Chapter I
INTRODUCTION, OBJECTIVES AND RESEARCH METHODOLOGY

1.1 Overview of Foreign Exchange Management in Nepal

Foreign exchange management in Nepal encompasses four processes: (a) choice of exchange rate regime, (b) management of international trade and payments, (c) foreign exchange reserves management, and (d) directing, monitoring and supervising the foreign exchange market. Nepal adopted current account convertibility both with India and the rest of the world since February 1993, in place of the then prevailing licensing system in foreign exchange for trade purposes. With the current account convertibility, open general licensing system [OGL] was adopted. This means that the commercial banks were free to open unlimited letters of credit [LC] for international trade as there were no restrictions in the current account transactions, both in receipts and payments of merchandise trade, services, income and transfer accounts. However, Nepal has not yet introduced capital account convertibility in the external sector transactions.

Nepal has adopted a fixed exchange rate with Indian Rupee [INR] since April 1960. Prior to this, the exchange rate with INR was fully market-determined. The present fixed exchange rate of INR 100 = Nepalese Rupee [NPR] 160 has been continued since February 1993. The exchange rate with INR was adjusted on eight occasions before the rate was set at INR 100 = NPR 160 in February 1993. The exchange rate with currencies other than INR was characterized by periodic changes before February 1993 when the exchange rate was made fully market-determined. Exchange rate with currencies other than INR was adjusted on 10 occasions before February 1993.

Intervention by the Central Bank in the local foreign exchange market including the management of the INR has also been the major aspect of

Nepalese foreign exchange management. Especially in Nepal where annual foreign trade flow and cumulative foreign debt stock occupy significant shares of gross domestic product [GDP], foreign exchange management becomes crucially important for ensuring viability and stability on both the external and domestic fronts of the economy.

1.2 Exchange Rate and the Foreign Exchange Market

International transactions require a unit of account, medium of exchange and a reserve asset acceptable to the countries involved in such transactions. Foreign exchange means currencies or other financial instruments that settle such transactions. Every time a company or government buys or sells products and services in a foreign country, they are subject to a foreign currency trade: the exchanging of one currency for another. Many individuals and organizations also trade currencies in the foreign exchange market for speculative purposes besides commercial and personal transactions.[1]

Foreign exchange trading is the mechanism by which the currency of one country gets converted into the currency of another country. By definition, "*an exchange rate is a price of one currency in terms of others*" (Eatwell, Milgate & Newman, 1996). It is made up of a base currency--- the currency against which the value of another currency is expressed. There are two conventions used for giving the quote of bid (or buying) rate and offered (or selling) rate. First, a currency quotation in the foreign exchange market that expresses the amount of foreign currency required to buy or sell one unit of the domestic currency is called an indirect quote. In indirect quotes, also known as *'quantity quotations'* or *'American terms'*, foreign exchange rates

[1] In Nepal, the foreign exchange market comprises the Central Bank and suppliers/ demanders of foreign exchange, e.g., exporters, importers, other business persons, money changers, banks and financial institutions [BFIs], remittance handlers, hotels, travel and trek organisors, students and patients seeking foreign exchange facilities, employment seekers going abroad, foreign investors, other Nepalese and foreign travellers, besides others.

are expressed in terms of how many United States Dollar [USD] can be exchanged for one unit of another currency. The domestic currency (i.e., non-USD currency) is the base currency in this system. Second, a foreign exchange rate quoted as the amount of domestic currency per unit of the foreign currency is called a direct quote. It is the opposite or reciprocal of the indirect quote. It involves quoting in fixed units of foreign currency against variable amounts of the domestic currency. In direct quote, also known as '*price quotation'* or '*European quote'*, foreign exchange rates are expressed in terms of how many domestic currency units can be exchanged for one USD. The USD is always the base currency in this system. Nepal Rastra Bank [NRB], the Central Bank of Nepal quotes official exchange rates on a daily basis in fixed units of foreign currencies against variable amounts of the Nepalese Rupee [NPR], i.e., a direct quote.[2]

A country has a fixed exchange rate if it pegs its currency at a given exchange rate and stands ready to defend that rate. Under a fixed exchange rate system, the value of a currency in terms of another is determined by the government or the Central Bank. The fixed exchange rates result from countries pegging their currencies to either a precious metal or to a particular currency or a basket of currencies. There is generally some provision for corrections of these fixed rates in case of fundamental disequilibrium. Examples of this system are the Gold Standard and Bretton Woods system.

Exchange rates predominantly determined by market forces are called flexible (or floating) exchange rates. When the government/Central Bank refrains from any intervention in exchange markets, the system is called a pure flexible system.

[2] The NPR is the currency of Nepal. Its currency code is 'NPR' and the currency symbol is 'Rs.'. The literary meaning of "Rupee" is "silver," and the name exists because it was previously a silver coin.

Managed float or *dirty float* is the system under which the exchange rate is not

pegged but the government/Central Bank, instead of simply leaving it to be set by the market, tries to manage it by smoothing out the small fluctuations through market interventions or through interest rates (Black, 1997). The technique for managing the exchange rate that allows it to *crawl* up or down by a small amount each day or week is called a *crawling peg* (Ibid, 1997).

In brief, the market in which different currencies are traded is called the foreign exchange market. "It is the financial market for exchange of currencies which includes cash or spot transactions, foreign exchange forwards, futures and options. The market is primarily over-the-counter [OTC] between the world's leading banks and their customers, although currency futures and currency options are traded on a number of exchanges" (Moles & Terry, 1999). The foreign exchange market encompasses the conversion of purchasing power from one currency into another, bank deposits of foreign currency, the extension of credit denominated in a foreign currency, foreign trade financing, trading in foreign currency options and futures contracts, and currency swaps (Eun & Resnick, 2008).

The foreign exchange market is the largest financial market in the world by virtually any standard. It is always open somewhere in the world, 365 days a year and 24 hours a day. The foreign exchange market includes both spot markets, for immediate delivery, and forward and futures markets, for delivery on future dates at pre-determined prices. The spot and forward foreign exchange markets are OTC markets; that is, trading does not take place in a central market-place where buyers and sellers congregate. The foreign exchange market is a worldwide linkage of banks, currency traders, non-bank dealers, and foreign exchange brokers, who assist in trades via a network of telephones, computer terminals, and automated dealing systems. Reuters, FX All, Bloomberg, and Electronic Broking System [EBS] are the most popular online software programs in the foreign exchange market which provide users the most recent financial information and secured trading platforms. Society for Worldwide Interbank Financial Telecommunication [SWIFT] is another channel for trusted and secured fund transfer messaging. Before the internet came, only corporations and wealthy individuals could trade currencies in the foreign exchange market through the use of the proprietary trading systems of banks. These systems required as much as USD 1.0 million just to open an account. Thanks to advancements in online technology, today, investors with only a few hundred dollars or equivalent other currencies can have access to the foreign exchange market 24 hours a day.

The management of reserves is one of the primary responsibilities of a Central Bank.[3] It also happens to be the most arcane area of Central Bank operations on which Central Banks traditionally maintain self-serving reticence and even their occasional public pronouncements are long on general principles of reserves management and short on the specifics of their portfolios. Some Central Banks do not even reveal the extent of their gold holdings and some cloak their foreign reserves operations in complete secrecy. Consequently, outside analysts do not have necessary evidence to comment on Central Banks' portfolio behavior (Manandhar, 2001). Reserves are liquid assets like gold, and/or convertible foreign currencies held by a government/Central Bank for the purpose of intervening in the foreign exchange market. Reserves consist of official public sector foreign assets that are readily available to, and controlled by, the monetary authorities (IMF, 2004).[4]

Intervention in the foreign exchange market is another very important aspect of foreign exchange management especially in those countries which do not

[3] Foreign exchange reserves, foreign currency reserves, foreign reserves or international reserves is referred simply as reserves in this thesis.

[4] IMF Guidelines for Foreign Exchange Reserves Management was approved by IMF Board of Directors on September 20, 2001 (Online available at www.imf.org).

have pure floating exchange rates. Intervention is the process of using foreign currency reserves to either buy one's own currency in order to decrease its supply and thus increase its value in the foreign exchange market, or selling one's own currency for foreign currency in order to increase its supply and lower its price (Ibid.).

Foreign exchange was considered a scarce commodity and was subject to strict control in almost all countries of the world till 1970s, and in the particular case of Nepal before February 1993, when exchange control was the order of the day. Now, the scenario and the perception has changed and the Central Bankers, government officers and the policymakers talk about managing foreign exchange flows and their prudent regulations, rather than exchange control and official restrictions.

1.3 Significance of the Study

The NRB Act 2002 has specified the NRB's responsibilities with respect to sound management of the foreign exchange including developing proper policies regarding foreign exchange, designing exchange rate regime, and managing the foreign exchange reserves. These responsibilities are crucial not only in the context of optimizing the returns on the foreign exchange resources but also improving the external sector competitiveness of the economy so as to ensure macroeconomic sustainability. Implementation of monetary policy would be successful when the monetary policy framework is well-supported with the formulation of a prudent foreign exchange policy along with its sound implementation. It may also be noted that external sector vulnerabilities and risks could adversely affect the working of the economy as a whole.

The South-East Asian financial crisis that occurred in 1997-98 was attributed to the unrealistic exchange rates maintained by these economies. Similarly, many other emerging economies have been badly affected on account of the improper exchange rate policy and its management which gave rise to large external sector weaknesses in these affected economies. Therefore, to ensure macroeconomic soundness along with the monetary policy effectiveness, the effective implementation of efficient foreign exchange management in its various dimensions has become extremely important. Nepal, surrounded as it is by two of the surging gigantic economies of Asia, namely, India and China, has faced an urgent necessity to address the development challenges and rising expectations of the people for which the economy needs to be strengthened with particular focus on improvement of the external sector. Nepal's economy has so far remained weak and under-performing, making it unable to withstand even a small shock by way of external sector risk. With this perspective also, Nepal's external sector competitiveness needs to be enhanced. The present study will cover the current performance and weaknesses of the same and of policies bearing on the external sector competitiveness. Hence, the related outcomes of the study are expected to be insightful towards improving the health of the external sector of the economy, with particular emphasis on the generation of a favourable balance in the Balance of Payments [BOP] on a sustainable basis.

1.4 A Brief Overview of Nepal's Economy

Nepal, popularly known as the land of the Mount Everest and the birth place of Lord Buddha, a land-locked mountainous country, situated in South Asia, spreads over an area of 1,47,181 square kilometres [sq. km.]. Nepal is bordered by India in the east, south and west directions and by Peoples' Republic of China/Tibet on the northern part of the snow-fed Himalayas. Though Nepal occupies 0.03 percent of the land of the world and 0.3 percent of Asia, the country has an extreme topography and climate. The altitude ranges from 70 metres to 8,848 metres and the climate varies from tundra to polar. The country stretches from the east to the west with a mean length of

885 kilometres [km] and from the north to the south with a mean breadth of 193 km.

The present constitution of Nepal declared the Federal Democratic State of Nepal with seven provinces. Nepal is so far divided into 75 administrative districts consisting of 217 municipalities and 3,137 village development committees [VDCs]. The VDCs are considered as rural areas and municipalities as urban areas of the country. Nepal's population in June, 2015 stood at 28.04 million with an urban share of around 17 percent and that of rural at 83 percent.[5] According to the National Population and Housing Census 2011, the country's population density was 180 people per square km., the sex ratio was 94.2 males per 100 females and the population growth rate per annum was 1.35 percent (Central Bureau of Statistics [CBS], 2012). The average household size consisted of 4.8 persons. The share of the working age population (aged 15 to 59 years) was 57 percent. There were 11,798 km of black-topped and 6,287 km of graveled roads, 20 km of railway track, 8 km of ropeways and 32 airports in Nepal till the end of fiscal year [FY] 2014/15 (MOF, 2016, p. 184).

So far as the social indicators are concerned, life expectancy at birth is 66.6 years, infant mortality rate [IMR] per 1,000 live births is 40.5, fertility rate per woman is 2.5 and the overall literacy rate for population of 5 years and above is 65.9 percent. Population per doctor is 1,663 and population per hospital bed is 4,413. For more than two-third (67.26 percent) of the total households, the main source of lighting is hydro-electric. Around 64 percent of households use firewood as the prime source of fuel for cooking. Tap/piped water is the main source of drinking water for 47.78 percent of the total households (MOF, 2016). Around 400,000 youth enter the labour market annually, for whom foreign employment has become the first choice in recent years.

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[5] Population of Nepal as of the 2011 Census Day (22nd June 2011) stood at 26,494,504 and the population growth rate at 1.35 percent per annum (CBS, 2015).

Nepal, with an average per capita Gross National Income [GNI] of USD 2,311, ranks 145th among 188 countries listed in the Human Development Report 2015 (United Nations Development Program [UNDP], 2015). About one-fourth of the population (25.16 percent) lives below the poverty line as per the Nepal Living Standard Survey 2010/11 (CBS, 2011). The *Gini Coefficient,* which indicates inequality in income distribution, is 0.328. The Nepalese economy is heavily dependent on agriculture. The agriculture sector contributed around 32.4 percent in GDP in FY 2014/15 (CBS, 2016). The nearest port, which is the main import and export point of Nepal's international trade, is Haldia/Kolkata in India, situated 900 km away from the nearest border point.

Petroleum products are the major imports, which account for USD 1.09 billion, i.e., 14.21 percent of total imports in FY 2014/15 (NRB, Quarterly Economic Bulletin [QEB], 2016). Nepal does not produce a single drop of petroleum, nor has any oil refinery in her territory, making it fully dependent on imports in the refined form, currently from India. As of 2011 census data, nearly 2.5 million Nepalese people are in foreign employment. The remittances sent by them form the backbone of Nepalese economy and the largest source of foreign exchange earnings in recent years. Woolen carpets, *Pashmina* and handicraft goods are the major exports. Remittances, foreign loans and grants, Foreign Direct Investment [FDI], and tourism business are the major sources of foreign currency.

Nepal is rich in hydro-resources, with one of the highest per capita hydropower potentials in the world; however, at the end of FY 2014/15, the total installed capacity of all hydropower plants stood at 829.19 Mega Watts [MW], merely 1.0 percent of the total potential of 83,000 MW, with connection to 67.26 percent of the households (MOF, 2016, p. 178). Moreover, Nepal has been facing power crises for the last seven years. Severe load-shedding by way of electricity power cuts up to 16 hours a day in winter has become the bitter truth for the Nepalese society. However, government's efforts of making Nepal a load-shedding free country has gathered momentum in recent years with some encouraging results since FY 2016/17.

Much of this backwardness is attributable to centuries of political and economic isolation, a land-locked mountainous country, a lack of visionary approaches, prevalence of corruption and a late start in development. Nepal embarked on economic development very late, only in the 1950s. After the structural move towards democratic polity in the political regime of the country, the government budgeting system was introduced in 1951 and the planned development process in 1956. There is little evidence to show that decades of development efforts have led to a significant improvement in the poverty situation, particularly in rural areas where nearly 83 percent of Nepal's population and the large majority of her poor live.

The beginning of the monetary system in Nepal may be traced to the issue of '*manank*' coins minted during the *Lichchhavi* period, though the coins did not possess a definite shape, weight and size. Nepalese paper currency came into circulation since 17th September 1945. Prior to the establishment of the NRB in 1956, the task of issuing and management of Nepalese currency was performed by the then government treasury office named '*Sadar Mulukikhana Adda*'. "It may be said that the development of metal currency (coins) in Nepal started with the growth of Nepal-Tibet trade and the paper currency with the progressive expansion in Indo-Nepal trade" (Nepal, 2005). Nepal maintains fixed parity with the INR and market-determined flexible exchange rates with rest of the currencies. NRB, as the Central Bank and the apex monetary authority, responsible for foreign exchange management in Nepal, regularly intervenes in the local foreign exchange market to buy USD from BFIs and remittance companies and sell to commercial banks. As of mid-July 2015, Nepal held gross foreign exchange reserves of USD 7.18 billion.

1.5 Objectives of Foreign Exchange Management in Nepal

All countries hold foreign exchange, but the reasons for holding differ widely from country to country. As such, the objective of foreign exchange management also varies from nation to nation. Unless the objectives are clearly defined, the effective management of foreign exchange cannot be carried out. While setting the strategic or tactical objectives, the authorities need to establish precisely why they are holding foreign exchange and how, when and for what purposes it will be utilized. A thorough analysis of the economic need of the nation, exchange rate regime, trade pattern, political vision, international environment and other dimensions are essential in this connection.

The unique features of foreign assets, viz., a public asset, involvement of huge investment and high holding cost make foreign exchange management crucial. Whether owned by the Central Bank or the government, ultimately they are public assets. Public assets naturally attract the highest concern for their safety. Likewise, NRB always values their proper management to meet the investment goals: security, liquidity and return within the policy restrictions.

Foreign exchange management in Nepal is a process that ensures instant availability of an adequate level of foreign assets, which are readily available to and controlled by the NRB for meeting a defined range of objectives. The official document, stating the strategic objectives and goals of foreign exchange management, so far, is the 'Foreign Exchange Investment Guidelines 2009'. These guidelines were prepared with the experiences of more than five decades in foreign exchange management and were approved by the NRB Board of Directors on 20th April 2009. According to the guidelines, the basic objectives of foreign exchange management in Nepal are as follows (NRB, 2009):

1. Help to implement the monetary and foreign exchange management policies.
2. Maintenance of adequate level of reserves as per the need and structure of the economy.
3. Ensure external payments without any default and provide confidence to the market.
4. Provide mandatory backing to issue the local currency.
5. Provide the necessary foreign exchange required to the GON.
6. Help to maintain stability in the Balance of Payments.
7. Intervene in the local market for liquidity management.
8. Profit maximisation/wealth maximisation without compromising on safety, liquidity and policy requirements.

Though, not included in the Guidelines, the maintenance and defense of the fixed parity between NPR and INR, and the management of physical and accounting cash of INR in the Nepalese territory are also integral parts of the foreign exchange management in Nepal.

1.6 Regulation of the Foreign Exchange Market

The foreign exchange market in Nepal is regulated by NRB. All market participants need to obtain a formal written license from the Central Bank to carry out the foreign exchange related transactions. These market participants operate their business in accordance with the prudential regulations and circulars issued by NRB from time to time. All the transactions are under NRB's surveillance and the licensed institutions must regularly report to the NRB. The Foreign Exchange Management Department [FEMD] and Bank Supervision Department of NRB continuously monitor the local foreign exchange market activities and also carry out on-site and off-site supervisions.

1.7 Structure of Nepal's Foreign Exchange Market

The Nepalese foreign exchange market consists of the Central Bank, banks and financial institutions, money transfers and moneychanger companies, hotels, airlines, tour operators and travel agencies, trek organizers and cargo handlers. As of mid-July 2015, 30 commercial banks, 84 development banks, 13 finance companies, 48 money transfer companies, 431 moneychanger companies, 329 hotels and resorts, 1,744 tour operators and travel agencies, 1,660 trek organizers and rafting agencies, 305 cargo companies, 59 airline companies and 79 other organisations (including insurance companies, hospitals and colleges) are authorized to carry out foreign exchange transactions.

Commercial banks are allowed to perform all activities related to foreign exchange transactions. National level development banks can carry out all activities other than issuing LC. Other development banks are authorized to accept and sell foreign currencies, while the finance companies can accept or sell INR only. Moneychangers can accept all foreign currencies. They can sell INR and foreign currency under passport facilities only. Institutions like airlines, hotels and tour operators are authorized to accept foreign currencies against the services that they sell to foreigners. Table 1.1 and the accompanying graph (Figure 1.1) present the structure of the foreign exchange market in detail.

Table 1.1

Foreign Exchange Market Participants of Nepal (As of mid-July 2015)

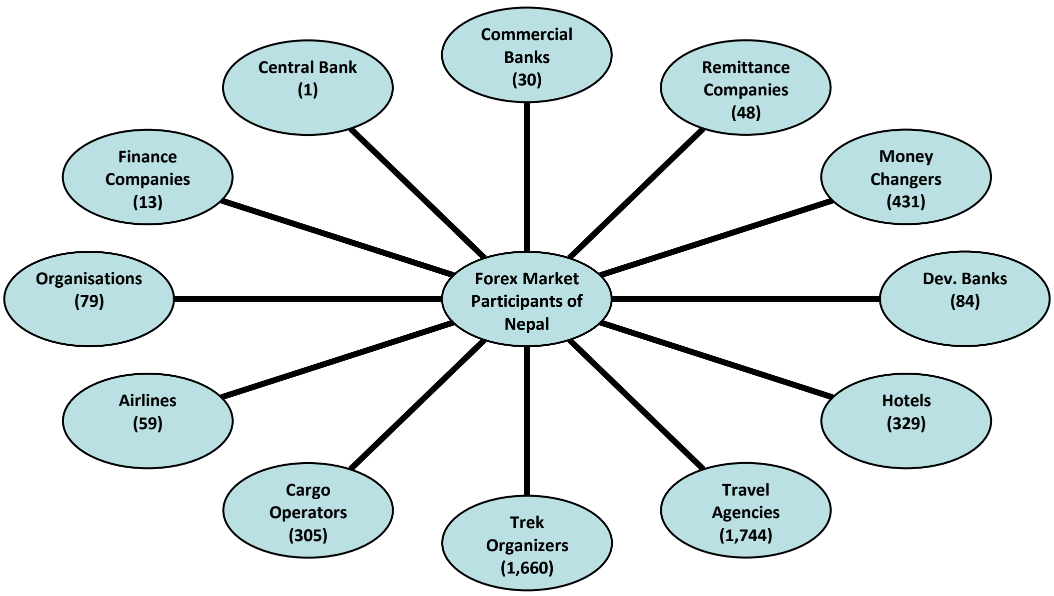
S.No.	Type of Participants	Total Numbers
1	Central Bank	1
2	Commercial Banks	30
3	Development Banks	84
4	Finance Companies	13
5	Money Transfer/Remittance Companies	48
6	Money Changers	431
7	Hotels	329
8	Travel Agencies	1,744
9	Trek Organizers	1,660
10	Cargo Operators	305
11	Airlines	59
12	Organisations*	79
	Total	**4,783**

* Includes Insurance Companies, Hospitals and Colleges

Source: Nepal Rastra Bank, FEMD and BFIs Regulation Department

Figure 1.1

Foreign Exchange Market Participants of Nepal (As of mid-July 2015)



Source: Nepal Rastra Bank, FEMD and Bank and Financial Institutions Regulation Department.

Monitoring and supervising the foreign exchange related activities is equally important to ensure compliance with circulars, directives, acceptable norms and concerned Acts as well as to assess emerging operational developments. Hence, for ensuring orderly functioning of the foreign exchange market, close monitoring and constant supervision of the activities of the market participants becomes essential. The monitoring and supervision may be off-site or on-site. Off-site monitoring and supervision is done by a review of the various reports, returns and statements that are required to be submitted by the market participants. On-site inspection is carried out at the place where the participants actually carry out the business.

1.8 Statement of the Problem

The currencies of the advanced economies are convertible and accepted worldwide. However, the currencies of the developing nations do not enjoy such acceptability. This, in turn, creates challenges and uncertainties for developing economies in the process of their undertaking international transactions and sustaining them for the well-being of their respective economies. Addressing such risks and challenges becomes vital especially in the modern era of increasing global integration. So, sound management of foreign exchange is essential to facilitate smooth exchanges of goods, services and capital for the benefit of the developing nations. Nepal being a very low-income developing nation, the importance of sound foreign exchange management is significant in view of the high risks involved in problems encountered in this area.

According to the preamble to the NRB Act 2002, one underlying reason for the establishment of the NRB has been the formulation of the monetary and foreign exchange policies for attaining price stability and improving the BOP situation so as to bring about sustainable development of the economy of Nepal. Formulation and implementation of the foreign exchange policy, determination of the exchange rate system and management of the foreign exchange reserves in the capacity of the custodian of the reserves, have been specified among the core objectives of the NRB. To address these responsibilities competently in the fast-changing global, regional and national economic landscapes requires knowledge, skills, technology and vision far higher in levels than could so far have been regarded as reasonably acceptable.

With respect to the exchange rate management, Nepal has adopted the fixed exchange rate with the INR and the floating exchange rate with regard to the other currencies. The NRB regularly intervenes in the foreign exchange market in order to stabilize the exchange rate as well as to swap and inject liquidity in the foreign exchange market at the request of the market participants. Such different regimes for different currencies could make the foreign exchange market inefficient. Repeated interventions by the Central Bank in the foreign exchange market, characterized as *dirty float* as defined earlier, could make the market really distorted. Therefore, a study bearing an assessment of the causes and effects of such interventions need to be undertaken.

Regarding international trade and payments, Nepal has adopted full convertibility in the current account transactions as reflected in the acceptance of Article VIII of the International Monetary Fund [IMF]'s Articles of Agreement, on May 30, 1994. The pace and structure of Nepal's integration with the outside world in terms of goods, services and capital transactions need to be analyzed so as to develop a proper system of exchange rates, to attain the objective of enhanced external sector competitiveness and financially sustainable economic growth.

The NRB has adopted a cautious approach in the field of foreign exchange reserves management. For example, investments of foreign exchange reserves have been made in US Treasury Bills, short-term time deposits with reputed commercial banks and other Central Banks; and interest-bearing current/call accounts with Central Banks and the Bank for International Settlements [BIS], as per the guidelines worked out by the NRB in pursuance of the objectives of enhancing security, liquidity and returns. At the same time, the rapid fluctuations in the international foreign exchange market have complicated the task of reserves management. So, the challenges and opportunities in this responsibility need to be properly analyzed to realize desired outcomes with the minimum of losses. To address such important concerns of the national economy, analyzing and evaluating the present practices in this endeavor have become a matter of high economic value for the economy as a whole.

Monitoring and supervision of the participants in the foreign exchange market has been an important assignment of the NRB. The NRB has an active monitoring and supervision mechanism with regard to foreign exchange activities of commercial banks, money exchange agencies, hotels, travel agencies, trek organizers, etc. Institutions, processes and products comprising the foreign exchange market need to be strengthened and improved to reap maximum benefits from such market. Inadequate attention to this responsibility of nurturing and regulating the foreign exchange market would deprive the economy of likely benefits accruing to the economy. In this context also, a study and evaluation of the present situation and organisation of the foreign exchange market in Nepal remains an important task.

1.9 Objectives of the Study

The overall objective of the study is to understand the process and pertinent issues relating to the foreign exchange management in Nepal. The study also aims at assessing the ongoing foreign exchange management practices in the context of the program of Nepal's financial liberalization, objectives of the monetary policy, economic development challenges, and international sound practices in this respect. The study will conclude with findings and make 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. The specific objectives are as stated below:

1. To study the present situation of, and regulations with respect to, the foreign exchange market in Nepal.
2. To review the foreign exchange regime and identify the specific factors responsible for the choice of exchange rate regime in Nepal.
3. To evaluate the sustainability of the fixed exchange rate regime with India and the variable exchange rate regime with the rest of the world.
4. To study and analyse the foreign exchange market Intervention process in Nepal.
5. To study the pace and structure of Nepal's integration with the outside world in terms of goods, services and capital transactions.
6. To analyze and evaluate the foreign exchange reserves management practices in Nepal.
7. To suggest strategies and measures for effective foreign exchange management in Nepal.

1.10 Research Design

The following research methodology has been adopted to achieve the basic and specified objectives of the study which are stated in the previous section:

1.10.1 Research Methodology

This study is based on time-series data, both primary and secondary. Besides, other relevant information from various sources has been collected and analysed. The primary data on the exchange rate in the informal market was collected from moneychangers, goldsmiths, petrol pump operators and businessmen. An evaluation of the foreign exchange 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.

1.10.2 Nature and Sources of Data/Information

The secondary data and information (published and unpublished) relevant to the study have been collected mainly through the NRB publications, FEMD and the available reports/studies conducted by researchers and experts in this field. The publications of the IMF and CBS are other vital sources of data. Information has also been collected from other books, journals, periodicals, reports and office bulletins. As planned by the study, the collected primary data on the informal market exchange rates from dealers and agents in the vicinity of the border with India and other information has also been used.

1.10.3 Scope of the study

The foreign exchange management practices in Nepal date back to the *Malla regime* (1207-1768); however, it lacks the time series data and the authentication. Data relating to exchange rate, foreign exchange reserves and international trade in aggregate form are available since FY 1959/60. However, the decomposed data are available only since FY 1974/75. The national accounting statistics are also available since FY 1974/75. The market intervention process itself was initiated in FY 1990/91 and the purchase of INR by selling convertible foreign currencies in FY 1988/89.[6] Thus, this study attempts to cover a period from FY 1974/75 to FY 2014/15 in consonance with the availability of data.

1.10.4 Population and Sample

The statistical data along with the views, comments and advice of the various participants in the informal foreign exchange market of INR have formed a part of the study. This information was collected from moneychangers, petrol pump operators, gold-smiths and businessmen in three border-adjoining major cities of Nepal, namely, Janakpur, Birgunj and Bhairahawa. These respondents have been selected on the basis of purposive sampling.

1.10.5 Data Processing

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.

1.10.6 Method of Analysis

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.

[6] GBP and USD were sold to buy INR in FY 1988/89 and FY 1989/90; after these two fiscal years, only USD sold to purchase INR.

1.11 Scheme of the study

The whole study has been presented in seven chapters as follows:

1. Introduction, Objectives and Research Methodology
2. Review of Literature
3. Evolution of the Exchange Rate Regime in Nepal
4. Foreign Exchange Market Intervention in Nepal
5. Dynamics of Nepal's Integration with the Outside World in Terms of International Trade and Payments
6. Foreign Exchange Reserves Management in Nepal
7. Findings, Conclusions and Recommendations

Appendices

Bibliography

Chapter one introduces the research endeavor along with the statement of the problem, objectives, research methodology and significance as well as the key features underlying Nepalese foreign exchange management.

Chapter two reviews the literature relating to different aspects of foreign exchange management in general and focuses on existing and past policies, provisions, regulations and operations in particular.

Chapter three dwells on the evolution of the exchange rate regimes over the years along with the existing pegged exchange rate system with the INR and flexible exchange rate system with the other convertible currencies concurrently. This chapter also evaluates the sustainability of the pegged exchange rate regime with the India and variable exchange rate regime with rest of the world.

Chapter four focuses on the intervention mechanism aimed at bringing about stability and confidence in the Nepalese foreign exchange market while

Chapter five contains a detailed review and analysis of the dynamics of international trade and payments over the study period.

The foreign exchange reserves management with its objectives of liquidity, safety and return has been a major part of this research work. Its framework and practice in Nepal has been analysed and presented in Chapter six.

The summary, findings, conclusions and recommendations based on the research work along with limitations and direction for further research have been presented in the final chapter, i.e., Chapter seven.