Chapter VII
FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter summarises the study undertaken, highlights the major findings of the study, the resultant conclusions and recommendations of appropriate measures for improving the foreign exchange management in Nepal.

1.1 Summary

The specific objectives of the study were: (a) to study the present situation of, and regulations with respect to, the foreign exchange market in Nepal. (b) to review the foreign exchange regime and identify the specific factors responsible for the choice of exchange rate regime in Nepal. (c) to evaluate the sustainability of the fixed exchange rate regime with India and the variable exchange rate regime with the rest of the world. (d) to study and analyse the foreign exchange market Intervention process in Nepal (e) to study the pace and structure of Nepal's integration with the outside world in terms of goods, services and capital transactions.(f) to analyze and evaluate the foreign exchange reserves management practices in Nepal.(g) to suggest strategies and measures for effective foreign exchange management in Nepal. Accordingly, the study focused on understanding the process and pertinent issues relating to the foreign exchange management in Nepal. Consistent with the same, the study assessed the ongoing foreign exchange management practices in the context of current account convertibility in the external sector transactions of Nepal. The study concludes with the findings and makes appropriate recommendations so that the policy formulation, review of the existing policies and implementation actions in the process of foreign exchange management would be further refined in the future.

This study is based on time-series data, both primary and secondary (published and unpublished). Besides, other relevant information has been collected and analysed. The primary data were collected from moneychangers, goldsmiths, petrol pump operators and businessmen. An evaluation of the related policies in the light of the actual developments has also formed a part of the study. The overall investment framework for the foreign exchange reserves as well as the governance structure and investment management operations for the reserves including the existing accounting and Information Technology [IT] support was also reviewed.

In consonance with the availability of data, the study attempts to cover the period from FY 1974/75 to FY 2014/15. The market intervention process itself was initiated in FY 1990/91 and the purchase of INR by selling convertible foreign currencies started in FY 1988/89. After the collection of data through various sources, they have been classified and presented in tables, charts and other formats and subjected to appropriate analysis and interpretation. For analyzing and interpreting the data, both qualitative and quantitative parameters have been used. Required financial management tools like ratio analysis and statistical techniques, viz., regression and significance tests have been used. Inferences have been arrived at on the basis of the aforesaid methods.

In the context of foreign exchange management, Nepal adopted INR as the anchor for bringing about stability in domestic prices as well as in exchange rates with other currencies since 1960. Inflation has remained more or less similar to that of India. During FY 1974/75 – FY 2014/15 (41 years), annual inflation averaged 8.8 percent. Inflation was highest (21.1 percent) in FY 1991/92 due to a sharp devaluation of exchange rate in that year. Further, out of the 41 years, inflation was in double digit in 12 years and single digit in 29, of which 10 years recorded below 5 percent. In a developing country like Nepal which is exposed to supply-side bottlenecks and occasional demand management pressures, this sort of inflation trend is not unexpected.

The NPR has exhibited overall stability with respect to the INR, while there have been some fluctuations in the exchange rates vis-à-vis other currencies because of Nepal's choice of INR as the nominal anchor for price and exchange stability. Nepal's exchange and payment system has been consistent with India's exchange and payment system. As an instance, Nepal opened current account transactions in the external sector in parallel with India's decision in this regard. Nepal has not opened a capital account so as India. However, as compared with the peg rate in the formal market, the informal market exchange rate of NPR with INR has undergone considerable depreciation, sometimes threatening the sustainability of the peg.

There has been overall BOP stability during the period of study. During the past 41 years (FY 1974/75- FY 2014/15), there have been BOP deficits in FY 1974/75, FY 1982/83- FY1984/85, FY 1987/88, FY 1994/95, FY 1995/96, FY 2001/02 and FY 2009/10 (nine years). During the rest of the 32 years, Nepal's BOP has been favourable. During the last five and half decades, the exchange rate with INR has been adjusted only on eight occasions, revaluation on four occasions and devaluation on four occasions (Table 3.2). During 1960-1993 (34 years), the exchange rate vis-à-vis the USD has been devalued on 10 occasions (Table 3.4). Since FY 1993/94 to FY 2014/15 (22 years), the exchange rate with USD has depreciated on 16 years and appreciated on six years. The extent of exchange rate change on any occasion has also not been so spectacular or exceptionally large. Nepal has fully complied with the payment terms of international debts, which is evidenced by Nepal not defaulting on debt servicing even on a single occasion. This shows Nepal's track record in foreign exchange management is satisfactory, though it is afflicted with a perennial shortage of INR. However, some improvements could be made to improve the rate of return from the management of foreign exchange reserves through the introduction of better insights, technical skills and technological improvements. On an overall basis, the exchange rate management in Nepal has served the related objectives, but as mentioned above, it has had to cope with a severe scarcity of INR.

7.2 Findings

On the basis of the study, we have arrived at the findings classified into the following four heads: (a) exchange rate regime, (b) foreign exchange market intervention (c) dynamics of Nepal's integration with the outside world in terms of international trade and payments, and (d) foreign exchange reserves management. The findings are presented in the following paragraphs:

7.2.1. Exchange Rate Regime

Fixed Exchange Rate Regime

Since 1960, Nepal has adopted a fixed exchange rate regime in relation to the INR. This arrangement has been in practice because of strong socio-cultural and economic ties and a high degree of mobility of factors of production between the two neighboring countries with an open border spanning 1868 km. (Tikku, 2013). Besides, India is the single largest trade partner of Nepal, which accounts for nearly two-thirds in exports, imports and total trade. Two-way labour movement across borders has been a regular feature. India is historically the largest source of Nepal's FDI.

To some extent, the current exchange rate peg with INR has been instrumental in maintaining economic stability in the country. This is helping to eliminate the exchange rate related uncertainties and provide confidence to the market. The peg with INR has contributed to business confidence and served to anchor inflation expectations. There have been no broken cross rates involving INR and NPR. The space for currency speculation and arbitrage activities is nil. Stakeholders are involving in the economic activities without any fear of exchange rate volatility. There is no exchange rate-related risk for them. However, an overvalued NPR has been a disincentive to export and an incentive to import. As a corollary, it very likely explains the severe shortage of the INR, which the Central Bank has been meeting by purchasing large sums of INR against the sale of its USD reserves. So, the peg has been maintained at a great cost. Moreover, a rigid peg may also become unrealistic with the passage of time and also heighten expectations about a devaluation, which can discourage inward investment. Hence, the pegged system warrants a careful review.

According to the empirical analysis of the study, subject to the stated limitations, exchange rate depreciation can improve the trade deficit and foreign exchange reserves. Capital flows may also improve due to a favourable outlook for the exchange rate of the NR, subsequent to the depreciation. Accretion to foreign exchange reserves could be used to finance imports to quell inflation, if the need arose.

Flexible Exchange Rate Regime

The exchange rate with currencies other than INR (i.e., convertible foreign currencies) was marked by periodic changes before February 1993 when the exchange rate was made fully market-determined. The exchange rate with currencies other than INR was adjusted on 10 occasions before the rate was made fully market-determined in February 1993. Since then, the exchange rate of the USD for the following day is determined on the basis of the displayed rate at 3:00 PM on Reuters/Bloomberg screen, deducting 30 paisa from the displayed middle rate for determining the buying rate and adding 30 paisa to the displayed middle rate for determining the selling rate. In the case of other convertible currencies, buying and selling rates are determined on the basis of the exchange rate vis-à-vis the USD in the international market as displayed in the Reuters/Bloomberg screen.

7.2.2. Foreign Exchange Market Intervention

For current account purpose, there is unlimited convertibility both in USD and INR. NRB has not yet intervened for broader macroeconomic or monetary objectives such as controlling inflation, maintaining competitiveness or regulating the amount of foreign exchange reserves. These issues are also addressed by fiscal measures in a pegged exchange rate regime, which is the country's nominal anchor. The procedures of foreign exchange market intervention (in USD) could be termed just as a simple purchase/sale from/to commercial banks at their request. This study finds that the foreign exchange market interventions are effective for the instant availability of foreign exchange in the market. In case of INR, NRB buys and sells INR as per the market need at the given fixed exchange rate. However, one finding is the frequent need to expend USD in order to augment the INR balance, which is needed to cater to the demand from the BFIs and others.

7.2.3. Dynamics of Nepal's Integration with the Outside World in Terms of International Trade and Payments

As an import-based economy, Nepal's trade balance is historically in deficit. Despite the easy access to the huge Indian market, Nepal has not been able to improve its trade performance with India with which her two-thirds of trade occurs. In recent years, the import from India is growing at a fast pace, leaving exports far behind, resulting in a terrible trade deficit and progressively worsening overall trade balance. In this scenario, remittances have proved to be the single reliable source for financing the trade deficit, due to which the current account position is continuously favourable and the foreign exchange reserves position is adequate.

As a member of the WTO, BIMSTEC and SAFTA, Nepal's trade policies are quite liberal. In some commodities, customs rates are negligible whereas in most of the commodities they have gradually declined. Various measures have been undertaken to promote exports. Unfortunately, these policies have proved ineffective in promoting exports and substituting imports in a dynamic context. Instead of diversification policy, Nepalese trade in recent years is concentrating geographically with India and China, and commodity-wise in a few products.

In the past, many incentives were provided to exporters through exchange rate management, like exporter's exchange entitlement scheme (bonus system), dual exchange rate system for USD, currency basket system, forward exchange rate facility, import license auction system, OGL and convertibility in current account. Though these attempts were appreciated by stakeholders during introduction, they failed to promote the export sector as there were serious impediments in implementation. With adoption of current account convertibility, integration with the world has increased, but the increase reflected in trade to GDP ratio is mainly due to increase in import rather than export. Exports tend to have more significance as a source of foreign currency rather than a demand generating activity domestically.

Increase in trade deficit requires a high volume of foreign exchange for its financing. In recent times, adequate inflows of remittance are contributing to financing the widening trade deficit. Though remittances are the single largest source of foreign exchange, their sustainability has been questioned since it is dependent on the policy of the remitter country which is not in control of Nepalese authorities. The trade sector will be affected if there will be disruption in the remittance inflows. Thus, the source of foreign exchange is fragile and any disturbance in it would result in BOP deficit.

There exists informal trade between India and Nepal of a substantial magnitude. Further, the exchange rate peg has also served some useful purposes, e.g., promoting economic integration with India and lowering business costs. However, the disadvantages are also considerable and need to be pondered over carefully.

7.2.4 Foreign Exchange Reserves Management

NRB, the custodian of Nepal's foreign exchange reserves, with this responsibility conferred by the NRB Act, is aware of the challenges for maintaining stability in foreign exchange management in the globalizing context. Globalization and greater integration of Nepal with the world economy was saliently reflected in Nepal's liberalized economic policy movements from the early 1990s and the milestone of obtaining membership in the WTO in 2004. This process would result in more magnified and volatile foreign exchange flows.

Bank credit limits have been set and exposures versus the limits are monitored manually. This monitoring is mostly done by the front office rather than the middle or back office. Market risk is currently not monitored since the fixed income securities in almost all the portfolio are held to maturity. NRB's concentration limits are: 3 percent of total foreign exchange time deposits of the NRB for 'A' rated banks and 5 percent for 'AA or above' rated banks. There is a 7 percent limit for Indian off-shore banks that pay LIBOR-plus. For these Indian banks, the minimum credit rating is 'BBB' or 'A1' as rated by ICRA. NRB has an authorized reinvestment program with the US Federal Reserve Bank of New York. Exposure versus these limits is monitored manually.

Reserves Adequacy

Nepal is a small developing country, which has been maintaining foreign exchange reserves sufficient to finance around 9 months (average of 41 years from FY 1974/75 to FY 2014/15) of imports of goods and services ensuring international liquidity, enhance capability to respond to risks, and safeguard the economic and financial security of the nation.

As measured on the basis of four different techniques; import capacity, the Guidotti rule, Reserves to GDP ratio and outstanding external debt to reserves ratio, Nepal's reserves level seems to be adequate at the moment.

7.3 Conclusions

The study is basically oriented toward analyzing and discussing issues with regard to Nepal's exchange rate regime, foreign exchange market intervention, international trade and payments and reserve management. Nepal has adopted current account convertibility for external sector transactions for both India and rest of the world since February 1993. This means that Nepal has adopted OGL since the aforesaid point in time. The long term objective is adopting completely market-determined exchange rates leading to capital account convertibility as practiced in advanced economies. In transition to such a regime, Nepal has not yet taken the first steps towards free floating of exchange rate and convertibility on the capital account. Accordingly the related arrangements concerning the foreign exchange management could be concluded along the following lines.

7.3.1 Exchange Rate Regime

Foreign exchange management in Nepal started in 1960, after four years of the establishment of the Central Bank in 1956. At that time, NPR/INR rate was pegged at NPR 1.60/INR 1.00. The motive behind the adoption of such an exchange rate policy was to maintain exchange rate stability and abolish the dual currency system. Since then Nepal has been following a pegged exchange rate system with INR with periodic exchange rate corrections through revaluation or devaluation. Even in the basket system, exchange rate with INR was not changed. While maintaining such an exchange rate system with INR, Nepal adopted a different kind of exchange rate system for convertible currencies such as dual exchange rate with USD, currency basket system, etc. In line with the economic liberalisation policy adoption in mid-1980s, Nepal introduced current account convertibility in 1993, effectively pegging the NPR with INR at NPR 160 for INR 100, which was the same as in 1960. Since then, exchange rate of NPR with other convertible currencies has been market-determined in line with exchange rate of INR with the convertible currency.

Given the open border and size of economic transactions, adoption of the pegged exchange rate regime with INR has yielded some benefits by performing anchoring and helping to maintain price stability, although Nepalese monetary policy sacrificed its independence to some extent. However, pegging the exchange rate for a long time at the same rate has weakened the competitiveness of Nepalese economy. This is reflected in the ever growing trade deficit with India, which has undermined the sustainability of the peg In border areas, the exchange rate with INR in the informal market rose to as high as NPR 168.02 sometimes in recent years because of a lack of supply of INR to meet its demand. Fortuitously, the accumulated foreign exchange reserves on account of remittance inflows have been helping to maintain the peg--- the reserves have sustained the mobilization of INR in the Nepalese market against the sale of USDs.

Because of the non-adjustment of the peg for over 24 years, trade and payments with India are highly imbalanced. In future, Nepal ought to seriously consider adopting a flexible exchange rate. However, at present, Nepal may not be able to do so with INR because of a weak economy and high volume of informal trade alongside the India-Nepal border. So, at the present, baby steps such as timely adjustments of the peg as signaled by market developments are desirable.

7.3.2 Foreign Exchange Market Intervention

The foreign exchange market intervention process plays a vital role in ensuring adequate liquidity in the local foreign exchange market in Nepal. The Central Bank always defends both the existing pegged exchange rate regime and the peg level of NPR 160 for INR 100 for which unlimited convertibility to INR in current account has been provided. NRB is managing the INR supply in the local market by purchasing INR from the Indian market by selling USD.

7.3.3 Dynamics of Nepal's Integration with the Outside World in Terms of International Trade and Payments

The widening trade deficit is an undeniable fact of the Nepalese economy. Along with export capacity, international competitiveness in terms of quality export items, frictionless channels of delivery, real exchange rate, inflation, GDP and interest rate are also crucial determinant variables of trade deficit. In the world of quota-free trade and ever decreasing tariff barriers, maintaining an appropriate exchange rate to reduce the widening gap between import and export is important. Sustained growth of exports through product and destination diversification can ease the problem in a more stable and reliable manner.

The regression analysis of the study suggests that the exchange rate depreciation can improve the trade deficit and foreign exchange reserves. Moreover, the price stability could reduce the trade deficit besides making it sustainable. Thus, exchange rate depreciation could have a net positive effect on the trade situation besides having a favourable impact on foreign exchange reserves.

7.3.4 Foreign Exchange Reserves Management

Legal authority has been given to NRB for the management of Nepalese foreign exchange reserves. NRB has developed investment guidelines to manage foreign exchange reserves which incorporates strategy and scope for management, giving due attention to liquidity, safety and return. NRB has been managing foreign exchange reserves in accordance with the Investment Guidelines 2009. NRB has formed a seven-member investment committee chaired by the Deputy Governor who looks after FEMD to make decisions on investment. Similarly, NRB has a separate department for foreign exchange management in which a separate division solely to manage the portfolio of foreign exchange reserves having front, middle and back offices to monitor risk and strive for return has been in place.

As far as the reserve accumulation is concerned, it has been increasing at a higher rate because of the rapid growth in remittance inflow. It reached as high as USD 7.0 billion in FY 2014/15, of which convertible currency reserves and inconvertible currency reserves comprised 73.6 percent and 26.4 percent respectively.

Of the total foreign exchange reserves in FY 2014/15, the main component is remittance which contributed 61.92 percent, followed by tourism income (8.86 percent) and export income (8.43 percent). In this way, contribution of exports to foreign exchange reserves is very low. On the uses side, merchandise imports absorbed 76.28 percent followed by service imports (14.67 percent) and principal and interest payments consumed only 6.73 percent of total reserves.

Investment policy guidelines contains clear provisions for management of different types of risks such as currency risk, interest rate risk, liquidity risk, operational risk, credit risk and counterparty risk.

7.4 Recommendations

In the light of the study and analysis of the process, assessment and issues pertaining to Nepal's foreign exchange management, the following recommendations are offered:

7.4.1 Exchange Rate Regime

Although the NRB is mandated under the fixed exchange rate regime to supply adequate INR to meet the market demand, people are presently inconvenienced in obtaining their INR requirements in cash. In the informal market across the Nepal-India border, the INR is traded as high as NPR 168 for INR 100. It is a manifestation of the deficit in INR availability. Given the shortage of INR as manifested in the informal exchange rate, GON should focus on increasing exports to India. An important approach for it could be to actively woo Indian tourists in the short to medium period and export hydro-electricity to India in the long run.

Many Nepalese people are working in India. They are bringing their earnings informally. Therefore, GON and the Central Bank should work out to make a provision for transferring money from India through formal channels so that demand for INR could be addressed to some extent.

Nepal may have to adopt flexible exchange rate system with INR once there is political stability and strong economic and efficient financial system in Nepal and in view of economic reforms which might comprise engaging in capital account convertibility in India.

As the current peg appears unsustainable, it needs to be readjusted again, as was done eight times in the past, to make it sustainable for the future. Concern arises due to continued appreciation of INR against USD. Although considerable faith has been placed in the current peg exchange rate system as a sound nominal anchor over the medium to long run term, the level of peg is clearly in need of a revision. Table 3.6 provided the analysis of consequences when the informal rate diverges from the peg. Therefore, unifying the exchange rate in both these markets is the first precondition toward eliminating the existence and implications of the informal market. This calls for introduction of the market-based, flexible exchange rate.

However, moving toward a more flexible exchange rate system requires stable and sound macroeconomic indicators. The stability of exchange rates in long run is to be sought through stability of underlying monetary and fiscal policies rather than through pegging. Therefore, Nepal has to take a courageous step to abandon her exchange rate peg with the INR in long run. Preparations in that directions should begin at the moment.

It is recommended that the exchange rate should be depreciated to improve trade balance and foreign exchange reserves. Any consequent rise in inflation is a matter which could be addressed separately.

7.4.2 Foreign Exchange Market Intervention

The prevailing intervention process needs many fundamental improvements for effective foreign exchange management. The intervention should be done at Central Bank's initiation rather than at the request of the individual BFIs. Intervention rate needs to be determined by the Central Bank by adopting the following improvements rather than following the Reuters reference rate. The process should be guided by the need of the economy rather than the benefit of the market participants. The improvement in the intervention process should be a regular phenomenon. The following improvements are recommended to improve intervention over the short, medium and long terms.

Short Term

Adoption of the automated system in the short run is recommended which will reduce unnecessary administrative formalities, documentation and time. The present margin of addition of three paisa on purchase intervention and subtracting four paisa on sale intervention should be raised to encourage inter-bank transactions instead of coming to NRB's intervention window.

In the existing set up, BFIs are found transmitting their exchange rate risk to customers by way of charging high exchange rates, as nobody knows what the rate will be on the next day. Therefore, the intervention process which is performed in the morning at peak hours could be scheduled at the end of the day. This will reduce the exchange rate risk of the BFIs and assist the general public with better exchange rates without any additional effort of the Central Bank.

Medium Term

BFIs can be allowed to maintain INR exposure to a suitable limit with Indian banks. Gradual relaxation can be given to the BFIs to expand the present ceiling of investment abroad, increase the variety of instruments and tenure. This exposure may be tied to the overall foreign exchange exposures of INR commitments. In the medium term, auction-based intervention can be performed by using services of government-owned commercial banks, or appointing an agent for intervention. For hedging currency risks, forwards and options could be introduced as short term hedging instruments while currency swaps could be promoted as long term hedging instruments.

Long Term

As previously discussed, various attempts can be made to minimize the trade deficit with India like development of hydropower projects, attracting Indian tourists and dismantling the peg.

7.4.3 Dynamics of Nepal's Integration with the Outside World in Terms of International Trade and Payments

It is urgent to promote exports to build a sustainable foundation for financing rising imports. The full and effective implementation of Nepal Trade Integration Strategy 2010 is recommended for this. With the implementation of the strategies, increase in competitiveness and productivity can be expected, otherwise fragility in the external sector will remain, thereby putting pressure on foreign exchange reserves.

Government policies and programs should be targeted for reducing the informal trade volume between India and Nepal and bringing trade into the formal channel. Both the countries will be benefitted if the informal trade is formalized and made transparent. As an effort to control informal trade, both the countries should monitor border activities effectively and channelize all kinds of trading activities through customs clearance point. These activities will control illegal trade transactions, make the statistics reliable and increase the government revenue to support economic development in both the countries.

Necessary measures for diversifying trade both in commodity and geography should be implemented. For example, these measures will include government interventions to facilitate trade arrangements across countries. FDI inflows to strengthen industrial base based on the natural resources available in the country, ought to be encouraged. Similarly, FDI should focus on developing hydro-electricity also to reduce the import of petroleum products in Nepal.

Timely amendment of the Foreign Investment and Technology Transfer Act, 1992 to accommodate the changed context is necessary. Similarly the Trade Policy 2009 also needs to be timely reviewed for its effective implementation.

Since sources of foreign exchange reserves are fragile, Nepal should manage foreign exchange reserves cautiously and seek alternative sources such as FDI for tapping huge hydro-power, cultural-religious and mountaineering tourism, high-value organic products in agriculture, herbs production and processing for long term stability in the external sector.

7.4.4 Foreign Exchange Reserves Management

Portfolio Diversification

Reserves management should be improved by portfolio diversification, currencywise, instrumentwise, regionwise and tenurewise. Diversification is essential for complying with the age-old adage of not putting all the eggs in one basket. In this respect, investment in gold should be five to 10 percent from the present three percent, by reducing the portfolio weights of other reserve assets proportionately as suggested by the present Gold Policy 2014 of NRB.

Infrastructure and capacity enhancement of investment

Web-based software should be installed as a pre-requisite to professionalized investment management. The Reserve Advisory Management Program [RAMP] of the World Bank would be of great assistance in this regard. Programs like experience sharing, deputation of employees to Central Banks which have successful track record in this respect, conducting training and development on a regular basis, designing succession planning and communicating with the concerned higher officials the progress and updates of the implementation of investment guidelines for further capacity enhancement in the reserves management are essential. Automation should also be the priority of the investment managers.

Tranching

It is recommended that NRB review the monthly payment requirements and resize the working capital tranche appropriately. NRB should also consider if it would be appropriate to tranche the rest of the reserves into two parts: (i) Liquidity, and (ii) Investment tranche. These tranches can be sized based on their objectives. By adopting such management, NRB can improve the returns on investment by shifting excessive funds to the investment tranche from liquidity tranche in short run.

Timely Revision of Investment Guidelines

The Investment Guidelines document was prepared in 2009. While it is quite clear on aspects such as the functions of the Investment Committee, currency composition, eligible instruments, minimum credit ratings and bank exposure limits, it is not very specific with regard to market risk parameters such as target duration, permissible duration deviation, benchmarks and tranching criteria. It is recommended that the Investment Guidelines be reviewed for adopting better international practices, developing criteria for benchmarking and improving tranching criteria so as to foster efficiency and effectiveness in the reserves management. Specifically, SAA policy should be developed which will determine the target duration, the proportion of bonds to money market instruments in the reserves portfolio and market standard bond benchmarks for the fixed income portion of the reserves.

Risk Management

A separate cell should be constituted for optimizing risk management criteria and considerations. The Middle Office should independently monitor the risk and performance of each sub-portfolio versus its benchmark as well as compliance with the investment guidelines. Furthermore, the risk monitoring process should be developed. The risk management should cover currency risk, interest rate risk, credit risk, liquidity risk and operational risk.

Portfolio Management

In addition to placing deposits, NRB invests in Treasury bills and notes, Fixed BIS and MTN BIS issues. These are purchased directly from the Federal Reserve Bank or BIS and typically held to maturity. There is no active management of the bond portfolio. Once the SAA study has been completed and benchmarks assigned, it is recommended that NRB start with an indexed bond portfolio and quickly move to enhanced indexation in order to improve return, while staying within the prescribed risk limits. Additionally, NRB should also diversify into other money market instruments such as short term money market instruments like bills of exchange and commercial papers up to one-year maturity without taking on more risk than permitted. It is also recommended that NRB measure the performance (rates of return) on its reserves portfolios in order to evaluate results periodically against the assigned market benchmarks. It is recommended that a portfolio management system be implemented to support reserves management functions.

Seasonality Analysis for Better Returns

Invariably, every economy has periods when foreign exchange outflows are heavy and periods when foreign exchange inflows are thin. What is important is that seasonality is planned for, so that the reserves remaining during such periods are still at healthy levels. By maintaining efficient coordination with debt management as well as appropriately forecasting future foreign exchange receipts and payments, the seasonality analysis will be enhanced. For example, keeping idle foreign exchange balance for quite a long time in less-yielding instruments like US Treasury Bills will not serve any meaningful purpose; to mitigate such an outcome forecasting should be realistic and updated from time to time.

Utilise SAARCFINANCE Forum for Mutual Reserves Management

Management of reserves would be more effective if the SAARCFINANCE member countries raise an investable fund out of their surplus reserves and utilize the efficient available manpower and the forum to invest it in the areas where the rate of return is maximum. Such bulky investments will very likely generate high returns. In the proposed set up, the member countries will invest their surplus funds only (not the entire reserves) so that they will not demand their reserves back in the short to medium term. The risk of triggering a price fall causing member countries to take back their funds will be low due to both the high trust in synergy on the one hand and the maturity period previously consented to on the another. At the same time, the competence of all the member countries' experts will also be utilized.

Encourage NRN for Investment in Nepal

It is an indisputable fact that Nepal needs a substantial inflow of FDI. This is mainly to supplement domestic savings and also to finance the trade deficit. Investments from NRNs will help to accelerate the rate of industrialization and growth, and have assumed a great importance in recent years. Nepal, therefore, has to develop policies which encourage the NRNs to invest in Nepal.

Segregation of Duties and some other HRM Issues

The organizational structure of FEMD should reflect a clear separation between the market analysis, dealing and accounting. The person engaged in the dealing process should not be involved in accounting of the same, especially in sending SWIFT messages and also in monitoring of risk and compliance. Similarly, the accounting and reconciliation of the balances ought not to be done by the staff which is involved in the settlement process. The level of staffing in the Middle Office will need to be increased in order to ensure that the person monitoring compliance of the portfolio with the guidelines is not involved in any trading activity.

Based on the researcher's personal involvement and experiences as an employee of the NRB, it is hereby stated that the current staffing level in the Investment Section of FEMD, whose statistics are provided in Chapter 6, is not sufficient to adequately ensure segregation of all duties, support technological innovations and provide backup when related staff attend training or proceed on leave. The transfer of key staff can disrupt reserves management activities and cause unacceptable results. There seems key person risk at NRB because not all staff members have the requisite expertise to perform reserves management functions required in their unit. Some have not been able to attend trainings due to a lack of replacement available. Therefore, staffing has to be increased even to provide replacements and develop successors.

NRB reserves management operations are strictly segregated between trading activities on the one hand and, settlements and accounting on the other. However, the functions of the middle office are sometimes performed by front office staff. There is no formal training program, but staff members regularly attend workshops offered by SAARCFINANCE, SEACEN, BIS, and the IMF. Staff rotation between functions is mandatory every three years.

It is recommended that the risk associated with personnel policies be recognized and managed properly and the level of staffing be increased suitably.

Ultimately, the important determinant of success in the investment management is the human factor. As an ideal, NRB's human resources policies ought to ensure adequate successor planning, recruitment of capable portfolio and investment managers and the nurturing of their careers with training and development activities.

7.5 Limitations

This research bears the following major limitations:

1. The study covers the foreign exchange management practices of Nepal only, therefore, there is no cross-sectional analysis. In other words, there is no experimental comparison with other Central Banks or any other institution.

2. Information available in the NRB and GON and related publications has been the main sources utilised for the study.

3. The study is based on the analysis of the available facts and accessed information. Information not published for the public at large has also been used in the study. Because of the nature of the data, such information is classified as official and not generally published.

7.6 Directions for Further Research

The study covers the process, components and functioning of the foreign exchange management of Nepal along with the related suggestions and recommendations. The thesis basically analyses the four aspects of foreign exchange management in Nepal: exchange rate regimes, market intervention, dynamics of international trade and payments and reserves management. Other aspects of foreign exchange management like remittances, FDI and foreign aid should be more extensively analysed in the future. Researchers could also study the financial costs of maintaining the peg as well as the related enforcement costs. Prospects of applying the modeling framework for foreign exchange management should be explored by quantifying the relevant variables and refining the postulated relationships in future studies.