

MONETARY POLICY FRAMEWORKS IN THE SAARC REGION



STATE BANK OF PAKISTAN
MONETARY POLICY DEPARTMENT

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CONTENTS

MESSAGE FROM THE GOVERNOR	
THE TEAM	
PREFACE	
INTRODUCTION	1
DEVELOPMENTS RELATED TO MONETARY POLICY	2
MONETARY POLICY OBJECTIVES AND IMPLEMENTATION	4
1. Ultimate Targets	5
2. Intermediate Targets	6
3. Operational Targets	9
4. Monetary Policy Instruments	11
INSTITUTIONAL AND LEGAL FRAMEWORKS	19
1. Independence	19
2. Accountability	22
3. Transparency and Communication Strategy	23
CONCLUSION	24
REFERENCES	26
ANNEXURE:	
A. Restrictions on Government Borrowings from Central Bank in SAARC Countries	28
B. Composition of Decision-Making Body of Monetary Policy	29
BOXES	
1. Structure of Financial Markets in SAARC Countries	5
2. Monetary Policy Transmission Mechanism in SAARC Countries	7

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MESSAGE FROM THE GOVERNOR (Acting)

These are interesting times for central banking across the world. The global financial crisis has exposed central banking to new conceptual and operational frontiers persuading them to revisit conventional approach to their traditional functions for achieving macroeconomic stability. Price stability that emerged as the overarching objective seems insufficient in ensuring financial stability. This has intensified the debate over reforming the international monetary system, devising more robust regulation mechanism for the financial sector, adopting the macro prudential frameworks and dealing with implications of debt burden of developed countries.

Central to this debate is the monetary policy strategy. Providing stimulus to the economy by lowering the interest rates have been checked by the zero lower bound of nominal interest rates and the central banks had to resort to quantitative easing - the approach that at least the developed countries had abandoned long ago. The fervor for adopting guiding principles of monetary policy in the form of inflation targeting and more operational reliance on interest rates seems to be cooling down. Nevertheless, establishing institutional and legal structures that ensure central bank independence, accountability and transparency have emerged as key areas of policy concerns. Furthermore, effective macroeconomic management in this age of increased financial linkages has made it imperative for countries to coordinate and cooperate in policy making.

In this context, SAARCFINANCE provides an excellent platform to enhance cooperation among central banks of member states to adapt the lessons learnt from recent experiences. Instituted to achieve the objectives of promoting dialogue and share experiences, the SAARCFINANCE Network has made significant progress since its inception. The need for further momentum, nonetheless, cannot be overemphasized to catch up with financial innovations and latest developments.

From the perspective of monetary policy, the study of comparative monetary policy frameworks in SAARC countries provide a good starting point in having an assessment of where we, as a group, stand today and what are the gaps from global best practices that we need to fill. Carried out under the auspices of State Bank of Pakistan, this study provides a comprehensive analysis of existing monetary policy frameworks in the SAARC countries setting the stage for further discussion and cooperation. The diversity in the implementation and formulation of monetary policy practices among SAARC countries indeed provides an opportunity to learn from each other's experiences and for increased cooperation in mutually beneficial areas.

I wish to congratulate the entire team of SAARCFINANCE Network and individuals who have been part of this unique research project.

(Ashraf Mahmood Wathra)

PREFACE

The South Asian Association for Regional Cooperation (SAARC) was formed in 1985 with an aim to enhance regional cooperation in the economic, social, scientific and cultural spheres. SAARC currently consists of these countries: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Within this larger umbrella, SAARCFINANCE Network was formed in 1998 to ‘open dialogue on macroeconomic policies of the region and to share mutual experiences and ideas’. In the 18th Meeting of SAARCFINANCE at Washington D.C. (USA), Pakistan took the responsibility to analyze and compare the monetary policy frameworks of SAARC member countries with an aim to identify areas of cooperation on macroeconomic policy making.

To capture the prevalent monetary policy practices and get first hand information, it was decided to conduct the study on the basis of information collected through a survey. After receiving the responses from the SAARC countries, an initial draft of this study was presented in a SAARCFINANCE meeting held at Islamabad, Pakistan, on 14-16 June 2012. The comments and feedback received from central banks of all SAARC countries were then incorporated and sent again for their review before finalization of this study.

The survey covers the legal and operational aspects of the monetary policy making and formulation processes instituted in the central banks of SAARC countries. However, other sources of information, like central bank websites and official publications, have also been used to enrich the analysis. Due to reliance on availability of primary data and feedback from the central banks of SAARC countries, the completion of this study consumed significant amount of time.

This paper is essentially a snapshot of existing monetary policy frameworks in the SAARC countries. It presents a comparative analysis of their salient features and, wherever possible, judges them according to the international best practices to identify areas of improvement. However, due to scarcity of comparative literature on this topic, it was indeed a challenging task to contrast the monetary policy frameworks of the member countries.

This study could not have been completed without the continuous support and motivation provided by the Governor, State Bank of Pakistan, Ashraf Mahmood Wathra. We are grateful to Chief Economic Advisor, Riaz Riazuddin and Director, Monetary Policy Department, Dr. Hamza Ali Malik for their guidelines and valuable suggestions at different phases of this study. We also take this opportunity to thank the country coordinators of SAARCFINANCE Network for their dedicated efforts in the conduct of SAARCFINANCE seminar and coordination in the survey phase of the study. Lastly, the analysis and observations made in this paper are entirely those of the working team and do not necessarily represent the views of the State Bank of Pakistan, and errors and omissions are the sole responsibility of the authors.

INTRODUCTION

Since the much wider recognition of its role in macroeconomic stabilization in the 1960s, monetary policy has progressed into a key policy tool to meet economy's desired goals, particularly maintaining price stability. The recent global financial crisis, however, has challenged this very fundamental role of monetary policy by revealing the fact that price stability on its own does not ensure financial stability. Despite having inflation well below the levels which could cause any concern for the economy, the financial crisis erupted and choked the developed economies within a very short span of time. All out efforts by these economies came to the fore including both *conventional* and *unconventional* practices to rescue the economy. With limitations on conventional tools, the central banks recourse to unconventional tools, such as monetization of government debt, increased. The evidence to the success of all these efforts in these developed countries, nevertheless, is mixed. The use of unconventional tools is considered temporary, but with more countries being attracted to them is keeping the debate alive. Nevertheless, the use of monetary policy as a tool to further economic objections still holds a firm ground.

Regarding monetary policy practices, literature does not suggest any optimal monetary policy regime that suits all economies. The role and nature of monetary policy can vary across countries according to their structure and level of development. There is, however, broader consensus that is depicted by the international *best practices* on the ingredients of monetary policy framework. It identifies macroeconomic variables which should be targeted and the instruments which should be used. Also, economic thought and practices in different economies have converged over the broad features of the institutional and legal framework that underlies the monetary policy making process. Characteristics like independence, accountability and transparency are considered as mandatory for central banks to make monetary policy more effective.

The heterogeneity in terms of monetary policy practices is also evident among the SAARC countries where there are differences right from the ultimate target to be achieved by their central banks to the constituent body for decision making and communication practices. The common strand is the fact that none of them fully conform to the *best practices* of monetary policy. The divergence is variable and understandable given the level of development these economies have achieved so far. Nonetheless, there are areas of conformation to best practices as well. For instance, price stability is the ultimate target of monetary policy among all countries. Almost all of them have indirect instruments of monetary policy, such as the open market operations, cash reserve requirement and standing facilities, in their use. However, the devil is in the details. Many of the countries are still targeting reserve money, which is considered an obsolete practice. Government borrowing from the central banks is either not restricted at all or the central banks have least control over it. The decision making bodies have one or more than one representatives of government depicting the state of independence of the central banks.

SAARC countries can improve the effectiveness of their monetary policies by filling the gaps that their current practices have in areas as suggested in literature or in the best practices of developed countries. Even among themselves, some of the SAARC countries have progressed considerably to meet many of the international best practices and learnt the academic lessons. Other countries can benefit from them as the SAARC forum provides an opportunity to share experiences. For instance, following the best practices, Pakistan and India have adopted the "interest rate corridor" framework to strengthen the operational aspect of their monetary policies. Other SAARC members can benefit from their experiences.

The rest of the paper is organized in four sections. Section A highlights some major developments in the area of monetary policy that have helped in shaping the current international best practices of monetary policy formulation and implementation. Section B discusses the policy targets, instruments, and operational procedures of monetary policy formulation and implementation in SAARC region. Section C compares and analyzes the institutional and legal structures determining central bank's independence, accountability and transparency. Section D provides concluding remarks and identifies the areas of improvements in frameworks of SAARC countries.

DEVELOPMENTS RELATED TO MONETARY POLICY

The role of monetary policy in the economic management of a country has strengthened considerably since the seminal work by Milton Friedman in 1960s establishing its pivotal role in macroeconomic stabilization. Friedman's contribution is encapsulated in his famous dictum *inflation is always and everywhere a monetary phenomenon*. Subsequent developments in economic literature, especially regarding the role of expectations and central bank independence, have further enriched the understanding of the role of monetary policy. The earlier belief that there is a tradeoff between inflation and unemployment did not last long as the later research showed that the best contribution monetary policy can make to long term economic growth and social welfare is by ensuring price stability.¹ As a result, price stability emerged as a primary objective of monetary policy of most central banks.

Mahadeva and Sterne (2000) analyzed mandated objectives of monetary policy in a sample of 94 countries and found that price stability, monetary stability and currency stability are defined as the legal objectives of central banks in almost all countries. However, central banks in many countries, particularly among the developing ones are still pursuing multiple objectives. Fry, et al. (1997) also observe that monetary policy objectives of many countries include goals like fuller utilization of resources, balance of payment support, financial stability etc.

To achieve the monetary policy objectives the decisions by central banks are made and executed under certain institutional arrangements which is generally referred to as the monetary policy framework (MPF) and are often described as monetary policy regimes such as monetary targeting, exchange rate targeting and inflation targeting (IT). The MPF of any country constitutes the intermediate and the operational objectives pursued by the monetary authorities, the instruments used to achieve these objectives and the procedures followed. The contents of the MPF are dictated by the legal framework provided in the legislation of central banks and are expected to be based on the structure of an economy, particularly the financial sector. This, however, does not suggest that only a certain monetary policy regime would be consistent with a particular structure of the economy.

The choice of a monetary policy regime has remained subjective in practice, as noted by Mahadeva and Sterne (2000). It observes that countries with similar economic and financial structures have different monetary policy regimes in place and, at the same time, countries with similar structures are working under different frameworks. This finding led them to conclude that framework choice has a weak relationship with the structure of financial markets. Ho (2008) also reached a similar conclusion while observing the monetary policy frameworks of developed and developing countries that the difference in

¹ See Mishkin (2000), Roger and Stone (2005) and Stone and Bhundia (2004)

monetary policy frameworks of these countries cannot be explained with the difference in their level of economic development.

Regarding identification and classification of monetary policy regimes, Stone and Bhundia (2004) argues that it is essentially the balance between *rules* and *discretion* that determines the category of MPF in which a particular country falls. It also observes that over time more and more central banks are choosing regimes with less and less discretion. On the other hand, Mishkin (2007) argues that commitment to a strong nominal anchor is central to making effective monetary policy.

The practice of implementation of monetary policy is also not straight forward and therefore cannot be generalized. The targets and the methods to achieve those targets vary significantly across economies. Ho (2008), for example, analyzed monetary policy frameworks of 17 countries, and found no obvious correlation between the expression of policy stance and choice of monetary policy regimes. It has been observed that central banks with same monetary policy regimes were expressing their policy stance through different operational targets.² However, apart from the countries that explicitly target exchange rate, most central banks use short term interest rate as their operational target.

Although there is abundant literature that attempts to measure the benefits of different monetary policy regimes for various countries, there is no consensus on the superiority of any particular regime. A clear pattern, however, in countries' choices of monetary policy regimes over time can be observed. Starting from the classical *gold standard*, most countries had moved to a *fixed* exchange rate regime under the Bretton Woods arrangement. During the 1970s and 1980s, most countries experimented with flexible exchange rates and/or monetary aggregate targeting regimes. During 1990s, many countries, especially the developed ones, started to move towards inflation targeting. Since the introduction of inflation targeting (IT) regime in New Zealand in the late 1980s, a large number of both developed and emerging countries have adopted the IT regime. Today there are more than 20 countries that fall under an IT regime (Pontines 2011).

Regardless of the choice of the MPF, the current debate about the role of monetary policy is focused on the question of how monetary policy strategy and central bank's operational and supervisory framework should be modified to ensure monetary/financial stability and prevent another financial crisis. Prior to the recent global financial crisis it was generally believed that price stability will automatically ensure financial stability. However, the crisis, which took place in the era of price stability, has casted doubts on this proposition. Latest research acknowledges price stability to be a necessary, but not a sufficient, condition for ensuring financial stability. Although research continues to favor price stability as the primary target of monetary policy (Mishkin, 2010), more emphasis is placed on macro-prudential regulations.

With regard to optimizing the efficiency and effectiveness of monetary policy, three desirable characteristics namely independence, accountability and transparency have gained popularity over time in economic literature. A more independent, transparent and accountable central bank enhances its credibility that makes the monetary policy more effective. Fundamental to the research surrounding

² Australia, Korea, New Zealand, Indonesia, Philippines, Thailand, United Kingdom are all inflation targeting countries; however, first three signal with a target for the overnight rate whereas the last four use an official central bank operation rate for policy rate expression.

central bank independence is the complex relationship between a central bank and government of that country. It is argued that long term economic stability hinges on the removal of politically motivated monetary policy decisions and the creation of an independent central bank with its own constitution and policy objectives. Arguments for central bank independence are further strengthened by the ample empirical evidence showing how it is linked with low inflation, sustainable economic growth and stable employment.

The legal framework of a central bank provides the basic structure that ensures development of these characteristics. For example, barring debt monetization by the government eliminates fiscal dominance and ensures independent decision making by central banks. Similarly central banks are made accountable to the public through parliament and are required to submit their performance reports and an independent assessment of the economy. Such reports are an important element of bringing transparency in the working of central banks. Moreover, it is widely accepted that only a transparent central bank does a good job of communicating its intentions to the public and reducing uncertainty regarding monetary actions and agenda. Greater transparency not only helps the central bank to carry out its mandate more effectively, but also enables it to be held accountable for its actions.

MONETARY POLICY OBJECTIVES AND IMPLEMENTATION

The MPF of any central bank essentially comprises a set of objectives defined in law, and the instruments that help in achieving these targets. The first set of objectives is the *ultimate* target, which is defined in the central banks legislation and they are accountable for achieving this target. The second tier is the *intermediate* target that serves as the nominal anchor for stakeholders to assess the direction of monetary policy. The third tier is the *operational* target that a central bank actively pursues in its day-to-day actions and through which it implements its monetary policy. For an effective and efficient monetary policy, these targets must be closely related to each other and defined very cautiously keeping in view the structure of the economy and the transmission mechanism of monetary policy through which the central banks actions are believed to be affecting the economy (see **Box 1**).

The instruments are the tools using which the central banks attempt to achieve their operational targets. This comprises the policy signaling variable (if different from the operational target), reserve requirements, open market operations and the standing facilities. These instruments are known as indirect instruments and are considered to be more effective in a market based economy. In contrast there are direct instruments like credit ceiling and interest rate controls, which impose direct restrictions on banks' activities. Direct controls, however, are now increasingly becoming obsolete due to their ineffectiveness in a market-based economy. The use of instruments by central banks is governed by certain rules and procedures, which define the way these instruments can be used. Since the use of instruments can be designed in multiple ways, setting up of these rules and procedures are an important element of MPF design to make monetary policy effective. Due to heterogeneity in economic and financial structures, SAARC countries also exhibit differences in their objectives and implementation of monetary policy. These differences can be noticed right from the ultimate objectives of monetary policy till the use of instruments.

Box 1: Structure of Financial Markets in SAARC Countries

The structure of financial markets generally refers to the overall size of financial system, its composition, depth, and efficiency. Undoubtedly, it has crucial importance in transmitting the effects of monetary policy to the financial decisions of economic agents. With developed and efficient financial markets, the monetary policy actions become more effective in achieving its desired outcomes.

The overall size and depth of the financial system can be gauged usefully through *ratios of broad money to GDP* and *credit to private sector to GDP*. The breadth of financial system can be measured by the outreach of the financial services mainly indicated by the number of bank branches and deposits/loan accounts of general public in commercial banks. Main indicators for measuring efficiency of the financial system include the *number of different financial institutions, price of services, and the interest rate spread of banking system* i.e. the difference between the lending and borrowing rate of banks.

The analysis of available data of different indicators of financial system across SAARC countries presents a diverse picture. Banking system in Maldives appears to have more outreach, as shown by the high deposit and loan accounts of general public in commercial banks as well as the highest number of ATM's available to per 1000 population. The low interest rate spread in Sri Lanka also highlights the efficiency of their banking system. However, the ratios of broad money to GDP and credit to private sector to GDP show that Nepal has the highest depth in financial system among SAARC countries, followed by India and Bangladesh. On the other hand, the indicator of total market capitalization, which identifies the total listed wealth of a country, and value of traded stocks (as % of GDP) stands significantly higher in India. It is worth mentioning here that central banks in all SAARC countries are also assigned with the responsibility of banking system supervision; the Royal Monetary Authority of Bhutan also oversees the operation of the stock exchange.

Structure of Financial Markets in SAARC Countries		Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
1	Commercial bank branches (per 100,000 adults)	2	8	16	11	17	7	9	17
2	Automated teller machines (ATMs) (per 100,000 adults)	1	4	14	9	20	7	5	14
3	Depositors with commercial banks (per 1,000 adults)	119	378	-	-	1334	278*	257	-
4	Borrowers from commercial banks (per 1,000 adults)	3	70	-	-	169	27*	27	-
5	Domestic credit provided by banking sector (% of GDP)	-3	70	49	74	83	67	43	46
6	Domestic credit to private sector (% of GDP)	5	49	50	50	54	53	18	31
7	Broad money (% of GDP)	36	69	67	77	64	76	38	38
8	Deposit interest rate (%)	-	10	5	-	4	4*	8	6
9	Interest rate spread (lending rate minus deposit rate, %)	-	3	10	-	6	4*	6	3
10	Market capitalization of listed companies (% of GDP)	-	21	-	54	-	20	16	33
11	Stocks traded, total value (% of GDP)	-	16	-	40	-	0	5	8

Source: WorldBank Database; the numbers pertain to 2011; * pertains to 2010

1. Ultimate Targets

The ultimate target of monetary policy is generally outlined in the legislations of central banks, which typically delineates the purpose and functions for which a central bank is created. Typically, no numerical values are associated with such targets. However, in inflation targeting countries, a range of inflation rate, or a single value is defined as a target for central bank. In the legislations of SAARC central banks a variety of monetary policy related objectives can be observed - such as, monetary stability, regulating the amount of money, promoting credit and exchange conditions,

Table 1 Ultimate Targets of Monetary Policy

Afghanistan	Price Stability
Bangladesh	Inflation; GDP Growth
Bhutan	Price stability
India	Price stability; Growth; Financial stability
Maldives	Price stability
Nepal	Price stability; Favorable balance of payment; Financial stability
Pakistan	Monetary stability; Soundness of the financial system; Fuller utilization of country productive resources.
Sri Lanka	Economic and Price stability

Source: SBP survey

maintaining domestic and external value of the currency, fuller utilization of resources, etc.

Based on the responses from SAARC countries, one common element of ultimate targets that can be identified is price stability/inflation; however, four of them (Bangladesh, India, Nepal and Pakistan) have multiple objectives (see **Table 1**). In addition to price stability, financial stability is another target, which is common among three countries. While for India and Pakistan, growth of the economy is the third objective, Nepal targets a favorable balance of payments. Bangladesh targets GDP growth as their second objective. The Reserve Bank of India, however, describes that the relative emphasis on the objectives pursued by it depends upon the prevailing macroeconomic conditions. These targets have neither been explicitly defined nor given any specific value and it would be pertinent to mention here that this is not limited to SAARC countries only. The targets are typically defined on the basis of economic literature and are often disputed due to interpretation. For example, price stability is generally considered as maintenance of low inflation; however, in common parlance this is also referred to as no change in prices. Moreover, low inflation is also subject to interpretation and varies across countries.

As noted in the previous section, the practices in SAARC countries are not very different from the general trend among developing countries, which often have multiple objectives. The central banks of developed countries, however, have shown an almost consensus in terms of maintaining low inflation as their overriding monetary policy objective (Lucas *et.al*, 2003). Having multiple objectives causes confusion among economic agents and reduces the accountability of central banks. For example, at times there could be disagreement over giving preference to price stability over growth promotion. A central bank may wish to give priority to price stability but is criticized for compromising growth of the economy. In such situations, the central bank decision may not be in the best interest of the economy. A central bank being asked to pursue multiple objectives may avoid accountability for not achieving any one or all the targets on the ground that it is economically not possible to achieve them.

2. Intermediate Targets

Intermediate targets are the link between operational target, which a central bank controls on a day to day basis and the ultimate target, which is a statutory requirement. The choice of an intermediate target (or targets) therefore requires a strong and stable relationship with both of them. It also depends on the depth of the financial sector and the degree of openness of trade and capital flows, and transmission mechanism of monetary policy (see **Box 2**). The target must be controllable through the operational target. Inflation, monetary aggregates and exchange rate, individually or in combination, have typically been chosen by central banks during the past four decades as intermediate targets. In the 1990s a significant number of countries opted for both inflation and money targets with an increasing number of countries moving towards explicitly mentioning intermediate targets. However, during the last decade many countries have adopted inflation targeting which involves setting up a *point* or a *range* of inflation as an intermediate target with price stability as the ultimate goal (Mahadeva and Sterne, 2000).

An important feature of intermediate targets is its use for communication purposes. The specification of a single variable as an intermediate target works as a *nominal anchor* for stakeholders. Projections of its future path and commitment of policy actions helps the central banks in anchoring expectations. The central bank establishes its credibility with more robust projections and implementing its committed policy actions. Another element related to the setting up of intermediate targets is the time horizon for

Monetary Policy Frameworks in the SAARC Region

which the target is set and the frequency with which the target is set. For example, a monetary aggregate target set on an annual basis has disadvantages over a target which is set for a medium term. A high frequency and relatively short period target has a higher probability of being missed. Empirical evidence finds such ‘misses’ more frequent in case of monetary aggregates (Mahadeva and Sterne 2000).

Box 2: Monetary Policy Transmission Mechanism in SAARC Countries

A better understanding of the monetary policy channels and transmission lag is indeed necessary for effective monetary policy formulation and implementation. Knowledge about the relative effectiveness of different channels contributes in choosing appropriate operating target and nominal anchor in order to achieve monetary policy objectives.

Based on the questionnaire response, *credit channel* appears to be the main monetary policy channels in SAARC countries; Bangladesh, Nepal, Pakistan and Sri Lanka, have reported credit channel as their main channel while Sri Lanka has reported exchange rate channel and interest rate channel as well. India, while acknowledging that there is no conclusive evidence based on the research carried out so far, has reported interest rate channel as gradually getting importance over the credit channel in transmitting the effects of monetary policy.

Transmission Mechanism of Monetary Policy

	Strongest Channel of Monetary Policy	Estimated Transmission Lag
Afghanistan	Credit channel and exchange rate channel	3-6 months for exchange rate, not estimated for monetary aggregates
Bangladesh	Credit channel	From 9 to 15 months
Bhutan	No information	Not estimated.
India	Interest rate	Variable.
Nepal	Credit channel	Not estimated.
Pakistan	Credit channel	Variable
Sri Lanka	Interest rate channel , credit channel and the exchange rate channel	6-24 month period

Source: SBP Survey

The responses from SAARC countries’ central banks, however, show the need to carry out extensive research related to monetary policy transmission mechanism. For example, although the central bank of Nepal has reported credit channel as its strongest channel, it has also mentioned that no quantitative research has been carried out yet. The response of central banks of India, Bhutan, and Pakistan also imply a lack of clarity on this matter. A similar lack of research and understating exists for estimating the transmission lag of monetary policy; only Afghanistan, Bangladesh and Sri Lanka have reported transmission lag of monetary policy.

In the 1970s many countries adopted monetary aggregates targeting; however by the 1980s many of them, particularly the developed countries abandoned it because financial innovation rendered the relationship between monetary aggregates and price stability – the ultimate target – unstable. Many of the SAARC countries (Bangladesh, India, Pakistan and Sri Lanka) also had monetary aggregates as their intermediate targets; however, India and Pakistan have abandoned them more recently and have been focusing on *multiple* indicators with a top priority for inflation (see **Table 2**). Although central banks pay close attention to the movements in monetary aggregates, the money supply is essentially endogenous in this framework. Other variables which are important in deciding policy stance include output gap, interest rates in different markets, fiscal position, trade balance, capital flows, and exchange rate. In case of Pakistan, the central bank focuses more on the future path of inflation while evaluating developments in different sectors of the economy to gauge the position of aggregate demand.

Monetary Policy Frameworks in the SAARC Region

Table 2 Intermediate Targets of Monetary Policy

	Variable	Targets	Frequency of Setting the Target
Afghanistan	Currency in circulation (CiC)	Growth rate of CiC	Annual
Bangladesh	Broad money	M2 growth rate	Annual
Bhutan	Exchange rate	1BTN=1INR	Irregular
India	Multiple indicators	No specific targets	Annual
Maldives	Exchange rate	12.85MVR=1USD (+/-20%)	Irregular
Nepal	Exchange rate	NA	NA
Pakistan	Inflation, together with an assessment of monetary aggregates	Projections of inflation relative to the announced target and projections of various components of monetary aggregates	Annual
Sri Lanka	Broad money	Consolidated Broad Money (M_{2b})	Annual

Source: Central banks' websites.

Note: Targets are the latest numbers available at the time of compilation.

BTN: Bhutanese Ngultrum; INR: Indian Rupee; MVR: Maldives Rufiyaa; USD: US Dollar

In the 1990s when the Indian economy started transforming into a more open economy with increasing trade and capital inflows, several external shocks made it difficult to control monetary aggregates (Mohanty 2010). At the same time monetary transmission also changed significantly. Subsequent to these changes India adopted a 'multiple indicator approach' and Mohanty (2010) terms it as an 'augmented multiple indicator approach' since the analysis of multiple indicators is complemented with several forward looking indicators and surveys.

In Pakistan, up till 2006, the State Bank of Pakistan (SBP) used to prepare a credit plan with indicative targets for overall monetary expansion and some of its key components. The overall monetary expansion target was decided by taking into account the annual targets for inflation and GDP growth set by the government in its Annual Development Plan. The rest of the monetary aggregates on assets side were then estimated on the basis of projected balance of payments, government's fiscal needs from the banking system and an estimated demand for private sector credit. Similar to the Reserve Bank of India (RBI), the SBP now focuses on the projections of key macroeconomic variables; in particular, inflation and various components of monetary aggregates.

According to the SBP survey responses and some other publications, Bangladesh and Sri Lanka still have monetary aggregates targeting regime in place. The central bank targets the announced value of broad money during a fiscal year and the 'credit plan' mechanism is still being used by Bangladesh. Nepal, Bhutan and Maldives use exchange rates as their intermediate targets and the latter two have pegged their currencies with the Indian Rupee and the US dollar respectively. Bhutan, in fact, has a conventional peg exchange rate arrangement with de facto circulation of Indian Rupee notes and coins alongside the Bhutanese Ngultrum. Maldives has created a band of 20 percent on either side of a central parity of Maldives Rufiyaa 12.85 per UD dollar in which it allows its exchange rate to oscillate. Monetary policy

plays a limited role in countries where exchange rate is pegged with another currency. In fact, the monetary policies in these countries become dependent on the inflation rate and the monetary policy of the country with whom the domestic currency is pegged.

In general, the choice of monetary policy regimes in these countries is consistent with the structures of their economies. Bhutan, mainly an agrarian and landlocked economy is largely dependent on neighboring India for all its trade. For Maldives, tourism, fishing and shipping are key economic activities. These activities make exchange rate as a key determinant of prices in these economies and hence the exchange rate targeting regime. As opposed to these countries, domestic manufacturing activities constitute a significant part of GDP in Bangladesh, India and Pakistan, therefore, making room for an independent monetary policy to influence aggregate demand in the economy.

3. Operational Targets

The choice of an operating target carries vital importance for the effective implementation of monetary policy. Central banks, with the help of its instruments, must have significant control over its operational target. Moreover, the operational target must be understood clearly by the financial markets and other stakeholders. Being the sole authority with control over *monetary base*, the central bank can control either the quantity or the price of money i.e. interest rate. With monetary aggregates targeting regime losing its effectiveness in the 1980s and 1990s, for reasons cited in the previous section, countries have also abandoned the use of monetary base as an operational target. In fact, it is argued that even if a broad money target is to be pursued as an intermediate target, interest rate is a preferred operational target over reserve money to effectively control it. Interest rates have emerged as a preferred choice during the last two decades for several of its advantages (Sturm 2001, Dack 1999). The choice between the two is driven primarily by the types and magnitude of shocks to aggregate demand or the money demand and money multiplier. However, the choice between the two loses its relevance if there are no uncertainties (Sturm 2001). With interest rates as an operational target, another issue is to decide about the maturity of the interest rate. Dack (1999) argues for a longer than overnight maturity on the grounds that such rate may be more relevant for benchmarking long term pricing of loans and deposits.

Among the SAARC countries, only India and Pakistan have adopted short-term interest rates as their operational targets (see **Table 3**). On the other hand, Afghanistan, Bangladesh and Sri Lanka are targeting reserve money (i.e. base money), while Bhutan and Maldives are targeting the exchange rate. Nepal is an exception, which targets the excess reserves of banks and financial institutions together with growth of private sector credit.

According to the SBP survey, in India, a short term interest rate – weighted average overnight call money rate is the operating target. This rate is kept within a corridor of Marginal Standing Facility (MSF) rate (ceiling) and a reverse repo rate (floor) under the Liquidity Adjustment Facility (LAF) of the Reserve Bank of India. The middle of the corridor is the repo rate which serves as the policy rate. The width of the corridor is currently 200 bps with the MSF rate 100 bps above the policy rate and the reverse repo rate 100 bps below the policy rate. Under the LAF, liquidity injections are made at the fixed repo rate and liquidity absorptions at the reverse repo rate (more details in the following sections).

In contrast with an uncollateralized interest rate as an operational target for RBI, the operational framework of the SBP constitutes an overnight money market repo rate as a target within the current 250

Monetary Policy Frameworks in the SAARC Region

bps corridor, set by the SBP reverse repo as a ceiling and the SBP repo rate as a floor.³ The SBP reverse repo rate is also the policy rate which is used for the communication of monetary policy stance.

	Variable	Targets	Period	Frequency
Afghanistan	Reserve money	Based on Nominal GDP Growth	Yearly	Annual
Bangladesh	Reserve money	Growth rate	Yearly	Annual
Bhutan	Exchange rate	1BTN=1INR	All the time	Irregular
India	Weighted average overnight call money rate	Middle of the corridor	All the time	Irregular
Maldives	Reserve money	Growth rate	Quarterly	Quarter
Nepal	Excess reserve of banks and financial institutions together with growth of private sector credit	No	NA	NA
Pakistan	Weighted average money market overnight repo rate	Middle of the corridor	All the time	Irregular
Sri Lanka	Reserve money	Growth rate	Quarterly	Quarter

Source: SBP Survey; Central banks' websites; NA: Not applicable

The practices regarding interest rate corridor both in India and Pakistan are slightly different from international best practices. Typically the corridor constitutes collateralized interest rates, with the policy rate in the middle of the corridor and a width of 50 to 200 bps. In Pakistan, the policy rate is not in the middle of the corridor and the width is also quite high, whereas in India, the target rate is not a collateralized rate.

The annual reserve money target of Afghanistan is based on the nominal GDP growth for the same period. Bangladesh uses reserve money as its operating target through closely monitoring the developments in key monetary aggregates; the central bank uses the changes in reserve money to achieve the overall growth target of M2, set annually. Similarly, in Sri Lanka reserve money acts as the operating target whose quarterly growth rates are set while preparing a monetary program in which the target for M_{2b} growth is also fixed taking into account several economic factors. To achieve the reserve money targets, the central bank of Sri Lanka conducts open market operations within a corridor of interest rates formed by the policy rates, which is the repurchase rate and the reverse repurchase rate. Maldives Monetary Authority (MMA) targets reserve money growth in order to control the growth of money

³ SBP reverse repo is the collateralized rate at which commercial banks borrow from the central for an overnight, while the SBP repo rate is the collateralized rate at which the commercial banks deposit their excess cash with the central bank for an overnight. The gap between the two rates, i.e. the width of the corridor, was set at 300 bps at the time of introduction of interest rate corridor framework.

Monetary Policy Frameworks in the SAARC Region

supply. Their monetary policy process begins with annual projection of reserve money target that are based on monetary developments and the economic growth in the international and domestic economy.

As an operating target Nepal controls the excess liquidity of commercial banks and private sector credit through OMOs of both short and long term repo and reverse repo transactions. In Bhutan, exchange rate is used as an operational target. The Royal Monetary Authority of Bhutan largely focuses on maintaining the fixed exchange rate with the Indian rupee (INR) through prudent reserve management and manages domestic currency liquidity using monetary policy tools, including the policy and base rates, and short term liquidity adjustment facility besides reserve requirements.

4. Monetary Policy Instruments

In order to achieve operating targets in a market economy, central banks mainly use three types of instruments: open market operations, reserve requirements and standing facilities. In addition to these, the policy rate is also considered as a tool since the signaling impact of the policy rate provides a considerable control over the operational target. Similarly, though interventions in the foreign exchange market are typically not considered as a policy tool for non-exchange rate targeting countries, but due to their impact on domestic liquidity and hence the interest rate, they can also be categorized in the league of policy tools. The use of a particular instrument depends upon the depth of the financial markets. In well-developed markets, which have a multitude of securities that can be traded and where the transactions are also voluminous relative to the size of the economy, typically the OMOs are used to achieve the operational target. Over the last two decades, central banks in the developed countries have completely abandoned the use of direct instruments (Buzeneca and Maino, 2007). However emerging and developing countries have not yet completely moved away from direct controls, partly because of lack of depth in their financial markets.

Table 4 Monetary Policy Instruments							
	OMO	CRR	SRR	Standing Facilities		Forex Operations	Others
				Lending ¹	Deposit ²		
Afghanistan	√	√	×	√	√	√	×
Bangladesh	√	√	√	√	√	√	×
Bhutan	√	√	√	√	√	√	×
India	√	√	√	√	√	√	√
Maldives³	√	√	×	√	√	√	×
Nepal	√	√	√	√	×	√	×
Pakistan	√	√	√	√	√	√	√
Sri Lanka	√	√	×	√	√	√	√

Source: SBP Survey

Notes: OMO: Open Market Operations; CRR: Cash Reserve Requirement; SRR: Statutory Reserve Requirement; Others: India uses refinance rates and Sri Lanka uses moral suasion as tools.

1: Includes both repo based and the discount window facility.

2: Includes both collateralized and/or uncollateralized deposits.

3: Maldives has minimum reserve requirement (MRR), which is same as CRR because the commercial banks are required to keep cash balances with the central bank.

Monetary Policy Frameworks in the SAARC Region

All the SAARC countries generally rely on indirect instruments for implementing their monetary policies. **Table 4** shows that all SAARC member countries use OMOs and cash reserve requirements (CRR). Maintaining SRR, which has become a typical source of providing mandatory financing to the government, is required by all central banks of SAARC except Afghanistan, Maldives and Sri Lanka. Standing lending and deposit facilities, as a lender and borrower of last resort, is provided by all the SAARC countries, except for Nepal which does not offer the standing deposit facility. In case of India and Pakistan, the standing deposit facility is in fact a collateralized repo transaction; however, since in effect it is similar to a deposit facility, no distinction is made here.

The foreign exchange operations of exchange rate targeting countries such as Bhutan and Maldives are not considered as a monetary policy tool. The rest of the countries though indicate the use of foreign exchange operations, but since the use is infrequent, this cannot be considered as a policy tool.

i) Cash Reserve Requirements (CRR)

The central banks of all the SAARC countries require their banks to maintain cash reserves, mainly to act as a monetary policy tool and a buffer against unexpected bank withdrawals (see **Table 5**). The cash reserve requirement is based on the total deposits of banks in all SAARC countries except for Pakistan, where only less than one-year term deposits fall under the requirement. Similarly, Pakistan is the sole country that has a contemporaneous base for the reserve requirement.

Table 5 Cash Reserve Requirement				
	Base	Maintenance Period	Lagged Base	Current CRR
Afghanistan	Deposits	1 month average	Yes	8%
Bangladesh	Deposits	14 day average	Yes	6%
Bhutan	Deposits	weekly average	Yes	5%
India	Deposits	14 day average and Daily	Yes	4.75% fortnightly and 70% of fortnight requirement on daily basis
Maldives*	All deposits excluding interbank liabilities and L/C margin deposits	14 day average	Yes	25%
Nepal	Deposits	7 day average	Yes	6% for commercial banks, 5.5% for development banks and 5% for finance companies
Pakistan	Deposits of less than one year maturity	14 day average and Daily	No	5% on average basis and 3% minimum daily
Sri Lanka*	All rupee denominated deposits	7 day average	Yes	8%

Source: SBP Survey and central banks' websites

*Referred to as SRR (Statutory Reserve Requirement) and MRR (Minimum Reserve Requirement) in Sri Lanka and Maldives.

Note: MRR for Maldives include both local and foreign currency reserve requirements.

Except for Afghanistan and Maldives, cash reserves are non-remunerated in all SAARC countries, which is in contrast to the practices of developed and emerging countries (see Buzeneca and Maino, 2007 and Borio, 1997). Furthermore, the reserves are required to be kept on an average basis over some time period; one week average in most SAARC countries with as long as one month for Afghanistan. India and Pakistan, however, require their banks to maintain minimum reserves on a daily basis also. The use of average CRR is supported on the argument that central banks should not get involved in day to day liquidity management to steer the overnight rate (Borio 1997); therefore, this practice of dual requirement (that is, daily and period average of CRR) in Pakistan and India is not an optimal way to manage liquidity and overnight rates of the interbank market. Furthermore, the maintenance period of SAARC countries (14 days, at most for all SAARC countries except Afghanistan, which has a 30 day maintenance period) is quite lower than many developed countries where the maintenance period is as high as one month (Borio, 1997). MMA practices are unique amongst these countries because of their high requirement of 25 percent reserve balances on both foreign and domestic deposits, which is highest of all the SAARC countries. As they do not require their banks to keep SRR, the overall requirement (including both CRR and SRR) is at par with other countries in the region. Lately, to relieve foreign currency (dollar) shortage, MMA has allowed the banks to keep 3 percent of the 25 percent requirement on foreign currency deposits in Rufiyaa with the central bank.

ii) Statutory Reserve Requirement

Bangladesh, India, Pakistan, Nepal and Bhutan are the SAARC countries which, in addition to the CRR also require their banks to maintain SRR in the form of liquid assets, such as cash, gold, and government securities - as allowed under their respective regulatory frameworks (see **Table 6**). The purpose of this requirement is to ensure that every bank has certain assets which could be liquidated at any time to meet financing needs of their customers. This helps smooth functioning of the payment system and contributes in the stability of banking system. It is, however, observed that these requirements are generally fulfilled by keeping government securities, which makes the SRR appear as an *easy* source of funding for the government. The lack of diversity due to dominance of government securities against non-government securities also reflects the shallowness in the financial markets.

Like in case of CRR, Pakistan differs from other SAARC countries regarding SRR as it requires banks to maintain SRR not on total deposits but only on less than one-year deposits. Also, unlike other SAARC countries, the base of the reserve requirement is not lagged. While Pakistan and India require SRR on a daily basis, Bangladesh, Nepal, and Bhutan direct their banks to maintain SRR for an average amount over a one-month period.

Table 6 Statutory Reserve Requirement

	Base	Requirement	Lagged Base	Eligible Assets	Current SRR
Afghanistan	-	-	-	-	-
Bangladesh	Deposits	Monthly average of Demand and Time deposits	Yes	Cash, Unencumbered approved securities + Balances with BB and scheduled banks as agent of BB	19%
Bhutan	All Deposits	Monthly average	Yes	Cash, balances with RMA, government bonds, cash balances in commercial banks of Bhutan and India	20%
India	All Deposits	Daily	Yes	Cash, Gold, balances in current account of other scheduled banks and Government Securities	23%
Maldives	-	-	-	-	-
Nepal	All Deposits	Monthly average	Yes	Government securities, central bank securities or any other securities specified by the central bank	Various (4%-15%)
Pakistan	<1 year Deposits	Daily	Yes	i) Excess cash held with central banks and in their tills ii) Government Securities iii) Other Approved Securities	19%
Sri Lanka	-	-	-	-	-

Source: SBP Survey; Central banks' websites; RMA: Royal Monetary Authority of Bhutan; BB: Bangladesh Bank

iii) Open Market Operations

Open Market Operations (OMOs) impact the operating target – the short term interest rate through the liquidity effect or the arbitrage effect. In its liquidity effect, injecting or absorbing liquidity puts pressure on the market interest rates; however, to what extent the market rates change depend upon the interest rate elasticity of demand and supply of reserves in the market and the expectations of market participants regarding liquidity conditions (Strum 2011). Whereas in the arbitrage effect, the relatively longer term maturity OMOs reduce the arbitrage opportunity created due to the difference in the policy rate, which is usually an overnight rate and the market interest rate. Specifically, if the policy rate, the rate which banks can borrow from the central bank, is lower than the market overnight rate, banks can make money by borrowing from the central bank and lending in the market. However, the central banks typically do not provide liquidity for such a short maturity and conduct higher maturity OMOs. This helps in avoiding the creation of any arbitrage opportunity.

While all the SAARC countries use OMOs as an instrument for monetary policy, there are few similarities and differences among them in their characteristics. Two characteristics of OMOs that are common among all SAARC countries is the use of government securities as an eligible asset and auction mechanism used to conduct OMOs (see **Table 7**). Afghanistan is an exception, where the unavailability of government securities requires the central bank to use its own securities for OMOs. In terms of frequency, the least OMOs (once in 3 months) are conducted by Bhutan and the maximum (more than

Monetary Policy Frameworks in the SAARC Region

once a day) by Sri Lanka. Bangladesh, Nepal, India, Maldives and Pakistan conduct OMOs once a week, on average, while Afghanistan conducts fortnightly OMOs. Although all central banks can conduct OMOs anytime for any tenor, their OMOs are scheduled typically around the end of reserve requirement period and correlate with the reserve maintenance period. Similar trends, however, cannot be observed among the SAARC countries. Nepal and Sri Lanka have a 7 day reserve maintenance period but they conduct OMOs specifically for more than 14 days (Nepal) or daily basis (Sri Lanka). Bhutan's reserve requirement period is on weekly average basis. Similarly India and Pakistan have a 14 days reserve maintenance period but OMOs of 7 days are conducted there. Bangladesh's reserve requirement period is 14 days and it conducts OMOs for overnight, 2 to 7 days or for more than 14 days.

Table 7 Open Market Operations

		Afg	Bngl	Bhut	Ind	Mal	Nep	Pak	SL
Frequency	Once a day		√		√ ²				
	More than once a day								√
	Weekly		√ ¹		√ ²	√	√	√	
	Fortnightly	√							
	Others			√ ³					
Tenor	Overnight	√	√						√
	2-7 days		√		√	√		√	√
	8-14 days								√
	More than 14 days		√	√			√		√
Eligible Assets for Collateral	Government securities		√	√	√	√	√	√	√
	Central bank bills	√	√						√
Nature of Transaction	Outright	√			√		√	√	√
	Repo		√		√	√	√	√	√
	Other		√ ⁴						
Interest Rate Determination	Auction	√	√	√	√	√	√	√	√
	Fixed rate				√				

Source: SBP Survey; ¹ OMOs through Bangladesh Bank Bill; ² Daily and weekly Liquidity Adjustment Facility; ³ 91 days; ⁴ By way of secondary market transactions

Afg: Afghanistan, Bngl: Bangladesh, Bhut: Bhutan, Mald: Maldives, Nep: Nepal, Pak: Pakistan, SL: Sri Lanka

Regarding the type of transactions, except for Bhutan, OMO transactions are largely repo-based among all the SAARC countries. Outright transactions are also common in SAARC countries except for Bangladesh, Bhutan and Maldives. Similarly, OMOs are conducted through auctions among all SAARC countries. In India, however, fixed tenders are also used for providing repo based deposit facility.

In addition to the use of government securities, Bhutan is the only country in the region which also utilizes the government deposits to affect liquidity in the system. It allows central banks to switch their government deposits from central banks to the banks and vice versa. When the interbank market is short of liquidity, the Royal Monetary Authority of Bhutan transfers the deposits of government to the banks to ease the pressures.

iv) Standing Facilities - Lending

Standing lending facility is the most common tool utilized by central banks to meet liquidity requirements of banks arising due to unexpected developments. In addition, it serves two more purposes. First, it provides a ceiling for the short-term market interest rates, and therefore forms the interest rate corridor together with interest rate floor created by the standing deposit facility. Second, it can be used for signaling of monetary policy when designated as a policy rate, albeit having certain disadvantages (discussed in the preceding sections). The direction and magnitude of changes in this rate, therefore, not only set the direction for other market interest rates but also results in market rate changes, generally, of similar sizes.

There are two ways in which the central banks provide lending facilities. One, there is a 'discount window' through which a commercial bank can borrow from the central bank by selling a security at a discounted price (i.e. less than the face value). The rate at which the security is discounted is often called the 'bank rate'. Most of the central banks have abandoned this type of facility. The second approach to borrow from the central bank is through entering into a repurchase agreement of an approved security. The bank sells its securities at the price fixed by the central bank and repurchases it at the maturity of the transaction period.

Liquidity support is usually provided for overnight but since the central bank cannot refuse any institution, the facility can be used for any time period by the banks, though with the caveat that banks will need to resort to the central bank every day. Nevertheless, this facility cannot be considered as an infinite source of reserves for banks, since the central bank discourages banks in different ways for the use of this facility. For example, by limiting the volume of borrowings, limiting the number of times a bank can consecutively access this facility, and penalizing the banks with higher interest rates for continuous use of this facility. In Pakistan, commercial banks are penalized with a higher rate for approaching the standing lending facility more than 7 times in a quarter.

The use of standing lending facility has considerably increased in most developed, developing and emerging economies from the late 1990s to mid 2000s, indicating its significant role in maintaining stability in a financial system (Buzeneca and Maino, 2007). In the industrialized countries, Dack (1999) suggests that central banks' dependence on discretionary market operations to manage liquidity has increased as compared to the reliance on standing lending facility.

All the central banks of SAARC countries have this standing facility for their selected financial institutions. The tenor of this facility varies from overnight to one-week (see **Table 8**). Transactions are collateralized in all the SAARC countries, except for Bhutan where this facility is provided as an overdraft. The rate charged for this facility is typically linked with the policy rate. For example, in India, where the Marginal Standing Facility has recently been introduced, banks can approach the RBI to obtain liquidity for overnight at a rate which is 100 bps above the repo rate, which is the policy rate. In Nepal, Pakistan and Sri Lanka, the rate of standing lending facility is itself used as a policy rate. In Bangladesh, Bhutan, and India, the rate of standing lending facility is their policy rate added with a premium rate. Nepal and Maldives are exceptions where the Nepal Rastra Bank also uses bank rate as a benchmark for providing this facility while Maldives Monetary Authority uses a premium over secondary market lending

Monetary Policy Frameworks in the SAARC Region

rates for its facility. Only India, Pakistan and Nepal have restrictions on the frequency of use of this facility.

Table 8 Standing Lending Facility					
	Tenor	Nature of Transaction	Access Eligible For	Interest Rate Charged	Limit to Approach
Afghanistan	Overnight	Collateralized	Commercial Banks	28 day Central bank security auction rate + 3.5 percent	No
Bangladesh	Up to a week	Collateralized	Primary Dealers + Non Primary Dealers	Reverse Repo rate or Repo rate (whichever is lower) + 2 percent	95% of face value for BGTB and 85% of face value for T-Bills
Bhutan	Overnight, 3 days up to 90 days	Clean	Commercial Banks	Policy rate + 1 percent	To be determined jointly by the commercial banks and the RMA.
India	Overnight	Collateralized	Primary Dealers Schedule Bank,	Repo rate + 1 percent	2% of Net Demand and Time Liabilities
Maldives	Overnight	Collateralized	Commercial Bank	The highest lending rates in the banking system + 2 percent	No
Nepal	5-days	Collateralized	Commercial Banks, Development Banks, and Finance Companies	Bank Rate	90% of collateral value
Pakistan	Overnight	Collateralized	Scheduled banks, non-banking financial institutions.	Reverse repo rate	No
Sri Lanka	Overnight	Collateralized	Commercial Banks Primary Dealers	Reverse repo rate	No

Source: SBP Survey; Central banks' websites; NA: Not available, BGTB: Bangladesh Government Treasury Bond

v) Standing Facilities - Deposit

Although not as common as the lending facility, the adoption of deposit facility has increased in various countries during the last decade. This has significantly improved the monetary policy transmission for emerging and developed countries, while developing countries have lagged behind in that respect (Buzeneca and Maino, 2007). Moreover, the maturity of deposit facility is much higher (longer than a week) in developing countries, as opposed to the developed and emerging economies (overnight to few days).

The standing deposit facility essentially provides a floor for the market interest rates as excess reserves in the system can be parked with the central bank at a pre-determined rate. The minimum return guaranteed by the central bank helps in minimizing the volatility of interbank rates and assists in managing interbank liquidity in addition to the OMOs conducted by central banks. The deposit facility can be provided through both uncollateralized and collateralized transactions; however, central banks generally adopt the

Monetary Policy Frameworks in the SAARC Region

former. Under a repurchase agreement, the central bank sells the security at a discounted price and repurchases it at maturity of the agreement.

Table 9 Standing Deposit Facility				
	Tenor	Nature of Transaction	Remuneration	Access
Afghanistan	Overnight	Collateralized	28 day central bank security auction rate less 1 percent	Commercial banks
Bangladesh	Unlimited	Uncollateralized	No	Scheduled Banks
Bhutan	Unlimited	Uncollateralized	No	Commercial Banks
India	Overnight	Collateralized	Repo rate less 100 bps	Scheduled Banks
Maldives	Overnight	Uncollateralized	Fixed at 0.25%	Commercial banks
Nepal	<i>No deposit facility is provided</i>			
Pakistan	Overnight	Collateralized	SBP reverse repo rate less 250 bps	Scheduled banks
Sri Lanka	Overnight	Collateralized	Repo rate	Commercial Banks

Source: SBP Survey, Central banks' websites

Amongst the SAARC countries which provide standing deposit facility, not all remunerate them (see **Table 9**). Bangladesh and Bhutan offer a deposit facility with no remuneration which leaves no incentive for their banks to keep excess reserves at their central banks, and therefore market interest rates can possibly decline to zero. The central banks of India, Pakistan and Sri Lanka, however, have deposit facilities with remuneration which is provided through a collateralized repo transaction at a predetermined rate linked with the policy rate. Afghanistan is unique amongst the countries in the sense that its own security is used as collateral in the standing deposit facility. In Sri Lanka, the repo rate is determined as a separate rate and acts as a policy rate in addition to the reverse repo rate. In other words, the width of the interest rate corridor is not fixed but changes with the reverse repo rate or the repo rate.

vi) Policy Rate

The policy rate serves as a prime monetary policy instrument due to its strong signaling effect. Announcement of policy rate sets the direction for market interest rates and determines the change in market interest rates. The impact of policy rate change is typically immediate in the short-term money market rates and with a certain time lag to the rest of the interest rates. The time lag is determined by the macroeconomic conditions and the financial market structure. Transmission mechanism with a strong interest rate channel and clarity about the policy rate potentially make the impact of policy rate optimal. Also, the policy rate works more effectively when it has a strong relationship with the operational target. Choice of an

Table 10 Policy Interest Rate

Afghanistan	No policy rate
Bangladesh	Repo rate
Bhutan	Policy rate
India	Repo rate
Maldives	Repurchase and the reverse repurchase rates
Nepal	Bank rate
Pakistan	Reverse Repo Rate
Sri Lanka	Repurchase and the reverse repurchase rates

Source: SBP Survey

inappropriate interest rate and multiplicity of policy rates creates uncertainty and compromises its effectiveness.

Afghanistan does not have a policy rate because they use OMOs and other instruments to control the growth in reserve money, their operating target. All other SAARC countries have policy interest rates for signaling monetary policy decisions (see **Table 10**). In all these countries, however, certain weaknesses can be observed in the design and use of policy rate. For example, Nepal uses excess reserve of banks and financial institutions as an operational target. At times the changes in such reserves may be driven due to autonomous factors and may be at odds with their policy rate. Similarly, in case of Sri Lanka while they have the repurchase and the reverse repurchase rate as policy rates their operating target is reserve money. Changes in the policy rates may not directly impact the reserve money and may involve longer time lags. The multiplicity of policy rates is another disadvantage since it can potentially create confusions for the stakeholders. For instance, an increase in the repurchase rate and an increase in the reverse repurchase rate may not have the same meaning if changes are not made at the same time. In Maldives, an indicative policy rate is used within the interest rate corridor of the two standing facilities to signal the MMA policy stance to the market. This rate is used as a ceiling when absorbing and as a floor when injecting liquidity under OMO.

Bangladesh and India, rather than using both repo and the reverse repo rates as policy rates, have currently designated the *repo rate* as their policy rate. However, as it has been mentioned earlier, while India's policy rate is essentially a collateralized rate, its operational target is the weighted average overnight call money rate. Since call money rates are based on *uncollateralized* transactions they typically carry a risk premium over market's interest rates based on collateralized transactions. Changes in risk perceptions may cause the deviation between repo rates and the call money rate to fluctuate significantly. This has, in fact, been observed in the report of the working group on operating procedures of monetary policy in India. They observe that the call rates are often either above or below the corridor, depending upon the liquidity situation.⁴ This suggests that at times the movements in the call rate may not be synchronized with the policy rate. Pakistan uses the *SBP reverse repo rate* as the policy rate, which is also the central bank's standing lending facility rate.

INSTITUTIONAL AND LEGAL FRAMEWORKS

The institutional and legal framework of a central bank refers to the constitutional arrangements and general principles under which the monetary policy is formulated and implemented. It determines the level of central bank *independence* to pursue its mandated objectives and the required level of *accountability* and *transparency* to gauge the performance of central bank actions to achieve macroeconomic objectives.

1. Independence

Empirical evidence shows that countries with higher central bank *independence* have lower inflation rate compared with countries where central bank is not independent.⁵ The independence of central bank is

⁴ Earlier the corridor used to be defined by the repo rate – the rate at which the RBI provided liquidity to the market and the reverse repo rate – the rate at which the RBI accepts surplus liquidity in the market. Note the difference between the definition of *repo rate* earlier and now. Now the repo rate is the middle of the corridor only.

⁵ See, among others, Alesina and Summers (1993) and Cecchetti et al. (2007).

mainly measured by the extent of autonomy central bank possesses in resisting politically induced motivations and pressures. In this regard, there are three major indicators that determine the degree of central bank independence viz. *limits on government borrowing from the central bank*, *structure of decision-making body* and the *appointment of central bank governor*. Cukierman (1992) allocates a weight of fifty percent to the limit on government borrowing in its computation of central bank independence index.

i) Limitations on Government Borrowing from Central Banks

Barring Bangladesh, where there is no limit on government borrowing from central bank, all SAARC countries have achieved some level of independence by putting restrictions on government borrowing from central bank in any form (see **Annexure A**). For example, in case of Bhutan, their Act prohibits central bank to make advances, directly and indirectly, to the government, its institutions, agencies or local government bodies. The RMA of Bhutan, however, may make temporary advances to the government subject to the condition of repayment within three months following the end of the financial year in which they were granted. In India, the government can borrow only under the scheme of Ways and Means Advances—temporary advances extended to government for meeting mismatches in its cash flows receipts and payments. The advances are also subject to limits.

Similar restriction on government borrowing from central bank is placed in Nepal. The NRBs Act states that government's borrowing from the central bank should not exceed five percent of previous year's revenue collection. In Sri Lanka, although the central bank is required to provide provisional advances to the government, the total amount of such advances outstanding at any point in time shall not exceed 10 percent of the estimated revenue of the government for the financial year in which they are made. Moreover, such advance shall be repayable within a period not exceeding six months. In case of Maldives, if government has insufficient funds to meet payments, the MMA will grant advances to the government through its ways and means account, which shall not exceed MVR100 million by end of any month and are to be settled within one year.

The parliament of Pakistan has approved amendments in the SBP Act regarding government borrowings from SBP in March 2012. Under these amendments, the federal government is required to bring its quarterly borrowing to zero at the end of each quarter. On the other hand the facility of ways and means advances is also available to the government, the limit of which is determined by the Central Board of SBP. The said amendment has also stipulated that the federal government will retire all its debt owed to SBP not later than 2019. Further, in case of not fulfilling these requirements, the Finance Minister will have to provide rationale to the parliament.

ii) Decision-Making Authority of Monetary Policy

Although most SAARC countries are able to insulate themselves from political pressures by putting some restrictions on government borrowings, their decision making processes allow them limited independence in monetary policy decisions. Excluding India, where RBI governor is the sole authority to decide monetary policy stance, the policy decisions in all SAARC countries are made by a governing body which includes members from the government or Ministry of Finance; in most cases around half of the governing body is composed of government officials (see **Annexure B**).

Table 11 Decision-Making Body of Monetary Policy

	Decision-Making Body	Voting/ Consensus	Minutes of Meetings	Member Appointment
Afghanistan	Supreme Council	Consensus	Not Published	President with the consent of Parliament
Bangladesh	Board of Directors	Consensus	Not Published	Government
Bhutan	Board of Directors	Consensus	Not Published	Government
India	Governor	N.A	Not Published	Government
Maldives	Board of Directors	Consensus	Not published	Parliament, on the recommendation of the President. The Governor will propose the nominees to the President
Nepal	Board of Directors	Consensus	Not Published	Government
Pakistan	Board of Directors	Consensus	Not Published	Government
Sri Lanka	Monetary Board	Consensus	Not Published	President, on the recommendation of the Minister of Finance

Source: SBP Survey; Central banks' websites; N.A: Not Applicable

Given the implications of monetary policy decisions on the cost of government's budgetary borrowing and interest payments, inclusion of government representatives in decision making creates a conflict of interest. In all SAARC countries, the decisions about monetary policy are made through consensus without publishing minutes of the meetings (see **Table 11**). The literature is relatively young in answering whether monetary policy decision should be made through consensus or voting and it is general practice among large majority of industrialized countries to publish minutes of their monetary policy meetings.

The international best practice regarding composition of decision-making body is the formulation of Monetary Policy Committee (MPC) and making it responsible of monetary policy decisions. With no government official as its member, the MPC consists of central bank officials, mostly economists, and external members from the academia and (or) business community. Although currently MPCs are in place in Afghanistan, Bangladesh, Bhutan, India, and Sri Lanka, the committees in these countries do not have decision-making authority, and their role is restricted to assist and advice the decision-making body.

iii) Appointment and Tenure of the Governor

It has been argued in literature that higher turnover and shorter tenure of central bank governor reduces central bank independence. According to Cukierman and Webb (1995), a negative correlation exists between inflation and governor's average term in office, particularly for developing countries. The argument for longer term of the governor and decision-making body is mainly based on two reasons. First, a longer term for governor and members of decision-making body will not make them worry for their reappointments and thus frees them from succumbing to a specific political agenda. Following this logic, it is favored that the tenure of decision-making body and governor should at least be greater than one election cycle (Lybek, 1999). Second, longer tenures will also ensure accountability of policy makers to different governments and therefore making them more consistent in their policy decisions.

In SAARC countries, although the tenure of governor stands highest in Sri Lanka, it is equal to their election cycle of 6 years (see **Table 12**). Similarly, the tenure of governors in Nepal also matches their election cycles. Pakistan and Bhutan have the shortest tenure of governor of 3 years among SAARC

Monetary Policy Frameworks in the SAARC Region

countries, which is also shorter than their election cycle of 5 years. In Bangladesh, the tenure of central bank governor is also one year shorter than their election cycle period. In Bangladesh, India and Sri Lanka, there are no restrictions on the renewability of governor's term.

Table 12 Appointment of the Governor and Tenure

	Appointing Authority	Tenure	Renewability
Afghanistan	Parliament on the recommendation of President	5 years	Two terms
Bangladesh	President, on recommendation of Prime Minister from a list of nominees proposed by the Ministry of Finance	4 years	Unlimited terms, subject to age limit of 65 years
Bhutan	His Majesty the King, on recommendations of the Prime Minister	5 years	One term, subject to age limit of 65 years
India	Central Government	5 years	Unlimited terms
Maldives	Parliament, on the recommendation of the President	7 years	Two terms, with the consensus of the President and the Parliament
Nepal	Central Government	5 years	Only once
Pakistan	President	3 years	Two terms, subject to age limit of 65 years
Sri Lanka	President, on recommendation of Ministry of Finance	6 years	Unlimited terms

Source: SBP Survey

2. Central Bank Accountability

While an independent central bank is widely acknowledged as desirable public good, it is also recognized that the accountability of the central banks also carries similar importance. Central banks are essentially public institutions that work in coordination with other institutions and should be held responsible for their actions (Stiglitz, 1998). In practice, the concept of central bank accountability has broadly two models. The central bank can be accountable either to the parliament or the government. In the latter case, however, the accountability of the central bank may be compromised if it is willing to lend support to short-term considerations of the government.

In SAARC region, Afghanistan, Bhutan, Maldives and Pakistan report to the parliament, while all other countries report to their Ministry of Finance (see **Table 13**). The central banks of Bangladesh and Sri Lanka report both to the parliament and the government. Given the fact that central banks in some of the SAARC countries are not directly reporting to their parliaments and that their governments also has the power to appoint the monetary policy decision-making body, the possibility of government's influence on central bank decisions cannot be ruled out.

Table 13 Central Bank Reports To

Afghanistan	Parliament
Bangladesh	Parliament and Ministry of Finance
Bhutan	Parliament
India	Ministry of Finance
Maldives	Parliament
Nepal	Ministry of Finance
Pakistan	Parliament
Sri Lanka	Parliament and Minister of Finance

Source: SBP Survey

3. Transparency and Communication Strategy

During the last two decades, concern for central bank *transparency* has increased significantly and one element to achieve this is to have a clear and focused communication strategy. It is widely accepted that a transparent central bank does a good job of communicating its intentions to the public and reduces public uncertainty regarding monetary actions and agenda. Greater transparency not only helps the central bank to carry out its mandate more effectively, but also makes it easier to fulfill the accountability requirement. Therefore, a central bank's communication strategy is critical to its transparency and influences the credibility, predictability and effectiveness of the monetary policy.

All SAARC countries use print and electronic media in communication with their stakeholders (see **Table 14**). Monetary policy decisions are communicated primarily through press releases in all SAARC countries excluding Maldives. The frequency of monetary policy decision/review varies across the SAARC nations. For instance, Sri Lanka reviews its monetary policy every month, Pakistan once every two months, India on quarterly basis and Afghanistan, Bangladesh and Nepal biannually. To improve the understanding of general public and communicate the evolving economic conditions, the central banks make speeches, issue periodic reports and utilize web postings. Some central banks have taken an extra effort and initiated special programs for public awareness and information dissemination. For example Bhutan conducts financial literacy campaigns and media reports while India has outreach programs for the general public. Bangladesh Bank arranges exchange of views with economists, professionals and other stakeholders through consultative meeting before preparing monetary statement (biannually).

Table 14 Communication Strategy of Central Banks								
	Afg	Bngl	Bhut	Ind	Mald	Nep	Pak	SL
Monetary Policy Statements	√	√	√	√	×	√	√	√
Minutes of Monetary Policy Meeting	×	×	×	×	√	×	×	×
Periodical Publications	√	√	√	√	√	√	√	√
Speeches	√	√	√	√	×	√	√	√
Press Releases	√	√	√	√	×	√	√	√
Press Conferences	×	√	√	×	×	√	√	√
Web Posting	√	√	√	√	×	√	√	√
Special Programs	√	√	√	√	×	√	√	√

Afg: Afghanistan, Bngl: Bangladesh, Bhut: Bhutan, Mald: Maldives, Nep: Nepal, Pak: Pakistan, SL: Sri Lanka
Source: SBP Survey

CONCLUSION

As mentioned in the introduction, this paper only provides a ‘snapshot’ of monetary policy frameworks in the SAARC countries. This snapshot shows the heterogeneity of these frameworks and its comparison with the international best practices and reveals more differences than similarities, which is not surprising and should be considered as an area of improvement and cooperation among SAARC countries. This study also provided a snapshot of the academic evolution of the monetary policy frameworks and it is observed that there are many areas in which the SAARC countries can benefit from the lessons identified in the literature and from the practices of the developed countries. Some of the SAARC countries have progressed considerably to meet many of the international best practices and learnt the academic lessons. This provides an opportunity to share experiences within the SAARC forum – the *raison d’etre* for the creation for SAARC and specifically the SAARCFINANCE. The following are the areas where SAARC countries need to pay attention and where they can share their experiences.

The overall monetary policy frameworks have witnessed significant changes over time in all of its three constituents: the objectives, the implementation procedures and the legal and institutional framework. Price stability has emerged as the primary objective for monetary policy and, barring the recent efforts by the developed and some emerging countries in the aftermath of the financial crisis, focus on promoting growth of the economy through monetary policy has declined significantly. The financial crisis, no doubt, has shaken the confidence on monetary policy as an instrument to control inflation only; financial stability has emerged as a serious candidate as an additional objective for monetary policy. Financial stability emerging as the main casualty in the financial crisis has deepened the academic debate over whether price stability through monetary policy itself takes care of financial stability concerns or this should be a complementing objective for monetary policy. Though SAARC countries largely remained immune to the financial crisis, they cannot remain immune to the post financial crisis developments with respect to the monetary policy and the role of the central bank.

One specific area which needs attention in SAARC central banks is the specification of intermediate target pursued by them. Still, many of them are targeting exchange rate or the monetary aggregates to achieve price stability. In addition, some are following multiple objectives. Monetary targeting regime has largely been abandoned internationally due to its inherent weaknesses. Moreover, multiplicity of objectives dilutes accountability and therefore erodes credibility of the central bank. This is an area where the central banks of SAARC countries can seek help from fellow countries who have recently abandoned such regimes.

In terms of the operational targets, though some of the SAARC countries are following the international best practice of using an interest rate corridor framework, still there is room for improvement in terms of targeting the right market interest rate and designating the middle of the interest rate corridor as a policy rate. At the same time other countries may evaluate the benefits of using an interest rate corridor framework and seek their peer countries advice in implementing this framework.

At a broader level, making monetary policy more effective requires the design of targets which are closely related with each other and are controllable. This requires an in-depth knowledge of the monetary policy transmission mechanism. Unfortunately, no SAARC country claims to have done any systematic

research in this area, which is an area where the SAARCFINANCE forum can once again be used to initiate a study on evaluating the monetary policy transmission mechanism.

Lastly, to enhance the credibility of the central banks the legal and institutional framework of SAARC central banks need attention. All the SAARC central banks have deficiencies in terms of independence, accountability and transparency. To make central banks more independent, first important requirement is to eliminate the avenue of debt monetization by the government. Second, the decision making authority for monetary policy must be free from the influence of the government. In none of the SAARC countries, an independent decision-making monetary policy committee is in place. Neither of them publishes minutes of the meeting in which monetary policy decision is taken. Almost all have representation of the government in their decision making authorities. To improve accountability, central banks must report to the parliament directly and to bring transparency, minutes of the monetary policy meetings must be made public.

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ANNEXURE A

Restrictions on Government Borrowings from Central Bank in SAARC Countries

Afghanistan	Government borrowing is restricted.
Bangladesh	According to Bangladesh Bank Order, there is no direct restriction on government borrowing from its central bank. In practice, government can borrow from Bank of Bangladesh under a scheme of ways and means advances, subject to a limit (currently the limit is Taka 20 billion). In addition, Government can borrow from BB in excess of WMA Advances through overdraft which is mutually decided by the Government and BB.
Bhutan	According to RMA Act, the central bank shall not, directly or indirectly, make advances to the government, its institutions, agencies and local government bodies. However, the RMA may make temporary advances subject to repayment within 3 months following the end of the financial year in which they were granted.
India	As per constitution of Reserve Bank of India, the government can borrow from the RBI under a scheme of ways and means advances, subject to a limit, which is decided mutually by the RBI and the government at the beginning of the financial year. The government can also incur an overdraft, but at an interest rate higher than the rate applicable for WMA, for a maximum of ten working days. The RBI can issue fresh government securities whenever 75 per cent of the WMA limit is reached.
Maldives	If government has insufficient funds to meet payments, the MMA will grant advances to the government through its Ways and Means Account (WMA), which shall not exceed MVR100 million by end of any month and are to be settled within one year.
Nepal	The central bank of Nepal's Act 2002 stipulates that government's borrowing in the form of overdraft from the central bank should not exceed 5 percent of previous year's revenue collection.
Pakistan	According to SBP Act, although Federal Government is allowed to borrow from Central Bank, it is required to bring its borrowing to zero at the end of each quarter barring the ways and mean limit that shall be determined by the Central Board from time to time. The debt of the Federal Government owed to central bank as on 30th April 2011 shall be retired not later than 2019. In case of not fulfilling these requirements, the Finance Minister will have to provide rationale to the parliament.
Sri Lanka	As per their Act (Section, 89), the Central bank of Sri Lanka could provide provisional advances to the government. However, the outstanding advances at any time shall not exceed ten percent of the estimated revenue of the government (for the financial year in which they are made) and shall be repayable within a period not exceeding six months.

ANNEXURE B

Composition of Decision-Making Body of Monetary Policy	
Afghanistan	Seven members of supreme council, members are Afghans
Bangladesh	Governor 1 Deputy Governor 3 Government officials at the Secretary level 4 members nominated by the government
Bhutan	Governor, (Chairperson) Deputy Governors, RMA (two) Secretary of Finance 3 other Directors appointed by the Government Director, Management Secretariat, RMA (Member Secretary)
India	Governor
Maldives	Governor Deputy Governor; An official from economic research and statistics sector or the financial sector of the MMA An official nominated by the Ministry of Finance and Treasury (MOFT) An appointee from the economic sector of the government other than MOFT Two appointees from the private sector
Nepal	Governor 2 Deputy Governors Secretary, Ministry of Finance 3 Board Members
Pakistan	Governor (Chairperson) Secretary Finance 8 Directors, at least one from each province
Sri Lanka	Governor - Chairperson Secretary, Ministry of Finance 3 nominated members