Monetary Policy and Reserves Management under Pegged Exchange Rate Arrangement: Nepal's Experience

Paper presented by Dr. Yuba Raj Khatiwada, Governor, Nepal Rastra Bank at a program organized by Royal Monetary Authority of Bhutan, Thimphu

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Background

1. After the breakdown of the Bretton Wood system in 1973, many advanced countries have adopted the market determined exchange rate system. Many emerging countries have also moved towards a flexible exchange rate after the East Asian Financial crisis of late 1990s. However, several developing countries have still been adopting some sort of pegged exchange rate system. So far, as IMF publications show, 45 out of 191 countries have opted for conventional peg, 12 have currency board, and 13 have no separate legal tender. On the other hand, there are 35 countries which have opted for managed floating; 30 countries are in free floating regime; and the rest are in the intermediate regime. In this way, a significant number of countries have a pegged type of exchange rate arrangement. However, there has been unsettled debate on the pros and cons of different exchange rate regimes.

2. The choice of the exchange rate regime is the fundamental macroeconomic policy choice, especially for small open economies. The decision of whether to peg or not determines monetary policy options. However, irrespective of the exchange rate regime, more than 50 per cent of the IMF member countries have opted for exchange rate as the nominal anchor of monetary policy. Besides, nearly a quartr of the IMF member countries have taken US dollar as the exchange rate anchor of monetary policy followed by Euro (15 %) and similar per cent of the countries have adopted inflation targeting and monetary aggregates as the anchors of monetary policy. This only indicates that the choice of the anchor of monetary policy is country specific and determined by the degree of economic openness, financial integration, and the existing exchange rate regime.

3. Pegged exchange rate regime has its own pros and cons in the economy. Pros include the exchange rate stability, low transactions costs with trading partner, reliable anchor for monetary policy, and credibility of the central bank. On the other hand, cons include lack of independence in monetary policy (especially if capital flows are high), possibility of speculative attacks,

necessity of hoarding adequate reserves, easy transmission of external shocks with monetary implications.

4. Many countries with pegged regime have suffered from speculative attacks, sharp capital outflows and full-fledged currency crises in the 1980s and 1990s. In such a situation or otherwise as well, international reserves have often been taken as an instrument to support monetary and exchange rate policies for maintaining internal and external stability of the economy. In fact, sufficient foreign exchange reserves have been instrumental to help stabilize foreign exchange rates along with ensuring payment for imports and external debt sevicing, and reducing the vulnerability to financial crisis.

5. Reserves management forms a part of official economic policies, since sound reserves management can increase a country's overall resilience to external shocks. On the other hand, inflows and outflows of foreign exchange reserves holding by the central bank have monetary implications, influencing money stock and interest rate in the economy - demanding necessary policy actions. Thus, management of foreign currency reserves becomes an important task for almost all central banks.

6. Nepal and Bhutan have a similar type of exchange rate arrangement – pegged with Indian currency along with free and unlimited convertibility in Nepal and parallel circulation of Indian currency in Bhutan till 2012. As both the countries have strong trade and investment linkages with India, management of Indian currency reserves becomes all the more important. We have been doing this also through stand by, swap, line of credit, and direct Indian currency purchase arrangements; and the stress for Indian currency reserves management has been all the more challenging to Nepal Rastra Bank. The demand for cash currency to meet cross border trade and payment obligation has multiplied the problem; as the perenial trade and balance of payments deficit has drained Indian currency from the market, at least for Nepal.

Monetary Policy under Pegged Exchange Rate Regime

7. The famous Mundell-Fleming 'Trilemma' implies that monetary independence (for inflation targeting), exchange rate stability (for targeting nominal exchange rate) and financial integration (for targeting nominal interest rate) are impossible simultaneously. Only any two out of three choices can be made active. So, there are three possibilities: (i) open financial markets and a high degree of monetary autonomy, while forgoing control of their exchange rate (e.g. advanced countries like US, Euro, Japan), (ii) countries with currency

boards have open financial markets and a fixed exchange rate but no control over money supply or interest rates (e.g. Hong Kong), (iii) an autonomous monetary policy and pegged exchange rate but closed financial markets (i.e. capital controls) e.g. China. Nepal falls under the third category, which has been following the pegged exchange rate regime with Indian currency since 1993 with the introduction of full convertibility of current account transactions. As such, even before that a de facto peg was maintained despite the system of currency basket to determine the exchange rate. Such a pegged regime with Indian currency has been anchoring the conduct Nepalese monetary policy for decades.

8. In the 1950s, Nepal had a flexible exchange rate regime with the Indian currency, during which Nepal had observed a substantial fluctuation of the exchange rate, undermining the use of Nepalese currency even in the domestic markets. Hence, in order to increase public confidence on Nepalese currency and expand its uses in the economy, the NRB started pegging the Nepalese currency with Indian currency since 1960. In the 1980s, although Nepal adopted the currency basket system to determine the exchange rates, the exchange rate with Indian currency did not change on day to day basis in practice. Given the open border with practically almost free flow of people, goods and services across the border, Nepal has no choice but to adopt the pegged exchange rate with Indian currency. As India is Nepal's major trading partner (contributing to more than two-thirds of Nepal’s foreign trade), major source of FDI, and tourist inflow to Nepal, the peg has served well in terms of reducing trade and investment uncertainty, anchoring prices, and helping investors to work out terms of trade and make investment decisions.

9. After the financial crisis of 2007-08, a new trilema has emerged in the monetary management. It has become evident now that price stability, exchange rate stability, and sovereign debt sustainability can not be achieved at the same time. Fortunately, for Nepal and also for Bhutan, the sovereign debt sustainability has not been a major issue. Thus if capital and financial accounts are under reasonable control, our central banks should not face both the old or new trilema.

Monetary Management under Pegged Exchange Rate Regime in Nepal

10. Given the partial capital control, Nepal Rastra Bank (NRB) has been following monetary targeting framework in monetary policy operation by taking broad money as an intermediate target, and the excess reserve of the banking

system and private sector credit growth as the operating targets. The NRB has been using cash reserves requirement (currently 6 per cent for commercial banks), statutory reserves requirement (currently 13 per cent for commercial banks), bank rate (currently 8 per cent for commercial banks), and open market operations (OMO) as monetary policy instruments. OMO committee under the chairmanship of Deputy Governor carries out OMO ever week on the basis of Liquidity Monitoring and Forecasting Framework (LMFF). LMFF duly considers foreign exchange interventions while forecasting liquidity of the banking system. Given the pegged exchange rate system, NRB has to intervene in the foreign exchange markets frequently and the liquidity so injected through the purchase of foreign exchange has to be sterilized through selling bonds and other instruments in the market.

11. Further, NRB has classified OMOs into three different categories such as regular, fine tuning and structural ones. While regular OMOs is carried out on a weekly basis, fine tuning operations can be conducted in any days of week to manage ups and downs of liquidity suddenly. Structural OMO is mainly designed for managing excess or shortfall of liquidity of long-term in nature. Monetary policy instruments like repo/reverse repo and sale and purchase auctions of treasury bills are used for OMOs.

12. For emergency liquidity needs, there is a provision of Standing Liquidity Facility (SLF) from which bank and financial institutions can borrow anytime by pledging government bonds held by them at a bank rate. NRB also uses cash reserve ratio (CRR) and Statutory Liquidity Ratio (SLR) as instruments for monetary policy. Because of (partial) capital control and absence of high capital mobility, Nepal has been able to maintain short/medium term divergence in interest rates to some extent compared to that of in India.

13. From 2014/15, NRB has introduced Term Deposit Auction as a new instrument to manage excess liquidity observed in the banking system in recent times as a result of elevated level of remittance inflows. The instrument has been able to mop up some of the excess liquidity from the market without burdening the fiscal authority.

14. In addition to mopping up the banking sector's liquidity through monetary policy instruments, NRB has been attempting to channelize the existing liquidity to productive sectors through regulatory and macroprudential measures. Banks can not lend more than 25 per cent of their total credit to real estate including housing and no more than 10 per cent for sole land

deals. Other sectoral exposures of the banks are also capped to 40 per cent of their total credit portfolio. Commercial banks have been directed to lend 20 percent of their credit to the productive sector which includes agriculture, energy sector, tourism and others. Of this at least 12 per cent has to be extended to agriculture and energy together. Banks also have to allocate at least 4.5 per cent of their total credit to the deprived sector. NRB has made the provision of providing refinance facilities at very concessional rates for the loans extended to exports, agriculture, energy, SMEs, and sick industries.

Reserve Management under Pegged Exchange Rate Regime

15. Management of foreign exchange reserve is crucial to defend the existing pegged regime from external shocks. Even the emerging economies with market-determined exchange rate regime have accumulated substantial amount of foreign exchange reserve as a lesson learned from the East Asian financial crisis of late 1990s to maintain the stability in the exchange rate and to avoid a possible financial crisis that can emanate from sudden stop of capital inflows or sudden outflows of capital from the country. A large holding of foreign exchange reserves can provide a buffer against speculative attacks.

16. Central banks need foreign currency reserves for a number of purposes such as funding foreign exchange market operations that arises as part of central banks' monetary policy function, foreign debt servicing, controlling excessive volatility of exchange rate, taking precautionary measures associated with potential balance of payments crisis and improving access to international capital market by signaling country's financial strength. Successfully management of foreign reserves boosts the confidence of any country's monetary policy, banking and financial system, and stability of the national currency.

17. When national currency is not convertible and not used in international market, suffering from so called 'original sin', the management of foreign exchange reserves is one of the prime functions of the government, which is normally carried out by central banks. In case of pegged exchange rate, a change in balance of payments is reflected in change in foreign exchange reserves of the central bank. Changes in foreign exchange reserves have liquidity implications in the domestic markets and such reserves need to be managed prudentially considering return, risks and liquidity. For this, a central bank needs to play a role of fund manager or portfolio manager to maximize returns and minimize risks subject to considerations of liquidity, diversity and

safety. Also as independence of central banks calls for their financial strength particularly profit to conduct effective open market operations or to provide lucrative compensation to employees to attract, retain and motivate the talents, a reasonable return from foreign exchange investment is all the more necessary. In recent years, reserve management practice has evolved as an asset management guided by the return-oriented strategies, even hiring external manager and setting up sovereign wealth fund. An unprecedented accumulation of reserves, the development of financial markets and financial technology and central bank independence contributed to such a changed practice of reserve management.

18. There is still no unanimous view on reserve adequacy in the literature. The old rule of thumb of maintaining reserves equivalent to three months of imports has become obsolete as openness and external vulnerability are no longer merely defined in terms of trade shocks. Now there has been new 'Greenspan-Guidotti rule' of full coverage of total short-term external debt for a year. Jeanne and Ranciere in their IMF working paper of 2006 derive a formula for the optimal level of reserves by constructing a model for a small open economy, according to which a reserve-to-GDP ratio of 10 percent seems to be an optimal reserve. However, there are many factors affecting reserve adequacy, for example a higher level of reserves would be preferable in countries with weak macroeconomic fundamentals, fragile banking system, volatility of capital flows, and less - developed domestic foreign exchange market.

19. Although Nepal's merchandise export growth has remained slower than that of imports due mainly to slow economic growth, lack of exports competitiveness and structural impediments in the economy, foreign exchange reserves have been increasing due mainly to the elevated level of remittance inflows. Foreign exchange reserves of the banking system stand at Rs 665.41 billion (US $ 6.94 billion) of which those held by the NRB amounted to Rs. 554.71 billion (US$ 5.82 billion) as of mid-June 2014. Of the reserves, 75 percent is in convertible and rest is in inconvertible (Indian) currency. The current level of foreign exchange reserves is sufficient to cover the merchandise and service imports of more than 10 months and almost double the outstanding foreign debt.

20. Reserve management in Nepal has been guided by the strategic objectives of investing reserve currencies in secured instruments in order to secure the value of the foreign currencies, investing the reserves in the financial

instruments that are readily convertible into cash, and making investment in the financial instruments in order to secure reasonable rate of return and contribute to increase national external assets.

21. NRB has been diversifying the compositions of foreign exchange reserves in recent years. In addition to investing in US dollar assets, NRB has now started investing a large chunk of foreign currency reserves in Indian and Chinese currency instruments. This is also guided by the payment obligations (trade financing, FDI servicing, and debt servicing) and in different currencies. Treasury bills and fixed deposits are the common investment instruments. There is a currency exposure ceiling put forth by the Board for the Investment committee which is chaired by the Deputy Governor in charge of the Foreign Exchange Department. The day to day management of foreign exchange reserves is done by the Investment Section of the Foreign Exchange Department. Most transactions take through SWIFT and information collected from Bloomberg information service. To have check and balance in foreign exchange operations, there is a provision of front office, middle office and back office in the Foreign Exchange Department.

22. NRB has been managing foreign exchange reserves with the view of maintaining reserve level sufficient for imports of merchandise and services for at least six months and for debt servicing of the government foreign debt for a year. NRB has chosen eight different currencies for investing foreign exchange reserves, maintaining exposure in US dollar to be 40-60 percent of total investment portfolio. By maintaining average portfolio duration of six months, maximum period of investment could go up to 10 years for bonds. However, 40 percent of the total exposure needs to be deployed in liquid instruments. Selection of banks and financial institutions is made on the basis of their latest credit rating indicators rated by S & P and Moody's, whichever is lower.

23. With growing trade deficit with India, the management of Indian currency has been a major challenge for NRB on reserve management front. For this, NRB has been following two-pronged approaches – firstly purchasing Indian currency by selling US dollar and second by allowing importers to import, especially raw materials and machinery equipment, from India by paying US dollar. NRB has been using its banking office and branches to provide limited Indian cash currency for those people who need Indian currency to meet expenses for medical, education and travel in India.

Concluding remarks

24. Nepal's fixed exchange rate arrangement mostly served the country well while economic growth in India remained high, inflation stood low, and the currency remained stable. In the recent years, with Indian economic growth slowing, consumer price inflation remaining high and exchange rate depreciating against convertible currencies, Nepal has sometimes felt the stress at both the regime and the level of the peg. As a drawback of the pegged exchange rate system, sometimes, Nepalese currency has been witnessing ups and downs against convertible foreign currencies because of the volatility Indian currency with convertible currencies. Such a movement of exchange rate, particularly with the US dollar, tends to bring several implications in the economy. However, overall, the existing pegged exchange rate regime with Indian currency has been helping to maintain macroeconomic stability and Nepal intends to remain in the exisiting regime unless there are serious implications of the peg.
25. Conduct of monetary policy is obviously very challenging task under pegged exchange rate regime since the change in balance of payments situation is directly reflected in foreign exchange reserve of the central bank with monetary implications. In addition, the burden of foreign exchange reserves management also comes to the central bank, being a custodian and manager of country’s foreign exchange reserves. However, given that monetary policy has less to do with inflation than domestic output growth or exchange rate policy in Nepal – as it is the case for a small open economy- NRB stands to defend the peg (may be even with the cost of breaching monetary target) for price stability reason as well.
26. As importance of foreign exchange reserves increases in case of pegged exchange rate regime, NRB has been formulating monetary policy to ensure that excess credit growth does not adversely affect balance of payments. Empirical studies in the past have shown that one rupee credit growth may lead to the same rupee equivalent drop in foreign exchange reserves. Further, with the gradual opening of capital account in Nepal and also in India in the process of globalization and financial integration with the rest of the world, maintaining the peg in coming days becomes a matter of constant review. So far, evaluations of the exchange rate arrangement have indicated that the benefits from the peg outweigh the losses and Nepal would continue the current system for the medium term.

27. As Nepal has been able to establish Nepalese currency as a legal tender currency by abolishing dual currency system with the introduction of fixed exchange rate system and as this is the basic foundation for the effective conduct of monetary policy, countries with similar situation may benefit from the experience Nepal has have during the last half a century or so.

28. Fixed exchange rate regime, no doubt, poses limitations to the conduct of independent monetary policy. But let us also be clear that other factors like the state of financial deepening, possibility of currency substitution, degree of capital flows, and monetary independence from fiscal policies and authorities are equally important determinants of effective monetary policy implementation. And, the peg has definitely served to address some of these limitations.

Thank you.