CHAPTER I
INTRODUCTION

1.1. GENERAL INTRODUCTION

Countries, these days, are becoming more interdependent in every aspect of life due to the rapid process of globalization that is facilitated by the revolutionary advancement in technologies of production, communication and information, and formation of the international institutions like the World Bank, IMF, and MNCs. Trade and other transfers are the important means of cooperation between countries. Because of lack of self-sufficiency, every country engages in international trade and tries to maximize its welfare by maximizing its comparative advantage of trade.

Besides the transactions of goods, there is continuous inflow and outflow of funds or financial transaction in terms of remittances, loans and grants, and investments between different countries. All such international transactions of a country are systematically recorded in a summary sheet, known as the Balance of Payments account. Thus a country’s balance of payments shows the balance between all the payments the domestic country receives from foreign countries, called credit items, and all the payments which it makes to them, the debit items.

The history of the compilation of balance of payments is not very long. The term balance of payments has its origin in the Mercantilist’s theory of “Balance of Trade” (Columbia electronic encyclopedia: online). The modern trade theory is the product of an evolution of ideas in economic thought. In particular, the writings of the mercantilists, Adam Smith and David Ricardo, have been instrumental in providing the framework of modern trade theory (Carbaugh, 1980; 17).

Mercantilists placed high value in the bullion or treasure as they were seen as the key to the wealth of the state (Pearce: 1987). The mercantilist writers were the first to develop the elements of a theory of international trade and commerce (Ellsworth, 1947; 8). To promote favourable trade balance, they advocated governmental regulation of trade through the imposition of heavily protective tariffs, quotas, and other commercial
policies like as the British Navigation Acts, and a restrictive colonial policy (Carbaugh, 1980; Ellsworth, 1947).

However, by the eighteenth century the economic policies of the mercantilists were under strong attack. David Hume put forward his doctrine of price-specie flow which rejected the mercantilists' notion of favourable trade balance. He argued that a favourable trade balance was possible only in the short-run and it would automatically be eliminated over time through the mechanism of capital outflow. According to him, surplus in trade results an inflow of gold and silver in the country and thereby increase in its money supply. The increase in the money supply would raise price level relative to that of its trading partners leading to an increase in its imports and decline in the exports and thereby eliminating the country's trade surplus. Thus Hume attacked the mercantilist's notion of trade surplus and argued that it was applicable only in the short-run (Carbaugh, 1980; Ellsworth, 1947). Hume argued that—

Suppose four fifth of all the money in Great Britain to be annihilated in one night... what would be the consequence? Must not the price of all labour and commodities sink in proportion...? What nation could then dispute with us in any foreign market, or pretend to navigate or to sell manufactures at the same price, which to us would afford sufficient profit?
In how little time, therefore, must this bring back the money which we had lost and raise us to the level of all the neighbouring nations? Where, after we have arrived, we immediately lose the advantage of the cheapness of labour and commodities; and the farther flowing in of money is stopped by our fullness and repletion (David Hume, *Essay of the Balance of Trade*, p. 300, cited in Ellsworth, 1947; 16).

The foundation of the modern trade theory led in the writings of leading classical economist, Adam Smith (1723–90). The trading principle of Smith was famously known as “Principle of Absolute Advantage” which advocated that “in order for nations to benefit from the international division of labour, each nation must have a good that it is absolutely more efficient in producing than in its trading partner. For him it would be better for a country to import goods that could be produced overseas more efficiently than to manufacture them itself. Countries would import goods in the production of which they had an absolute advantage over the importing country (Carbaugh, 1980; 18–19).

However, David Ricardo (1772–1823), another leading classical economist advocated the theory of “Comparative Cost/Advantages” rejecting Smith's view of absolute advantage. According to him, even if a nation has an absolute disadvantage in the production of both goods relative to its trading partner, a basis for mutually beneficial
trade may still exist. The less efficient nation should specialize in and export the good in which it is comparatively less inefficient (where its absolute disadvantage is least). The more efficient nation should specialize in and export that good in which it is comparatively more efficient (where its absolute advantage is greatest). Absolute productive efficiency was thus not a crucial factor governing the basis for trade, according to Ricardo (Carbaugh, 1980). If countries specialize in the production of such goods in which they have a comparative advantage (or greater relative efficiency), then trade will be mutually beneficial to all countries (Samuelson and Nordhaus, 1985; 834).

The theories of absolute advantage and the comparative advantage are best explained from the following example reproduced from Samuelson and Nordhaus (1985).

**Table 1.1**

Comparative Advantage

<table>
<thead>
<tr>
<th>Product</th>
<th>Labour input in America</th>
<th>Labour input in Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 unit of food</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>1 unit of clothing</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

The table (Table 1.1) shows the units of labour required to produce one unit of specified goods in America and Europe. The table shows that Europe is in absolute disadvantage in producing both commodities, yet, it is in comparative advantage in the production of clothing. In a free trade regime, trade flows from lower price regime to higher price regime. In doing so, America will be in advantage to produce and sell food while Europe will be well off in the specialization in clothing. In this way, both countries will be mutually benefited. At the same time the clothing industry in America and the food industry in Europe will shut down due to the comparative disadvantages in their production.

Even today, the relevance of Ricardian principle of comparative advantage is high and remains highly influential trade principle in the economic literatures.

Another influential international trade theory, “the factor endowment theory”, was put forward by two Swedish economists, Eli Heckscher and Bertil Ohlin. Though it is supply side theory as like the Smith’s absolute advantage and Ricardian comparative advantage, it differs from Ricardian trade theory in the sense that the Ricardian theory places primary reliance on factor productivities as the main determinant of the basis for
trade, while the Heckscher-Ohlin model places primary importance to the factor endowments nations enjoy (Carbaugh, 1980: 63). The model holds that a country which has an abundance of, for example, labour will specialize in the production and export of goods, which use labour intensive techniques, and import goods which are intensive in the use of the country’s scarce factor of production (Pearce 1986).

Thus, Heckscher-Ohlin comparative advantages in factors and Ricardian comparative advantages in costs are traditionally treated as alternative theories of comparative advantage.

1.2 Balance of Payments Defined

There are two distinct concepts of the balance of payments viz., accounting balance of payments and market balance of payments. The former is defined as a record of all the financial transactions in goods, services and capital assets which have taken place between a country’s residents and the residents of other countries within an arbitrary accounting period, normally one year. Whereas, the latter refers to the balance of supply and demand for a country’s currency in the foreign-exchange market at a given rate of exchange (Thirlwall and Gibson 1992).

It should be noted that market balance is observable in its effect, e.g., on the exchange rate or the level of external reserves (Pearce, 1986). The present exchange rate system of pegging permits to redefine balance of payments as the change in the level of international reserves of a country. (Mundell 1968: 2). The change in the international reserves that shows the market balance of payments deficit or surplus also elucidates the degree of intervention of the authority in the foreign exchange market. Indeed, if the exchange rate regime were absolutely floating, then there would be no change in the international reserves at all, hence, there would be no question of the balance of payments disequilibrium and also no need of holding the international reserves for official financing. Then, there could be a coincidence between the market balance of payments and the accounting balance of payments in this situation. Thus, in freely floating exchange rate regime, the market balance of payments must always be balanced. But in fixed exchange rate regime there is balance only by chance and if not balanced, intervention is required (Thirlwall and Gibson 1992).
IMF (1996) has supplied a precise and elaborated definition of the balance of payments. According to it, "the balance of payments (BOP) is a statistical statement that systematically summarizes, for a specific time period, the economic transactions of an economy with the rest of the world. Transactions, for the most part between residents and nonresidents, consist of those involving goods, services, and income; those involving financial claims on, and liabilities to, the rest of the world; and those (such as gifts) classified as transfers, which involve offsetting entries to balance—in an accounting sense—one-sided transactions."

The accounting balance of payments has a great value among the economists and policy makers. However, much theoretical analysis of the balance of payments is concerned with balance in the market balance of payments and exchange rates (Pearce 1986).

The accounting system of balance of payments is based on double entry book keeping system, in which the receipts of foreign currency are included in the credit side (assigned plus), and the payments made in foreign currencies are included in the debit side (assigned minus). In assets and liabilities term, "the term credit is used to denote a reduction in assets or an increase in liabilities, and the term debit is used to denote an increase in assets or a reduction in liabilities. In practice, credits are entered on the left-hand side, and debits are entered on the right-hand side (IMF 1996: 2)."

The difference of credit items and debit items is the balance of payments of the country. As, according to the rule of double entry book keeping system, debit always equals the credit, so, in principle, the net balance of all entries in the statement is zero, i.e., the balance of payments of a country always balance. But in practice, however, neither the overall account nor all the sub-accounts can be separately balanced in all cases. The current account may be in surplus or in deficit and similarly, the capital account also may be in surplus or in deficit when considered separately. However, if the sum of both current and capital account is negative, there is a balance of payments deficit and on the other hand if it is positive then balance of payments is said to be in surplus. The central bank of a nation holds quantities of foreign currencies called 'official reserves' which are drawn to settle any deficit creating a net decrease in the official reserve and vice-versa. Thus, a net decrease in the official reserve signifies deficit in the
balance of payments, and vice-versa. So the balance of payments is always made to balance by adding or subtracting some amount to the summation of the current account and the capital account, as and when required. In this sense, the overall balance of payments account is always in balance.

However, Cournot's law\(^1\) argues that the balance of payments of the world as a whole is identically zero. Cournot's law however, does not imply that the balance of payments of the world excluding the transaction of the monetary authorities is necessarily zero (Mundell 1968: 3).

Depending upon the system of exchange rate regime, the deficit in balance of payments may cause either depreciation or capital outflow, i.e., decrease in foreign reserves. For example, in a fixed exchange rate regime, the effect of deficit exerts a downward pressure on its official reserves till the exchange rate is not devalued whereas; in the floating exchange rate system the value of the domestic currency depreciates automatically till the balance is maintained (Mcconnell and Brue 1996).

The balance of payments account consists of two major sub-accounts, viz., current account and the capital and financial account. The current account refers to goods and services, income, and current transfers. Whereas, the capital and financial account (which was formerly known as capital account in the economic literatures) is mainly divided into two main categories: the capital account and the financial account. The capital account comprises all transactions that involve the receipt or payment of: i) capital transfers like, general government capital transfer and other sectors capital transfer, and ii) acquisition or disposal of non-produced, non-financial assets like, land, patent rights, trade marks etc. Whereas, the financial account comprises direct foreign investment, portfolio investment, other investment and reserve assets. As the data of economic transactions are derived from different sources and also there may occur time lag between transactions of goods and services and payments for them, which may create certain errors and omissions during the compilation of the balance of payments. The errors and omissions also occur due to the fluctuations of the exchange rate. Therefore, in balance of payments statements, the standard practice is to show a separate item for net errors and omissions. This item is labeled by some compilers as a balancing item or statistical discrepancy

\(^1\) This identity has become known as Cournot's law because of the extensive use Cournot made of the proposition.
because it is used for the purpose of balancing the balance of payments account (IMF 1993). As deficit in the balance of payments creates a downward pressure on the holdings of scarce external reserves, a country may slide to bankruptcy if its balance of payments is persistently deficit for a long time period.

The International transactions of a country may take place in variety of currencies. The task is to convert to all the transactions in a single unit of a currency before compiling the balance of payments statement. In general practice, a country’s BOP statistics are normally expressed in domestic currency as the data are used in conjunction with other national statistics. However, if the domestic currency undergoes major changes in relationship to other currencies, it may also be necessary to compile the national balance of payments in a more stable currency, which may be useful for the international comparisons (IMF 1996: 6).

A resident of an economy is defined as whose centre of economic interest lies in that economy. Thus, to be a resident of an economy, an economic unit must have a center of economic interest in that economy. It is to be noteworthy that if an individual stays in an economy for a year or longer, or intends to stay in an economy for a year or longer, he or she is considered a resident of that economy and if not, he or she is considered a nonresident. However it is subjected to some exceptions (For detail see, IMF 1996: 13-15).

After World War II the International Monetary Fund was established to handle problems relating to the balance of payments and foreign exchange (Columbia electronic encyclopedia: Online). It provides assistance to the member countries to improve their balance of payments. “When a country draws from the IMF it sells its own currency to the IMF and acquires in exchange a foreign (convertible) currency that it needs and when a country repays a drawing on the IMF it repurchases its own currency, paying for it with a convertible foreign currency” (Mundell 1968).

The history of systematic accounting of balance of payments in Nepal is quite recent– being only about thirty years. Only after the establishment of balance of payment division at about 1974/75, the systematic accounting of balance of payments was started. Until 2000/01, for the purpose of compiling balance of payments, Nepal had been using the “Balance of Payments Manual Fourth Edition” published by the IMF. However, in
recent years it has been using “Balance of Payments Manual Fifth Edition” published by the IMF in 1993. In fact, in recent years Nepal has been using both old and new series of balance of payments statement.

1.3. LITERATURE REVIEW

Various economists, academicians and researchers have been studying the problems on the trade, balance of payments and its adjustments process. Since the very beginning it has been becoming the centre issue of the debate in the economic literatures. Consequently various theories and principles have been developed for the adjustment of the balance of payments problems. Similarly, institution like IMF is established to finance the member countries for any adverse situation in its balance of payments. Most of the developing countries have been facing balance of payments problems, especially in current account. This section includes some theoretical as well as empirical literature surveys.

1.3.1. Theoretical Approaches

Prior to the 1930s, economics possessed no comprehensive theories of the balance of payments, of devaluation, or of balance of payments policy. Instead there was a well worked out theory of the mechanism of international adjustment under the gold standard, and a theory of exchange rate determination under floating exchange rates (Johnson 1977).

Since the gold standard was abandoned in 1931 as the supposedly automatic mechanism of balance of payments adjustment, three schools of theory have grown up corresponding to the three different ways of viewing balance of payments disequilibrium either (i) as a problem of distorted relative prices in international trade, or lack of competitiveness; (ii) as a problem of excessive expenditure relative to output, or countries living beyond their means; or (iii) as a consequence of internal monetary disequilibrium, that is an excess supply of money relative to its demand. These three way of viewing balance of payments difficulties correspond to the so-called elasticities, absorption and monetary approaches to balance of payments adjustment (Thirlwall 2003: 111). In addition to these approaches, a frequently discussed approach is the portfolio
approach. However, the portfolio approach is an extension of monetary approach to the balance of payments. In this connection Thirlwall mentions that—

The portfolio approach is part of the monetary approach and is about how switching between assets (including goods) can affect the current account of the balance of payments and the exchange rate. In fact, one approach to exchange rate determination is the so-called Portfolio Model which I discussed in my book 'Balance of Payments Theory and the United Kingdom Experience, 4th Edition' (Macmillan, 1992). One of the major causes of asset switching is changes in the interest rate, so that the portfolio approach is also about the financing of current account deficits (surpluses) by capital inflows (outflows) - although, as you will know, within the monetary approach to the balance of payments there is no distinction between the current and capital account (mistakenly in my view) (Thirlwall A. P. in an email response).\(^2\)

In the theoretical part of the literature review, a brief note will be made on these approaches.

1.3.1.1. Elasticity Approach to the Balance of Payments

The credit for the development of the theory of devaluation during 1930s goes to Joan Robinson (Johnson, 1977). For a long time, after the collapse of the international gold standard in 1931, economic analysis of the balance of payments was dominated by the so-called elasticity approach to balance of payments adjustment (Thirlwall and Gibson 1992).

The elasticity approach to the balance of payments rests upon the exchange rate changes and the price elasticities of demand for exports and imports in international trade, and states that, when the exchange rate is devalued or depreciated, the export becomes cheaper and simultaneously imports become more expensive causing increase in net export leading to an improvement in the trade balance and thereby an improvement in the balance of payments. With the assumptions that the balance of payments was in equilibrium position initially, and the supply elasticities of all goods are infinite, the Marshall- Lerner condition states that, “the devaluation will improve the balance of payments on current account if the sum of the price elasticities of demand for exports \((E_X)\) and imports \((E_M)\) exceeds unity in the absolute value” (Thirlwall and Gibson 1992;

\(^2\) Currently, Thirlwall, A. P. is an Emeritus Professor of Economics in the University of Kent, UK.
Thirlwall 2003; Kenen, 2000). That is for devaluation to improve the balance of payments on current account the condition is—

\[ E_X + E_M > 1 \]

Where, 
\( E_X \) = elasticity of export demand = \( \frac{F}{X} \frac{\partial X}{\partial P} \) and 
\( E_M \) = elasticity of import demand = \( \frac{F}{M} \frac{\partial M}{\partial P} \)

Where, \( P \) is the exchange rate.

If the Marshall–Lerner condition is not satisfied and the sum of the price elasticity of demand for exports and imports is less than one, then a fall in the exchange rate will bring about a worsening of the balance of payments.

However, it is argued that even if the Marshall-Lerner condition is satisfied, depreciation in the short-run has a tendency to worsen the balance of payments. However, after a point of time period, the situation starts improving and deficit starts getting smaller and smaller and ultimately moving to surplus as the exports earnings start offsetting the imports payments. This is known as the so-called J-curve effect. The J-Curve effect has best been explained in the following diagram.
When currency depreciation takes place, there is no immediate positive effect on the trade balance due to the inelastic nature of price elasticity of demand for exports and imports in the short run. The immediate effect after devaluation falls on the relative price structure of commodities. As the devaluation takes place, export of the devaluing country becomes relatively cheaper and imports become relatively dearer. However, due to the inelastic demand for exports and imports, there will be no immediate reduction in the import demand and immediate increment in the export demand in the short run. As the devaluing country’s imports become dearer, export continues to remain stagnant, with no curtailment in the import volumes, the current account further worsens in the short run. Only over the passage of time the export volume will start increasing and import volume decreasing and thereby creating an improvement in the current account and hence in the balance of payments of the devaluing country.

The elasticity approach is commented on the basis that it is only a partial equilibrium analysis; it ignores supply conditions and cost changes as a result of devaluation; and it also ignores the income and expenditure effects of exchange rate changes.

1.3.1.2. The Absorption/Expenditure Approach

Coined by Sidney Alexander in 1952, the absorption approach states that a country’s balance of payments on goods and services is given by the difference between its national output and absorption, that is, the aggregate consumption and investment expenditure of the goods and services (Vries 1987). The essence of the absorption approach is that: devaluation can improve the trade balance and hence balance of payments only if income is increased by more than expenditure or absorption.

The absorption approach can either be applied to the balance of payments as a whole or to the balance of payments on current account. In the latter case the balance of payments is the difference between national income and national expenditure (Thirlwall and Gibson 1992). That is—
\[ B = Y - A = X - M = S - I \]

Where,

\( B = \) balance of payments on the current account = \( X - M \),

\( Y = \) National income of the economy = \( C + I + G + X - M \)

\( A = \) Domestic expenditure or absorption = \( C + I + G \).

\( X = \) Export,

\( M = \) Import,

\( S = \) Saving,

\( I = \) Investment

Policies to raise \( Y \) are called the expenditure–switching policies and the policies to reduce "\( A \)" are called expenditure–reducing policies. Before full employment, expenditure–switching policies are appropriate, while at full employment when \( Y \) cannot be increased, expenditure–reducing policies are appropriate to improve the balance of payments.

The absorption approach is considered to be more advanced over the elasticities approach as the latter is basically a partial equilibrium analysis. Whereas, the absorption approach recognizes that devaluation affects not only the relative price of traded and domestic goods but also aggregate income and expenditure. However, it excludes the effect of money supply and the elasticities of exports and imports in the balance of payments making itself a partial approach. Johnson (1977) has commented on this ground that-

The absorption approach was an attempt to bypass the elasticities issue and go to the heart of the matter, the prevalent inflationary conditions. As such, it may be described as a halfway house to the full Keynesian analysis of balance of payments policy, another halfway house on different route to the same destination being the extension of the “elasticities” approach by the addition of Keynesian multiplier theory.

1.3.1.3. The Monetary Approach to Balance of Payments:

The monetary approach studies the balance of payments as a whole that is balance in both current and capital accounts of the balance of payments. Therefore the balance of payments disequilibrium is equivalent to a change in the level of international reserves of
the monetary authority (Thirlwall and Gibson 1992). Johnson (1972a) mentions in this regards that-

...The models to be constructed are extremely simple, inasmuch as they concentrate on the overall balance of the balance of payments, i.e., on the trend of international reserve acquisition or loss, and ignore the composition of the balance of payments as between current account, capital account, and overall balance, as well as the question of changes in the structure of the balance of payments accounts that may occur as a country passes through various stages of economic growth.

The monetary approach to balance of payments is the modern version of the classical-price-specie-flow theory developed by David Hume. The basic content of the monetary approach is that the balance of payments is essentially a monetary phenomenon and assumes that changes in international reserves are function of disequilibrium between the supply of and demand for money. That is, change in the international reserves is the function of the supply of, and demand for money. Thus, balance of payments difficulties can be corrected through monetary adjustments (Thirlwall and Gibson 1992; Thirlwall 2003). In this regard Johnson (1977) and Mussa (1974) have noted that–

All the balance of payments disequilibria are monetary in essence... Balance of payments disequilibria must inevitably be transitory. A government may be able for a while to support a deficit without self-correcting monetary consequences, but it must eventually run out of international reserves, unless additional reserves can be borrowed from abroad. Similarly, a country’s authorities may be able for a while to “sterilize” acquisitions of international reserves, but eventually they will exhaust their stocks of domestic credit assets (including possibly the ability to force domestic commercial banks to hold international assets instead of domestic assets) and will be able to continue to sterilize reserve inflows only by lending the money back to foreign countries in non-commercial ways. All balance of payments disequilibria could be handled by the use of domestic monetary policy, without the need for exchange rate changes, with the exception of disasters like the 1930s (Johnson 1977)

The first feature is summarized in the fundamental proposition that the balance of payments is essentially (but not exclusively) monetary phenomenon. In this proposition, the term “the balance of payments” refers specifically to the official settlements balance, that is, to the “money account.” The official settlements balance is in surplus (deficit) when the monetary authorities of a country are purchasing (selling) foreign-exchange assets in order to prevent their own money from appreciating (depreciating) relative to other monies. Thus, analysis of the balance of payments only makes sense in an explicitly monetary model, and, in this sense, the balance of payments is an essentially monetary phenomenon (Mussa 1974).

An excess supply of money leads to a loss of international reserves (a deficit), and an excess demand for money leads to a gain in international reserves (a surplus) and
changes in the level of reserves are the mechanism by which the balance between the supply and demand for money is restored (Thirlwall, 2003). The working mechanism can be illustrated as—when the domestic money supply increases and thereby the excess money supply increases in the economy, the domestic exchange rate tends to depreciate. As the exchange rate is assumed to be fixed, the monetary authority will buy the excess supply of domestic currency from the market at the cost of its foreign exchange reserves till the money supply equals the money demand. This results in the reduction in the level of foreign exchange reserves of the monetary authority turning the balance of payments into deficit (Daniels and VanHoose: Online).

Johnson (1972a) has derived a simplified mathematical interpretation of the monetary approach to the balance of payments. He has come to conclude that, reserve growth \((g_R)\) and the balance of payments are inversely related to the rate of domestic credit expansion \((g_D)\), that is—

\[
g_R = \frac{(1-r)}{r} \times g_D
\]

Thus, a deficit in the nation's balance of payments is resulted from an excess money supply that is not eliminated or corrected by the nation's monetary authorities. The nation's balance of payments surplus or deficit is temporary phenomenon and self-correcting in the long-run, i.e., after the excess demand for or supply of money is eliminated through an inflow or outflow of funds, the balance of payments surplus or deficit is corrected.

But the framework of the monetary model is too restrictive. Factor prices are perfectly flexible, leaving output constant at its full-employment level, and this assumption keeps real income constant. Domestic and foreign prices are tied together by purchasing-power parity. Investors are risk-neutral, so open interest parity obtains when there are no obstacles to capital mobility. To focus attention on the money market, the monetary model drastically simplifies behaviour in the labour, product, and bond markets (Kenen 2000: 416). Further, advocates of the monetary approach make assumptions

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about prices, incomes, and other variables that allow them to construct very simple models in which money is the only thing that matters for balance of payments behaviour. Because the monetary model depends on restrictive assumptions, its predictions are not always borne out by experience. That is why it is hard to accept the policy recommendations often drawn from it. (Kenen 2000: 393). As it assumes the fixed exchange rate regime, it is out of relevance in the floating exchange rate regime, more strictly speaking in the clean floating exchange rate regime. Moreover the supply and demand for money determines the exchange rate not the balance of payments. It ignores the other assets from the analysis and assumes no sterilization of reserve movements by the monetary authorities through open market operation, which is very unrealistic in the real world (Thirlwal 2003). Moreover, the expansion of domestic credit would enhance productive capacity of the economy and hence would improve the balance of payments of the country through the enhancement in the export trade and reduction in the import due to substitution.

1.3.1.4. The Portfolio Approach to Balance of Payments:

The Portfolio Balance Approach, which, as explained above, extends the Monetary Approach by incorporating other financial assets (in addition to money), is a synthesis of Ricardian trade model with income and price effect, and capital flows effects. There are three assets—money, a government bond, and a foreign bond denominated in foreign currency. The strategic stock-flow relationship in the model is the double link between saving and wealth. Saving adds to wealth, but an increase in wealth reduces saving. A change in the exchange rate affects wealth, too, by conferring a capital gain or loss on holders of the foreign bond (Kenan 2000: 441).

The assumptions of the portfolio approach are less restrictive compared to the monetary approach to the balance of payments. Unlike the monetary approach, it assumes that output does not always stay at its full-employment level; the price level does not depend exclusively on the exchange rate; the domestic interest rate is not tightly tied to the foreign rate (Kenen 2000: 416). Foreign and domestic bonds are imperfect substitutes. In particular, foreign bonds are assumed to carry additional risk and therefore there is a risk premium to such instruments. Investors are risk-averse and thus hold all
three assets (Keenen 2000: 441). In this model, in contrast to the monetary approach, other financial assets are as important as domestic money (Thompson). The model assumes that domestic residents can distribute their wealth between three assets: domestic money, domestic bonds, and foreign bonds. Equilibrium in the three asset markets will be given when the supply of the three assets is equal to the demand (Thirlwall and Gibson 1992). That is:

$$W = M + B + EB^* \quad \ldots \quad 4$$

Where,

- $W$ = Wealth,
- $M$ = domestic money supply,
- $B$ = supply of domestic bond,
- $E$ = domestic currency price of a unit of foreign currency, and
- $EB^*$ = domestic currency value of net holdings of foreign assets.

An increase in foreign expenditure leads to a permanent increase in income when the exchange rate is pegged. There is a temporary increase when the rate is flexible, but the domestic currency appreciates gradually, reducing absorption and switching demand back to the foreign good. An open-market purchase leads to a temporary increase in income when the exchange rate is pegged and to a permanent loss of reserves. With imperfect capital mobility, however, the loss is not large enough to offset completely the open-market purchase, and there is a permanent increase in the money supply. When the exchange rate is flexible, there is a permanent increase in income and a permanent depreciation of the domestic currency. But the permanent depreciation can be larger or smaller than the depreciation that takes place instantaneously; the exchange rate can undershoot or overshoot its long-run level. As in other models, capital mobility diminishes the effectiveness of monetary policy under a pegged rate, reducing the temporary increase in income. It enhances the effectiveness of monetary policy under a flexible rate, raising the increase in income in the short run and long run. A devaluation of the domestic currency causes a permanent increase in income and raises the stock of reserves. But there are two ways of getting to this long-run result. When holdings of the foreign bond are small, wealth does not rise much. Hence, income and reserves rise
immediately, but by less than they must rise eventually, and the economy runs a balance of payments surplus during the adjustment process. When holdings of the foreign bond are large, wealth rises sharply. Income and reserves rise immediately by more than they must rise permanently, and the economy runs a balance of payments deficit during the adjustment process (Kenen 2000: 441-42).

1.3.1.5. Empirical Approaches

Several empirical studies have been under taken by various researchers and academicians in the area of exchange rate system, trade balance, and the balance of payments. Some of the important studies are reviewed in this section.

The article by Komiya (1969) examines the effect of economic growth in balance of payments by using general equilibrium approach. In post- war Japan, the economic growth had been very high and the balance of payments was in deficit. The major findings of this paper are that growth in output tends to improve the balance of trade as well as the overall balance of payments while it deteriorates the capital account. As the economy grows, money demand increases and an increase in money supply increases the demand for goods and services and bonds from abroad deteriorating the balance of payments situation of the growing country. An autonomous increase in government (or investment) expenditure deteriorates the balance of payments due to deterioration on the trade balances for similar reason. It is also shown that, in a two country situation, the balance of payments on current account of a growing country turns into a surplus by appropriate monetary policies when the world price level is stabilized.

The paper by Miles (1979) examines the statistical relationship between the devaluation and both the trade balance and balance of payments for 16 devaluations of 14 countries in the 1960s. The effects of devaluation are explored through several statistical techniques. The results show that the balance of payments improved significantly following the devaluation. However, the improvement is temporary—lasting only about two years.

The paper by Bhagawat and Onitsuka (1960) analyses the responses of exports and imports to devaluation in non-industrial countries during the 1960s taking the experience of 40 countries and 50 devaluations. The study concluded that in almost all
cases, export trade became significantly better in the post devaluation three-year period, compared with both the pre devaluation situation. There was no immediate effect for imports. In general, imports continued to grow even after devaluation.

This article provides good information about the effects of exchange rate changes on the performance of trade. The result of the article is compatible with the theoretical aspects.

The paper by Kreinin (1977) is devoted to analyze the effect of exchange rate change on the volume of trade of six countries, in the short run (that is in the time horizon of 3 or 4 years). A marked effect on the volume of trade was observed in three countries of investigation (US, Japan and Canada). But for other countries (Belgium, Italy and Germany), there was no effect of exchange rate change on the trade volume.

Deppler (1974) aims to describe the effect of the exchange rate change on the exports and imports of France, Germany, the Netherlands, and United Kingdom. It was found that, the effect of the exchange rate changes was quite substantial in the volume of exports. The evidence on imports is considerably weaker. Although most of the adjustments are in the appropriate direction, they are rarely substantial. On the basis of the results for exports, it appears that most of the exchange rate effects take place within three or four years.

The paper by Chakraborty and Kulkarni (1989) presents an analysis of the effect of expansionary fiscal policy on balance of payments of India by using the Keynesian framework of the four sector open economy. Using statistical tools like ordinary least square, the paper takes the balance of payments as a dependent variable and the government budget deficit as the independent variable. The major findings of the paper are that the effect of the budget deficit is negative on the capital account of the balance of payments and interest rate elasticity of capital flows is very low. However, this paper excludes the other important macroeconomic variables from the model of the analysis.

The unpublished report by Institution for Sustainable Development (1993) studies the overall situation of the balance of payments of Nepal with India since 1975/76-1990/91. The major findings of this paper are that Nepal is facing a chronic payments deficit with India and this is due to the increasing trade deficit with India. For several times, in order to maintain the balance of payments situation favourable with India, Nepal
is bound to buy Indian Currencies by selling dollar to the Reserve Bank of India. This paper also provides some suggestions to improve the Nepalese balance of payments condition with India. In fact, this paper is the only paper which has done some substantial works in the bilateral balance of payments situation of Nepal. As this paper was published some 15 years before, and no concrete works have been done on this topic since then, there is need for a fresh look on this problem.

CURRENT ACCOUNT

Trade

The book by Katti (2001) gives some glimpses on Indo-Nepal trade and co-operations since the ancient. Since long back India remained the largest trading partner of Nepal. Nepal’s exports to India as a percentage of total trade have been less than its imports from India creating significant trade and balance of payments deficit with India. This book has raised open border, unauthorised trade, discrepancy in trade data, excise duty refund, duty free border trade and disparity in tariff structure as the major issues in the Indo-Nepal trade relations.

The book by Dahal (1987) is devoted to analyse the problems and prospects of Indo- Nepal trade. The percentage of share of Nepalese trade with India is comparatively very high though it is declining. Despite the introduction of various trade measures, the alarmingly increasing trade deficit is the major problem of Nepalese trade with India. Transportation problems, smuggling, sluggish export growth rate etc., are the other major problems of Nepalese trade. Even though, the book provides some important issues and information, it lacks in quantitative analysis.

The article “Indo-Nepal Trade and Transit Relations” by Katti (2000) discuses the direction of Nepalese trade along with the issues in Indo-Nepal trade and transit relations. The article clearly points out that the Nepalese trade deficit with India is increasing annually causing high risks in the balance of payments deterioration. In order to improve the trade situation, it is advised to explore new exportable items that increase the volume of earnings, establish the import substitution industries, develop infrastructures and enhance tourism.
The book by Lama (1985) deals with the diverse aspects of Indo-Nepal economic cooperation. Trade, treaties, aids and investments are the major issues of discussion. This book shows that India is one of the major trading partners of Nepal. Up to 1954/55, Nepal had surplus in trade with India. Since then, there is a continuous increase in trade deficit with India. However, because of the continuous increase in Indian currency reserves and invisible earnings from India, the balance of payments remained favourable. Prior to green revolution in India, the terms of trade was in favour of Nepal, but after that, it became against of Nepal. Among numerous factors, the land-locked ness, open border, composition of trade (export of primary products and import manufactured goods), lack of establishment of the import substitution industries, exchange rate systems are pointed as the major factors that has been playing a prominent role for Nepalese trade balance deficit.

The book by Paudyal (1988) is highly analytical. It uses econometric methods and mathematical interpretations as tools for analysis. It shows that Nepal's foreign trade is excessively concentrated towards India with high deficit. The deficit increased in alarming proportion after the implementation of dual exchange rate policy in order to diversify trade. The policy of trade diversification enhanced the exports to countries overseas, but the imports from India remained increasing creating a huge shortage in Indian Currency reserves of Nepal Rastra Bank, which, on the one hand, compelled the authorities to sell the convertible foreign currencies to buy Indian currencies, and on the other, to devalue the Nepalese currency vis-à-vis the Indian currency. Though this book deals with various aspects in the Indo-Nepal trade, it lacks in dealing the other aspects of economic cooperation between India and Nepal.

The book by Banskota (1981) shows that the continuing and increasing trade deficit is the major problem in Nepalese foreign trade. It describes numerous problematic factors between Indo-Nepal trade however, fails to analyse the other entries of balance of payments.

The discussion paper by Shrestha (2003) reveals India as the largest trading partner of Nepal. Nepal's balance of trade with India is always in deficit due to comparatively high imports from India. Trade imbalance, landlockedness, deficit of industrial raw materials in Nepal, inadequate market, inability to compete in the Indian
market, unauthorized trade, etc., have been pointed out as the major problems for the expansion of Nepalese trade in India. This work also analyses the Indian aid and investments in Nepal. As the work provides some new information regarding Indo-Nepal trade and cooperation, it is expected to be useful for the researchers.

Aid/Grants:

The book by Lama (1985) deals about the Indian economic aids to Nepal and places a comment saying that it (aid) bears two facets—economic development and trade and exercise of Indian foreign policy in Nepal. The share of India’s assistance for the development of infrastructures like transport and communication is the highest. Education, health, forestry, industry, water sources are the other important sectors of economic cooperation. Besides these, India also provides loans, grants and technical assistance to Nepal. The proportion of loans is negligible compared to the proportion of grants. Even if the flow of external assistance is increasing rapidly, the pace of economic development is almost stagnant, possibly due to high capital-output ratio and long gestation period of the projects. However, because of foreign assistance, the overall balance of payments is in favourable condition in spite of huge deficit in the current account. It is found that because of various factors, the effectiveness of Indian aid in Nepal is not according to expectation. It is advised that India should be generous towards Nepal and it should give more emphasis for equal distribution of benefits of the major projects.

The book by Pyakurel et al. (2005) is devoted to picture out the Indian contribution in Nepalese development. The economic aid has been continuing almost in one direction from Indian government to Nepalese government. Not only this, there is also a flow of private capital from India to Nepal since 1936 in order to take advantage of the cheap raw materials and labour available in Nepal. India has been providing aid to Nepal in diversified field of co-operation like, transportation, communication, water resources, education, health, agriculture and forestry, industrial development, trade and commerce, urban development and so on. Since Indian economic assistance is made through grants, there is no financial liabilities for Nepal neither in present and nor in future. On the ground that Nepal bears extremely high liabilities of foreign loans, India's
cooperation in terms of grants are considered to be highly advantageous and productive for the economic development of Nepal. However, this book fails to quantify the major implications of such cooperation on Nepalese economy.

Services

The book by Katti (2001) shows that tourism is one of the important sources of earnings of forex in Nepal and makes a significant contribution to Gross Domestic Product (GDP) of the country. Because of exotic natural beauty and rich cultural heritage, it has become a dreamland for tourists. The number of tourists from India is considerably high. The figure includes only the tourists coming through airlines. This book provides some important glimpses of Nepalese tourism industry. It provides the over all figure of earnings from tourism in Nepal. However, it fails to provide the figure of earnings from visiting Indian tourists separately and its contribution to Nepalese balance of payments situation.

The book by Seddon et al. (2001) is the outcome of colossal survey that incorporated the possible sectors including political parties, trade unions and households that provides the information about the remittance flows into Nepal. The remittances both internal and or external have become the means of rural livelihoods of millions of Nepalese. In terms of value, the remittances sent from abroad, contrary to the official records of total Rs.2.9 billion, is estimated to be well over Rs. 35 billion for the year 1997. This figure includes only the remittances sent by the people working overseas and the people working in the public sector in India. The work also "guesstimates" that the total remittances sent by the Nepalese workers abroad and all the Nepalese working in India (including both people working in public sector and private sectors) amount to Rs. 50 billion to Rs. 70 billion. It calculates that the remittance from India alone is on an average Rs. 43.5 billion and the total remittance from abroad comes to be Rs. 70 billion. But this seems to be quite unrealistic because, on the one hand, due to the shortage in Indian Currency reserves in Nepal, Nepal Rastra Bank is bound to purchase Indian Currency by selling dollar and on the other hand there is no significant Indian Currency circulation in Nepalese markets even if it is acceptable there.
CAPITAL ACCOUNT

Private Investment

The book by Lama (1985) gives a short glimpse on Indian private investment in Nepal. Most of Indian private investments are confined to brewery, manufacture of ghee, production of dry cells, woods and crafts, hotel business, and mining operations. However, in most of the cases, Nepal’s ambivalent attitude and “small country fear” became the major hurdles for the expansion of Indian joint ventures in Nepal. But this book does not deal about its contribution to the overall Nepalese balance of payments.

The book by Katti (2001) deals about some historical developments, nature of and constraints for Indian investment in Nepal, but excludes its contribution in the Nepalese balance of payments.

The paper by Shrestha (2003) gives some new information regarding the Indian investment in Nepal. It is noted that there are over 265 approved Indian joint ventures in Nepal of which over 100 are in operation with a cumulative total Indian investment lying in between 36 to 40 percent of the total Foreign Direct Investment (FDI) in Nepal. These joint ventures are associated with different sectors that include tourism, infrastructure, consumer durables and non-durables, and export oriented industries like, garments and carpets. Companies like, Dabur, Hindustan Lever, Colgate etc have been working and exporting their products smoothly to the abroad. But it fails to discuss its contribution to Nepalese balance of payments.

Issues of India’s trade, aid and investment in Nepal are available in isolated studies only. This study is intended to take an integrated approach to Nepal’s balance of payments problem with India particularly since 1991/92–2004/05.

1.4. RATIONALE, SCOPE AND OBJECTIVES OF THE STUDY

Because of the importance, the word “Balance of payments” has been becoming central point of concern among the economists since long back. It has become a popular topic of discussion among them as it provides multi-dimensional picture of economic situation of a country. By observing the situation of balance of payments of a country one can guess how much the nation has developed, what is the economic strength of the country, what may be the living standard of the society, what policies should be taken in
order to correct it, if necessary. Thus, a regular study of balance of payments of a country has become essential for the policy makers and the government. As most of the earlier studies on India and Nepal are either related to trade or politics, and there have been no substantial works regarding to the bilateral balance of payments between them, this work is expected to be of much importance among the policy makers and the academia as it provides a new sight in the Indo-Nepal relations.

Nepal is a land-locked, underdeveloped country. Given that it is characterized predominantly by subsistence agricultural economy, it bears less per capita income of about US$ 250 and low standard of living, hence falls within the domain of a least developed country. Even though the processes of infrastructure building and industrialization and foreign direct investment (FDI) were begun at a rapid rate after the restoration of democracy in 1990s, they became devastated before getting any fruits due to the political instability and protracted internal violence.

It can be clearly revealed through the survey of the existing literatures that a continuous and severe deficit in the trade balance and the balance of payments with India is the chronic economic problem of Nepal. In current account, the net earnings from services and transfers have always been offset by the trade deficit creating a continuous deficit in the current account.

Furthermore, in view of the dependency and geographical location, India can be considered as the rest of the world for Nepal. Nepal is surrounded by India from three sides—East, West and South. The northern border is economically not feasible. India and Nepal have ties since time immemorial in history. The ties have further become stronger in the modern era through increased trade and cooperation. However, despite numerous attempts to diversify trade and thereby reducing the dependency on India, Nepalese dependency on trade with India has been remaining substantially high both in value and volume. In fact, India is the only country with which Nepal has the highest dependency in trade and cooperation.

In addition, the movement of goods, services and factors of production are almost free between these countries. In this backdrop, it has become imperative to find out empirically the major determinants of Nepalese trade and balance of payments with India.
This study, however, has analysed the balance of payments data since 1975/76–
2003/2004. This is because that no significant studies have been done on this subject
matter since then. This study has been trying to analyse all the components of the balance
of payments. Moreover, this study has been carried out mostly by using and analyzing
Nepalese data.

In this whole scenario as mentioned above, the study has set the following
objectives:

1) To analyze the structures of Nepalese trade and balance of payments with India.

2) To analyse empirically, the determinants of Nepalese trade and balance of
payments with India.

3) To prescribe appropriate policy prescriptions to improve the situation of Nepalese
trade and balance of payments with India.

4) To find out proper policies for the effective management of the Indian currency
reserves in Nepal.

1.5. RESEARCH QUESTIONS AND HYPOTHESES OF THE STUDY

Depending upon the above literature the following research questions and
hypotheses are set up.

Research Questions

1) Have the Nepalese trade balance, current account and the overall balance of
payments with India been always in deficit?

2) How has the trade deficit been financed?

3) Has the income from services and transfers more than offset the trade deficit so as
to keep the current account surplus?
4) To what extent have the inflow of remittances and Indian investments been creating a favourable condition for the improvement of balance of payments situation of Nepal?

5) What is the composition of Nepalese trade and balance of payments?

Hypotheses of the Study

I. For Trade:

The study has tested the following hypotheses for Nepalese exports to and imports from India:

a) The primary determinants of Nepalese exports to and imports from India are Nepalese gross domestic product, relative prices and net domestic Nepalese assets/credits.

b) Nepalese imports from India increases with the levels of Nepalese reserves of both convertible and inconvertible currencies with the monetary authority of Nepal.

II. For the Level of Nepalese Net Reserves of Inconvertible Currencies (NFAI)

For the level of Nepalese net reserves of inconvertible currencies (NFAI), the study has set the following hypotheses:

a) The level of Nepalese reserves of Indian currencies increases as Nepalese income, cross rates between Indian and Nepalese currencies vis a vis US dollar, and the ratio of interest rates on Nepalese currency relative to Indian currency increases.

b) Further, the level of Nepalese reserves of Indian currency increases as the relative Indian consumer price index increases as also the net reserves of convertible currency and net domestic credit flow increases.
III Other Hypotheses

a) Transfers from India have made a significant contribution for the improvement of Nepalese current account and hence the balance of payments situation with India.

b) The effective management of Indian currency reserves in Nepal can help to improve the adverse situation of Nepalese balance of payments with India.

c) Indian aid and investment in Nepal improves the Nepalese balance of payments situation but is inadequate to bridge the current account deficit.

1.6. METHODOLOGY AND SOURCES OF DATA

The research has been carried out using all the empirical, analytical and descriptive methods. The data has been processed using E-Views and Excel computer packages. Various statistical tools like, percentages, averages, standard deviation correlation, and regressions have been applied supported by different tests like Durbin-Watson test for serial correlation, F test, multi-collinearity test and unit root test etc. to arrive at accepting/rejecting some the hypothesis mentioned above.

Primarily the analysis has been based on the primary data published mostly form Nepal Rastra Bank (NRB), Ministry of Finance (MOF), Central Bureau of Statistics (CBS), Ministry of Commerce and Industry, Tourism Board, Hotel Associations, Reserve Bank of India (RBI), World Bank (WB), International Monetary Fund (IMF), Asian Development Bank (ADB), Directorate General of Commercial Intelligence and Statistics (DGCIS), Indian Embassy in Kathmandu and other related sources. The secondary sources of data like book and articles have also been used for the collection and analysis of information.

The sources of data, methods of collecting and arranging of data, formulation of research models, and the propositions and assumptions underlying on it have been fully discussed in the empirical analysis chapter.
1.7. CHAPTER SCHEME

The thesis has been divided into eight chapters under the following scheme.

CHAPTER I: Introduction

The first chapter has examined the literature on the subject, examined the various theoretical approaches to the problems, and defined the scope, significance and objectives of the study.

CHAPTER II: Analysis of Merchandise Trade

The second chapter has dealt with the historical evolution of Indo-Nepal merchandise trade. An attempt to analyse the nature, trend and problems in Indo-Nepal trade has been made in this chapter.

CHAPTER III: Analysis of Non-Merchandise Trade

The third chapter will be analysis of the Nepalese non-merchandise trade with India in which an attempt has been made to analyze bilateral services and transfer flows. In this chapter some brief studies on Indian aid, remittance and tourism have been made. Further, all components of the services and transfer accounts have been dealt in separate headings in chapter IV.

CHAPTER IV: Capital Account Analysis

In this chapter an attempt has been made to study the Indian investment capital flow and their impact in Nepalese economy. The effects of Indian investments on Nepalese balance of payments have been discussed in detail in this chapter.

CHAPTER V: Overall Balance of Payments Analysis.

In this chapter the overall Nepalese balance of payments situation with India, its nature and trend, the major sources for deficit and sources of financing for deficit have been discussed.
CHAPTER VI: Management of Indian Currency in Nepal

In the scenario of depleting the reserves of Indian currency of monetary authority of Nepal, this chapter has been devoted to find out the problems and prospects of Indian currency management in Nepal.

CHAPTER VII: Empirical Analysis

This chapter has made the empirical analysis for the improvement of Nepalese balance of payments with India using various mathematical and econometric techniques, using mainly monetary approach.

CHAPTER VIII: Conclusion

The last chapter will be the conclusion chapter in which all the summaries and conclusions of the findings have been dealt.