency outside banks. Results which are presented below in *Table 1.,* suggest that changes in the demand for COB can be explained by changes in output, exchange rate, volatility in inflation or exchange rate, and finally by a linear trend. [9] The trend is used in the model as a good proxy for financial innovation, and indicates that recent developments in COB might reflect the changing financial environment rather than a reduction in the demand for money. The same trends might become part of broader money definitions reflecting the impact of this financial innovation in M2 as well. Assuming that money will be given at least some consideration in the conduct of monetary policy, Bank of Albania should be aware of such structural changes and should not interpret them as useful signals for monetary policy.

Table 1. Recent Monetary developments

	Y	***INF***	***i***	***VAR cpi***	***EX***	***VAR ex***	***T***	***F***	***ECM***	***R^2***	***LM***	***RESET***
COB	**1.595**			**-0.053**	**-2.20**		**-.040**	**16.87**	**-0.47**	**0.73**	**8.98**	**0.95**
	6.31			***2.45***	***4.03***		***3.8***		***4.48***			
COB (ER)	**1.298**				**-1.598**	**.0013**	**-0.024**	**12.88**	**-0.56**	**.61517**	**7.97**	**1.60**
	7.72				***4.25***	***2.08***	***4.03***		***4.71***			

In a short note, I would like to raise the similar discussion with regard to asset price developments. Asset prices contain important information for monetary policy. The issue is taken by Vickers (1999), Schwartz (2002), and Cecchetti (2005).[10] These studies provide compelling reasons for which asset prices should be an important element of monetary policy discussion. In general asset prices could provide information about future price developments and financial stability. In addition, Mishkin (1996) discusses Tobin's *q* theory of investments and the wealth effects on consumption as important channels of the monetary policy transmission mechanism. Current economic developments in the US confirm the practical importance of the theoretic recommendations.

[8] Currently there are no studies that tackle this question.

[9] Table 1 present the results of ARDL cointegration tests for of two different models of currency outside banks for the period 1996-2007. The first model includes the variance of inflation as explanatory variable, as opposed to exchanger ate variance in the second one.

[10] See also OECD Outlook, No. 78, Recent House Developments: the Role of Fundamentals

Developments in asset prices (meaning real estate prices) in Albania are very informative for both reasons mentioned above, and can provide important information and have implications in the conduct of monetary policy for two important reasons. First, construction is one of the leading economic sectors in Albania providing about 13 percent of total GDP, and has been an important factor behind the fast credit growth. Second, because asset prices are not included in the CPI basket and current inflation figures do not contain this information. Third, because most of the new residential housing is financed by long-term credit in foreign currency form the banking system. Discussing the implications of asset price developments for monetary policy, Svensson (2003) suggests that "… asset price developments and asset price bubbles are taken into account and responded to the extend that they affect the projection of the target variables, inflation and output gap".[11] Therefore, like in the case of money, monetary policy must precisely assign the role of asset prices in the conduct of policy and announce it simultaneously with the new regime of monetary policy. This discussion should be done in the contest of an empirical investigation.

New monetary policy setup and the role of transmission mechanism

Theory predicts several channels through which monetary policy exercises its pressure on economy and alters the short run behavior of economic agents such that the final objective is achieved with a reasonable accuracy. These channels depend on the characteristics and the stage of developments of each economy. They include an interest rate channel, credit channel asset price channel and an exchange rate channel. In addition there is a communication channel focused on expected inflation. For a detailed discussion of these channels of monetary transmission please see Mishkin 1996.[12] The monetary policy outcome could be a simultaneous reaction of all, few or just a single channel. Therefore, it is necessary to understand the working relationships and the time lag of each channel for a successful monetary policy.

Several empirical attempts are made to understand and quantify transmission of monetary policy in Albania through investigation. These exercises have been taken many forms depending on the availability of data; existing setup of monetary policy and the scope of investigation. A broad discussion of the research related to transmission mechanism s is provided by Kolasi Shijaku and Shtylla (2007). All the studies in this topic for Albania arrive at the conclusion that the most powerful channel of monetary transmission is the exchange rate channel. Most of these studies also find that the power of the monetary is channel is reduced over time since the introduction of the new monetary policy setup of 2002. These findings are also confirmed from Tanku, Vika, and Gjermeni 2007 in their study of the exchange rate pass-through to inflation. Yet none of the models has been able to explain what has taken the place of the weakening exchange rate channel given that the monetary policy has resulted very successful especially during the latter part of these last 6 years.

[11] See Svensson 2003, Monetary Policy and Real Stabilization, pp.36
[12] Also see Transmission Mechanism for Monetary Policy in Emerging Market Economies by Bank for International Settlements 2008.

Current situation of the statistical information does not allow an empirical investigation of other channels. New series of inflation expectations are not long enough to allow for empirical investigation of the expectations channel. The same can be said for credit channel. Vika (2007) investigates the existence of a credit channel of monetary policy. He concludes that despite indicative results that suggest a modest effect of monetary policy over credit to economy, empirical tests do not provide conclusive results that can prove the existence of the bank lending channel in Albania. Vika (2007) suggests that further investigation is needed in the future.

The challenge of statistical information is not only related to the short series, but also to the frequency of data. Most important difficulty relates to important SNA components which are either not available in quarterly frequency or are not available at all. Until such data becomes available the challenge for the Bank of Albania would be to develop the best estimates for such statistics and update them properly as they are needed in the policy decision making process. This approach is already used for the calculation of several important statistics like quarterly GDP, capital stock, import price index, etc.

The second challenge relates to the fact that Albanian economy is in a fast transition process which means that the value of the estimated parameters of such transition mechanism will probably change in the coming years in response to structural changes. The nature of the transmission mechanism might also change with some channels becoming less important and others gaining more and more power as previous research find that potential transmission channels are inactive currently. Petters (2005) concludes that deposit channel does not work since deposits are very inelastic (they represent almost the only possibility of investments for the broader public). However due to deepening and widening of financial markets, an increase in the disposal income and introduction of the new financial market instruments, this part of the transmission mechanism will become more pronounced and will influence the transmission mechanism. The same is expected to happen with regard to credit channel.

Another big uncertainty relates to the expected size of dollarization in both sides of the banks balance sheets. According to Bank of Albania statistics, as of March 2007 foreign exchange deposits represent 34 percent of M3 aggregate, in addition over 72 percent of M3 annual expansion is taking place in foreign currency. On the other hand foreign exchange credit represents 70 percent of the total stock of outstanding credit to economy. Deroose (2005) provides a brief discussion on the effect of dollarization. His comments indicate that the power and stability of the transmission mechanism will depend on the size of dollarization. Therefore the ability of the central bank to control inflation via monetary effects on domestic demand and inflation expectations will depend on the size and speed of dollarization. Recent developments indicate that dollarization might not be isolated to deposits and credit but can also relate with the behavior of the government. Should Government decide to borrow more on international markets then in domestic market, it will bear important implications for the ability of the Bank of Albania to use monetary policy efficiently.

Banking system credit to government has been an important source of money creation in Albania since most of credit to economy is extended in foreign currency (see above). If this latter trend continues, and government borrows abroad rather than in domestic market an important channel of money creation for domestic currency will be lost resulting in further increase of dollarization. This change will bear implications for monetary policy and its ability to control economic activity will change.

The uncertainties discussed above will affect the transmission mechanism. They require that the Bank of Albania understands and predicts the ways in which economy will evolve. In conclusion the marginal understanding of the transmission mechanism is and will remain a serious challenge for the conduct of the policy in the future, especially due to the fact that expected macro developments have a very different nature form the ones that concerned Bank of Albania during the last 6 years.

The role of exchange rate and the implications for monetary policy:

To this end, the best understanding of the transmission mechanism come form the Bank of Albania Macro-econometric model.[13] Despite the fact that its objective is not specifically monetary policy simulations, it provides the best data set and allows for monetary policy simulations that could be used to understand the way in which monetary policy exerts its influence in the economy. The findings of the model as it is shown in appendix 1, confirm the conclusions of the other studies that exchange rate play an important role in the transmission of monetary policy in the economy. In fact the model shows that monetary policy transmission works through exchange rate channel. I would like to focus in this particular feature of the transmission mechanism to discus the implications of exchange rate interventions in the foreign exchange market.

Results from the Bank of Albania macro-econometric model suggest that a policy rate shock (increase in the interest rate for weekly repurchase agreements) is transmitted to inflation via changes in exchange rate. Appendix 1 portrays this monetary shock (increase of repo rate by 25 basis points) under three different scenarios: first with perfect uncovered interest rate parity (UIP), second constrained UIP and finally no UIP at all. The last scenario considers exchange rate as an exogenous variable in the model. Graphical presentation shows clearly that as the role of exchange rate is reduced so is the impact of monetary shock in inflation. The conclusion is obvious: the free floating behavior of exchange rate produces the best result outcome with respect to inflation. The shock is fully transmitted to prices in 4 quarters (over a year period). Such finding is consistent with both inflation forecast models and the findings of other studies see Istrefi and Semi (2007), and bears very important policy implications.

First, it sets a very strong binding constraint on monetary authority. It requires that while monetary policy decisions are executed (e.g. change the policy rate by 25 basis points), the Bank of Albania should restrain itself from intervening in the foreign exchange

[13] For a discussion of the macro-econometric model please Kota, Dushku, Binaj (2005) and Dushku, Kota, Jakab (2007)

market, and until monetary policy intervention is fully transmitted. If such constraint were violated every single foreign exchange intervention might alter the direction and amplitude of transmission mechanism and therefore yield unpredicted effects of monetary intervention on inflation.

Second, despite its perceived restrictive nature, such constraint does not exclude monetary policy intervention in response to exchange rate changes whenever they might pose potential threats to inflation. In this particular case inflation targeting regime framework will incorporate such information in the decision making process in the timely manner so that they will not pose problems for the achievement of inflation targets. Exchange rate shocks will be part of inflation forecast process and must be addressed by changes in instrument variable, rather than exchange rate intervention. Such response will make inflation targeting regime an acceptable operational framework of monetary policy even in the face of appreciating exchange rate pressures, supposedly due to incoming inflows similar in size to the ones experienced by leading transition economies in the late 1999.

The best possible suggestion based on the current understanding of the transmission mechanism is that Bank of Albania should choose the hands off approach as recommended by the results. This approach will also require that Bank of Albania buys and sells in the market all the foreign exchange that results from its direct sales or purchases to the third parties, assuming that these transactions represent market demand or supply for foreign currencies. These transactions contain important price signals. Otherwise meeting the third parties demand or supply exclusively from official reserves as oppose to the market will be the equivalent of an intervention in the foreign exchange market and bear the same consequences.

This hand off constraint has the potential to develop into a challenge for the Bank of Albania if exchange rate were subject to sudden appreciation or depreciation. Responding to such changes might bring instability to monetary policy. In addition to sudden sharp fluctuations, this conclusion bears important implications for the implementation of the Bank of Albania's strategy for foreign exchange reserves as well. At the moment Bank of Albania must keep the level of its international reserves above 4 months of imports. According to this rule, an increase in the level of import must be matched by a proportional increase in the level of international reserves. How should Bank of Albania address this conflicting issue?

The problem of meeting the target of international reserves, or adjusting possible exchange rate misalignment remains a challenge. Ignoring any of these two and other similar issues has the potential to develop into problems of financial stability. The issue is discussed by Mishkin and Savastano (2001, pg. 439), on theoretical grounds. They conclude that in addition to interfering with the efficiency of transmission mechanism, interventions will damage the reputation of inflation targeting itself. Tanku, Vika and Gjermeni (2007) discuss and investigate empirically whether monetary policy interventions respond to exchange rate changes in Albanian foreign exchange rate market. Their results show that empirical findings might lead to the misinterpretation that monetary policy responds to exchange rate fluctuations. Therefore they follow Mishkin and Savastano (2001) to recommend that: Bank of Albania' must announce publicly that its intervention in the foreign exchange market are not and should not be related in any way with the achievement of the inflation target and must be followed by a public statement that explains clearly the nature of the intervention and states publicly that it does not intend to address exchange rate concerns and does not provide any policy signals. One feasible approach for the Bank of Albania to deal with its foreign exchange reserve objective would be to preannounce a schedule comprising the sum and the frequency of foreign exchange interventions at the beginning of the reference period and stick to it. Given the considerations above I believe that the suggestion of Tanku, Vika and Gjermeni (2007) offers a viable compromise.

Conclusions

The Bank of Albania is reaching toward a new phase of monetary policy management. During the last three years it has engaged in a smooth transition process that has transformed the monetary management closer to an inflation targeting regime. This process of gradual adjustment is preceded by a considerable economic research to understand the theoretic implications and facilitate the practical implementation of the new monetary policy setup. The studies of the Bank of Albania during this preparatory phase have substantially improved our empiric understanding of the monetary policy transmission mechanism and economy in general. In addition the research has extended the portfolio of statistics available for monetary policy decision making with important indicators that are not currently provided by national accounts statistics.

Based on the current nature of monetary policy, its impressive success in achieving price stability, and the findings and of existing research, one could be almost sure that the Bank of Albania will officially announce that the new monetary policy will operate under an inflation targeting regime.

The objective of this material is to browse into the existing literature and identify potential problems that can pose challenges for monetary policy in this new phase. The purpose is to stress what policy constraints emerge from the existing research and identify possible improvements or additions to the recommendations of existing literature.

The literature of inflation targeting focuses mainly on the central bank, its final objective and the implications for monetary policy. This focus can easily create the illusion that inflation is a commitment of the central bank to price stability. In fact inflation targeting is not just the commitment of the central bank but a commitment of a group of institutions; it is an anchor to sound economic management. This commitment is discussed in the preconditions for inflation targeting. Therefore, other economic agents should properly understand the implication of their actions and respect the constraints that such regime imposes. They should restrain from intervening in any direct or indirect way that can influence or raises risks to the price level stability in the long-run. Moreover analyses of economic developments in Albania and its trade partners including inflation, economic growth, exchange rate indicates that current policy and inflation target of the Bank of Albania is optimal and does not contradicts economic fundamentals or raise concerns for economic development of the country.

Economic research continues to debate whether money deserves any direct role in the inflation targeting regime. In the case of Bank of Albania the interest in such discussion goes beyond academic curiosity. Monetary targets have officially the safeguards of price stability during the last 15 years and empirical investigation indicates that money demand is cointegrated with prices, economic activity and exchange rates, and is stable in the long-run. In addition monetary statistics are accurate and available in real time. Therefore Bank of Albania should continue to consider developments in the monetary aggregates. There are however two considerations that condition the use of money in the new policy setup. First, the Bank of Albania should publicly redefine the role of money and communicate to it to the public; and second, authorities should be aware of possible structural changes that might take place in the money demand. This requires that monetary developments are understood and interpreted correctly after the effect of such structural changes is considered

Potential forces that might affect money demand can also induce substantial change in the behavior of the economic variables. They have the potential change the behavior of economic agents with respect to money consumption savings etc., resulting in changing transmission mechanism. In conclusion Bank of Albania must continue to re-estimate its existing models when new data becomes available. In the meantime it should continue the investigation of the transmission mechanism and improve its existing models and use their feedback in the policy decision making process. As this process goes, on Bank of Albania must increase the public understanding of its transmission mechanism. Persistent research to understand better the economy in general and the dissemination of this knowledge will assist the communication channel and increase public confidence and transparency of the bank of Albania.

Our current understanding of the transmission mechanism indicates that exchange rate channel plays an important role in the transmission of policy signals in Albania. The challenges relate to the need for potential interventions in the exchange rate market. In that case the Bank of Albania will have to deal with the risks of affecting the pass-through of its policy actions to inflation and damage the reputation of its inflation targeting regime. However this constraint does not prevent the Bank of Albania from meeting its international reserves objective given that the size of the intervention and its goal are communicated to the public and do not affect the trend developments in exchange rate.

This material did not devote a special section to the discussion of the statistical information, however it strongly emphasizes importance of this topic in the success of inflation targeting regime. Statistics will most likely be in a similar shape, and their contribution will continue to be a challenge not only to monetary policy but also to any of economic policy in Albania. In this situation the Bank of Albania has no choice but to estimate on its own the set of statistics that are deemed important for monetary policy. This approach will also require a proper understanding by the public of the methodologies that are used to derive such statistics and the role that they play in the policy setup. The Bank of Albania must use empirical investigation to define the role of these statistics in its new policy setup. Finally the role assigned to this set of statistical information and the econometric models that explain their relationship with the final objective of the Bank of Albania should become available to the public. This form of communication will assist the formulation and efficient transmission of monetary policy in the existing environment.

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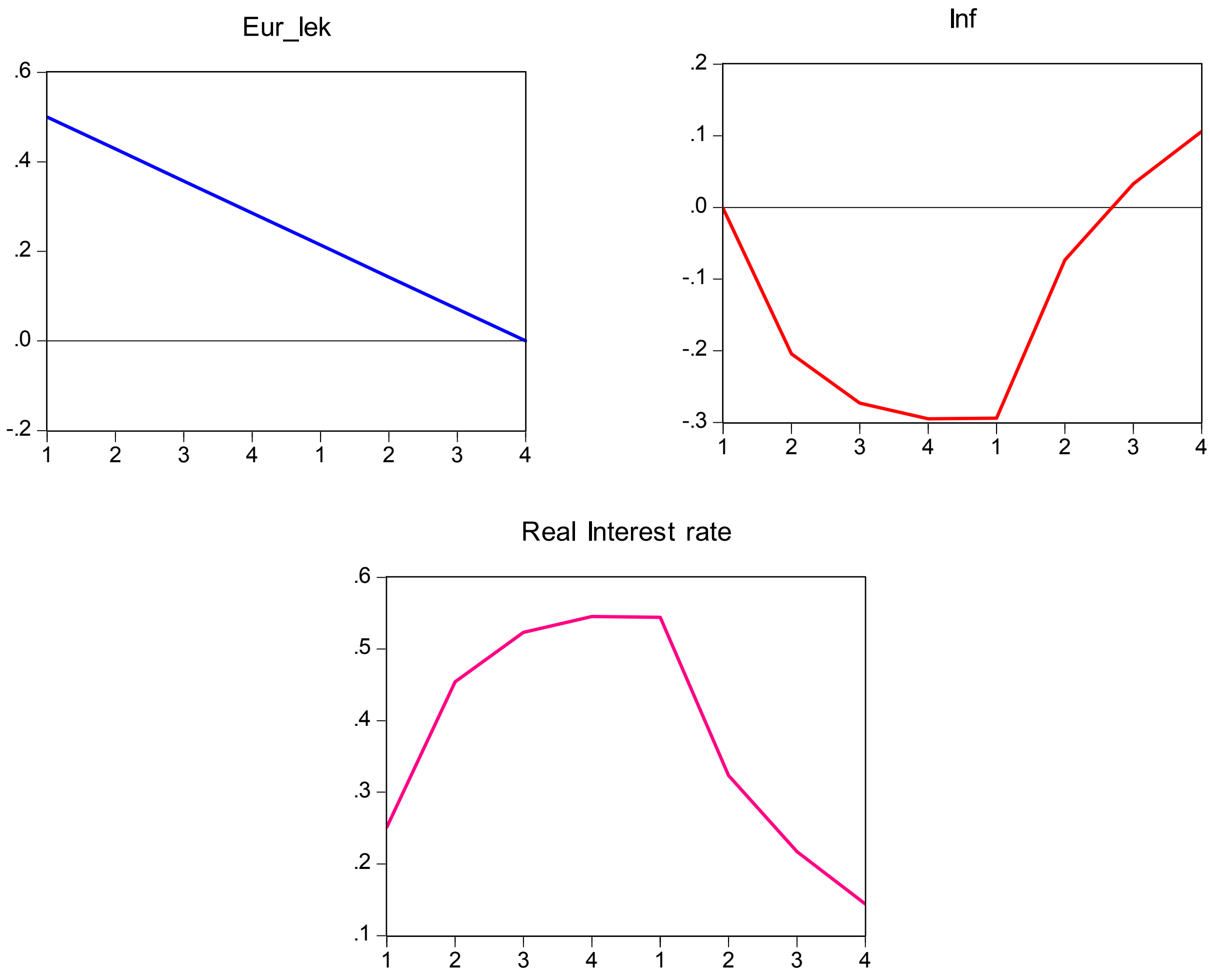
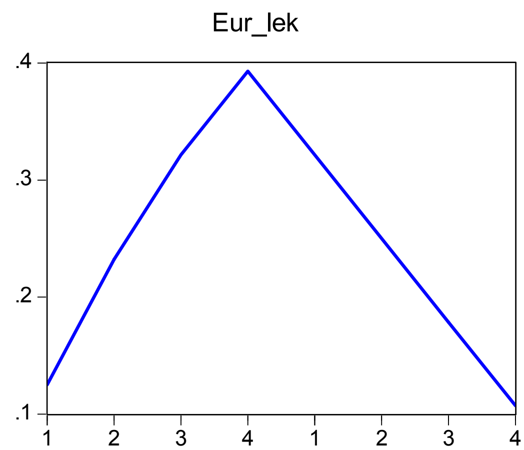
Appendix 1

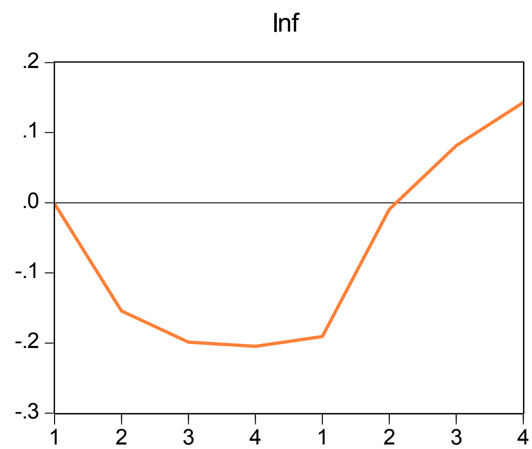
Policy Simulation 1:
25 bp interest rate increase in base rate and UIP: immediate appreciation of 0.5% and then a gradual depreciation back

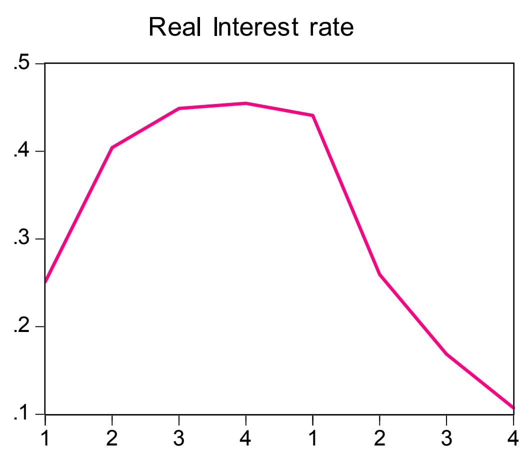


Policy Simulation 2: modified UIP

25 basis points increase in the base rate and modified UIP: gradual appreciation to 0.4% for 3 quarters then a gradual depreciation back

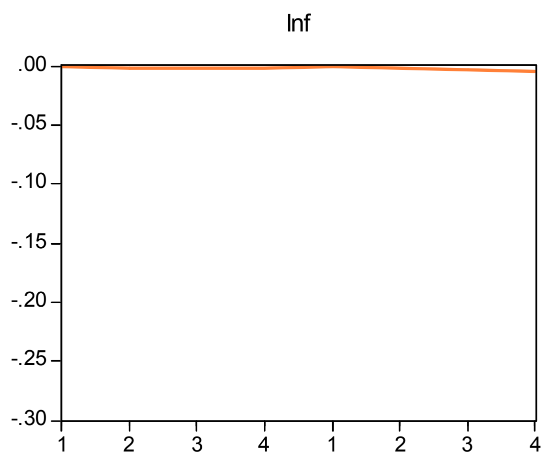


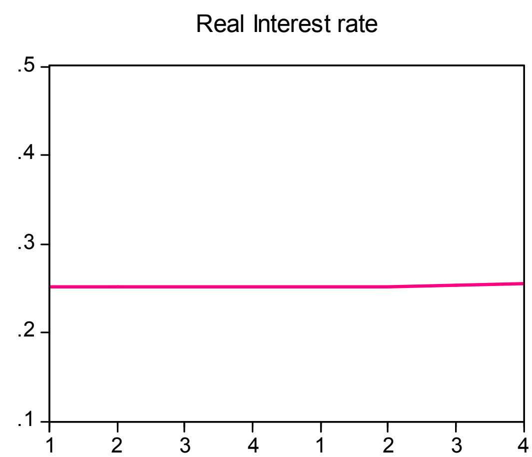




Policy Simulation 3: on UIP

25 basis points increase in the base rate and no exchange rate reaction





Comparison of pass-through estimates in MEAM and Istrefi, Semi (2007)1.