

CHAPTER 2

THEORIES OF BALANCE OF PAYMENTS - A CRITICAL REVIEW

2.0. INTRODUCTION

Theories of BoP are concerned with identifying possible determinants of BoP, and specifically analysis of policies for preserving BoP equilibrium. Analysis of BoP is essentially a post-war phenomenon. Prior to the Keynesian revolution, problems of international disequilibrium were discussed within the classical conceptual framework of 'the mechanism of adjustment', the actions of the monetary and other policy-making authorities being subsumed in the system under consideration. The Keynesian revolution however, has introduced the notion of chronic disequilibrium into the analysis of international monetary system. The present chapter intends to critically review the several competing theories of BoP. The diversified views on the nature of BoP phenomenon culminated in its partial understanding. The question whether the phenomenon is real or monetary remains as yet an unsettled issue. While the conventional theories view BoP as a real phenomenon determined by real forces like income, expenditure and relative prices, the modern monetary theory formulates BoP as a monetary phenomenon establishing a link between state of domestic money market and level of international reserves. An examination of relative merits and demerits of each theory, it is hoped, would provide a basis for understanding the BoP phenomenon.

2.1. CLASSICAL 'MECHANISM OF ADJUSTMENT'

Prior to 1930s, no comprehensive theory was available for analysis of BoP. Instead there was a well worked out theory of mechanism of international adjustment under the gold standard. This approach, known as the Classical

Price-Specie-Flow mechanism or Humes mechanism sought to analyze automatic adjustments that would take place pursuant to a particular exogenous change. Deriving motivation from the classical model, the mechanism assumes that citizens in deficit(surplus) country would experience a negative(positive) real balance effect. And because of changed relative prices and real balances, residents of deficit country would purchase less from abroad, and citizens of surplus country would increase their imports. This process would continue until payments balance is restored.

The classical approach to BoP adjustment contained no analysis, however, of the effect of exchange rate changes as a substitute in a fixed-price world for flexible domestic prices, which was more relevant to the period after 1931 when the gold standard collapsed as a system of international payments. David Hume used this mechanism to refute the mercantilist belief that a country could achieve a persistent balance of trade surplus by the mercantilist policies of import protection and export promotion.

The history of BoP theory since the early 1930s has been one of successive "approaches" of increasing degree of theoretical sophistication. Johnson (1977a) has classified the various approaches into five types viz., (i) the simple "elasticity" approach, (ii) the "absorption" approach, (iii) the Keynesian "multiplier" approach, (iv) the Keynesian "policy" approach, and (v) the "monetary" approach. It may also be possible to broadly classify these approaches into two depending on whether BoP is treated as a real or a monetary phenomenon.

2.2. TRADITIONAL APPROACHES

The first attempt to view BoP as a real phenomenon has been made by Joan Robinson (1937) who formulated the elasticity approach as a response to the need for a theory of BoP adjustment under flexible exchange rate. The

elasticity approach and its extension Keynesian multiplier are concerned with the following three questions :

- (i) What are the conditions for currency devaluation to improve a country's BoP on current account ?
- (ii) What will be the effect of currency devaluation on the level of domestic activity, and how will this affect BoP ? And what are the conditions for devaluation to be successful ?
- (iii) What will be the effect of devaluation on terms of trade of the devaluing country ?

The elasticity approach finds answers to the above questions in terms of the Marshall-Lerner condition which is derived in a two-country two-commodity context on the assumption that underemployment exists in each country and that domestic price of each country's exports goods is given.

The basic equation of the Marshall-Lerner condition is given by

$$dB/de = -X(1 + \eta_x + \eta_f) \quad \dots(2.1)$$

where dB is the change in home country's trade balance, measured in units of domestic currency, de is the change in exchange rate, X is exports, x and f are suffixes representing exports and imports respectively (both measured in units of domestic currency) and n_i is elasticity of demand for i_{th} good, $i = x, f$.

From equation(2.1)

$$dB/de > 0 \text{ if } |\eta_x + \eta_f| > 1 \quad \dots(2.2)$$

That is, devaluation of a currency will improve BoP position if the sum of domestic elasticity of demand for imports and foreign elasticity of demand for exports exceeds unity.

The Keynesian multiplier approach is a modified and extended version of the elasticity analysis in the sense that it takes care of the limitations of the latter. A major drawback of the elasticity approach has been that it employs partial equilibrium analysis for analyzing an aggregate phenomenon like BoP. As a result, it ignores cross-correlations among relative goods prices and demand and supply. The Multiplier approach is based on a mixture of Hicks-Mosak general equilibrium analysis with Keynesian income-multiplier analysis which finds its development in the works of Harberger (1950), Laursen and Metzler (1950), and Meade (1951). From the Keynesian point of view, the elasticity analysis ignores the net multiplier effects of changes both in export proceeds and in spending on home and exportable goods associated with changes in import expenditure - changes in trade balance. The assumptions underlying the derivation of the Marshall-Lerner condition imply that terms-of-trade changes are the only initial effect of devaluation. This approach does not take into account the effect of any change in exchange rate on real output and money variables of the economy. It explicitly assumes that any improvement in trade balance following devaluation is matched by saving in the form of accumulation of foreign exchange reserves, and that the resulting accumulation of hoards of foreign exchange has no feedback on the real economy.

The focus of foreign trade multiplier analysis centers on the automatic adjustment that would take place if a shift in a country's payments position occurred. Suppose that a country, initially in equilibrium, experiences a downward shift in demand for its exports, with a consequent initial deficit. The reduction in exports would lead to a decline in home-country income, which in turn would reduce expenditures via the multiplier. With a positive

marginal propensity to import and to save , imports would decline by some fraction of the initial adverse shift in trade balance. This could partially offset the initial shift in equilibrium position.

The multiplier approach makes good the deficiency of the simple elasticity approach by recognizing and allowing for the implications of changes in expenditure on output, income, expenditure, and again output on BoP equilibrium. The analysis is based on the following assumptions :

- a. The existence of unemployed resources whose rate of utilization can vary without ulterior consequences as a result of devaluation.
- b. An infinite elasticities of supplies, making changes in exchange rate and terms-of-trade.
- c. Exchange rate is merely a control device over terms-of-trade.

According to this model the effect of devaluation on trade balance may be obtained from the following equation :

$$\frac{1}{M} \frac{d(B_h/r)}{dr} = \frac{s_h s_f (\eta_h + \eta_f - 1)}{s_h m_f + s_f m_h + s_f s_h} \quad .(2.3)$$

where M is imports, r is price of foreign currency in domestic currency, subscripts h and f denote home and foreign countries, s and m refer to marginal propensities to save and to import, and η represents elasticity of imports. This formula seems to suggest that apparently the more sophisticated Keynesian general equilibrium model is similar to the earlier elasticity model, since both seem to depend on the Marshall-Lerner condition - "sum-of-the-elasticities-minus-one".

The post-war economic conditions rendered the elasticities approach unsuitable and necessitated an alternative approach to analysis of BoP under conditions of post-war open inflation. Alexander's absorption approach is a major post-war development to this effect. This approach has been considered as the first step towards development of a BoP model within a macro-economic framework. The approach portrays a country's deficit in foreign trade as an excess of absorption over income, ie., of investment over saving. Devaluation can remedy this over-absorption. Consequent upon a devaluation domestic prices of imports would rise, so that to restore real cash balances to the desired level, it becomes necessary to 'hoard' money, thereby reducing absorption. The main formal development of the absorption approach is found in the works of Alexander (1952), though many others including Meade (1951), Tinbergen (1952) and Johnson(1958) have contributed. The "absorption" approach of Alexander was an attempt to bypass the "elasticities" issue and go to the heart of the matter, the then prevalent inflationary conditions. Johnson (1977b) describes it as half-way house to the full Keynesian analysis of BoP policy, another half-way house on a different route to the same destination being the extension of the "elasticities" approach by the addition of Keynesian multiplier theory.

The absorption approach treats BoP not simply as excess of residents' receipts from foreigners over residents' payments to foreigners but rather as excess of residents' total receipts over total payments. Formally,

$$B = R_f - P_f \quad .(2.4)$$

where R_f is the excess of receipts of residents from foreigners, and P_f is payments by residents to foreigners. Since all payments by residents to residents (R_r) are simultaneously receipts by residents from residents (P_r), equation (2.4) can be written as

$$B = R_f + R_r - (P_f + P_r) \quad (2.5)$$

Hence,

$$B = R - P \quad (2.6)$$

where R is total receipts by residents, and P is total payments by residents.

At the heart of the absorption approach is the accounting identity viz.,

$$B \equiv X - M \equiv Y - A \quad \dots(2.7)$$

where B is trade balance, X is exports, M is imports, Y is income and A is absorption. The above identity may be written in first differences (A) as :

$$\Delta B = \Delta Y - \Delta A \quad (2.8)$$

Equation (2.8) reflects change in B as a difference of changes in Y and A. Further, a change in A as a result of devaluation may be decomposed into a direct and an indirect change, the latter being the result of a change in Y due to devaluation. The indirect change in absorption depends on propensity to absorb. Devaluation may directly change the amount of real absorption associated with any given level of income. The change in A may be written as

$$\Delta A = c\Delta Y + \Delta D \quad (2.9)$$

where c is the sum of marginal propensities to consume and invest, and ΔD represents the direct effect of devaluation on absorption. By substituting (2.9) in (2.8), we get

$$\Delta B = (1-c)\Delta Y - \Delta D \quad (2.10)$$

The above equation states that the effect of devaluation on trade balance depends on : (i) the effect of devaluation on real income; (ii) the magnitude of marginal propensity to absorb 'c' and (iii) how devaluation directly

affects absorption at any given level of income - how large is AD. Alexander divides his subsequent discussion into two parts viz., indirect effect and direct effect. The income effects of devaluation are: (1) idle resource effect and (2) terms-of-trade effect. Under direct effects he recognizes (1) cash-balance effect, (2) income re-distribution effect, (3) money illusion effect and (4) various miscellaneous effects.

If there are unemployed resources, increase in exports following devaluation brings about an increase in income via foreign multiplier. Also, devaluation causes a deterioration in terms-of-trade and hence a reduction in the country's real income. Hence the "idle-resource" and "terms-of-trade" effects upon income are opposite in direction, so that AY may have either sign. As a result, the effect of devaluation on AY remains ambiguous. As regards the effect of devaluation upon income and consequent income effect upon absorption, trade balance will improve only if c is smaller than unity. But, while marginal propensity to consume is usually less than unity, c , the combined marginal propensity (to consume, invest, and spend publicly) may well be greater than unity. If so $(1 - c)AY$ will be negative and trade balance will deteriorate. As long as c is less than unity, any increase in income will increase absorption by less than the increase in income, and thus trade balance will improve. If c is larger than unity, devaluation will have a negative effect on trade balance, because the induced effects on absorption will be larger than the original effects on production.

The absorption approach suggests that removal of BoP deficits would normally require a simultaneous adoption of expenditure-switching and expenditure-reducing policies. An expenditure-switching policy implies that devaluation reduces imports and encourages exports in deficit country and switches demand in surplus countries for imports. If the Marshall-Lerner condition is met, these effects tend to improve the deficit country's trade balance but at the same time raise the level of aggregate demand in the

deficit country via increased net exports. If resources in the country are near full capacity use, then a domestic expenditure reducing policy, such as a tax increase, would be necessary to avoid inflation.

The popularity of this theory has been due to its apparent close linkage with monetary sector of the economy in the sense that real expenditure can exceed real income if supply of real money exceeds demand for real money balances. In other words, deficit (or surplus) in BoP can be linked with excess supply (or excess demand) in money market.

Economists especially Machlup (1955) have questioned (i) the validity of the underlying framework of analysis, and (ii) Alexander's concentration on aggregate magnitudes and neglect of relative prices. Alexander's approach recognizes the need to rebuild real balances in the face of price rises after devaluation, but ignores reduction in money supply which is the counterpart of deficit which caused devaluation.

2.2.1. Elasticities and Absorption Approaches : Controversy and Synthesis

The absorption approach has been the target of a heated debate in the 1950's. Machlup, who is a strong critique of the absorption approach points out that it is not correct to neglect relative price of imports and exports (and so elasticities) to concentrate on absorption and income. These prices have a crucial importance in determining terms-of-trade effect and may also influence marginal propensity to spend. According to Machlup, Alexander's fundamental equation was nothing more than a definition, and therefore his absorption analysis was nothing more than an implicit theorizing based on tautologies." The accounting definitions do not allow one to draw causal inferences - that B depends on Y and A in a causal sense. Furthermore, in Alexander's analysis, all quantities are real variables, while from a BoP stand point what ought to be considered are money values. Since it is clearly

possible for "real" and money balances to move in opposite directions, an analysis based on real values may well be misleading from a policy maker's point of view.

Several attempts have been made to reconcile the elasticity and absorption approaches to analysis of devaluation. The spirited controversy between Alexander and Machlup on the relative merits of these approaches to the problem of determining the effect of devaluation appears to have ended in the former's attempt to synthesize the two approaches. His synthesis consists of treating the initial effect of a devaluation on BoP (determined by the elasticities) as multiplicand to which a multiplier (determined by the propensities) is applied to obtain the final changes in national incomes of the two countries concerned and hence the induced changes in home country's imports and exports.

Alexander's synthesis has been criticized by Tsiang (1961). He pointed out an inconsistency in super-imposing of a multiplier upon the elasticities solution of effect of a devaluation. According to him, unless the supplies of exportables and domestic goods in both countries concerned are all infinitely elastic, so that prices in both countries (except prices of imports) will remain constant, the multiplier effect of the initial change in trade balance will bring about further changes in relative prices, and hence further substitution between imports and domestically produced goods in both countries. Thus if the conventional elasticities solution is treated as a sort of multiplicand to which a multiplier is to be applied to obtain the final effect, then multiplier itself should again involve the relevant elasticities that are in the multiplicand. There can be no neat dichotomy of the final effect of a devaluation into a part that consists of the elasticities solution and another that consists of the multiplier (or absorption) solution. The total effect of a devaluation must be analyzed in a comprehensive system in which changes in incomes, prices and outputs are all

taken into consideration.

Alexander in his approach has brought out a fundamental fact viz..that, a negative trade balance necessarily implies national expenditure in excess of national income. This obvious truth has been underscored by Machlup who emphasized the role played by credit creation in sustaining excess expenditure in case of trade deficit and concluded that "nothing can be said about the effects of a devaluation unless exact specifications are made regarding the supply of money and credit". According to Tsiang, the contribution of Alexander-Machlup dispute is the rediscovery of the important role played by supply of money in BoP analysis. Tsiang has demonstrated the crucial role that could be played by monetary factors and showed in a more comprehensive way how relative prices and income-expenditure adjustments combine to determine the effect of a devaluation.

In an attempt towards a fuller reconciliation of elasticity and absorption approaches Yeager(1970) has pointed out that if the points of contact between the absorption and elasticity approaches had been obvious, the two would have amounted to one single approach, requiring no reconciliation. Actually, each employs its own distinct concepts. These give each approach an advantage over the other in drawing implications from certain types of empirical facts and in handling certain questions.

2.2.2. Keynesian "Policy" Analysis : The Meade - Tinbergen Model

The question of attaining external balance in foreign trade and BoP, and internal balance in domestic price stability and full-employment simultaneously finds its expression in the Keynesian "policy" analysis. This integrated model in an open economy has originated in Meade (1951) and Tinbergen (1952). The model assumes that the country under analysis has a policy authority which utilizes "financial" (fiscal and monetary) and exchange

rate policies in order to implement objectives with respect to full employment (internal balance) and BoP (external balance).

The central point of this theory for policy is that, if a country seeks to attain a BoP surplus while maintaining full employment, the solution is to combine a devaluation with a deflation in exactly the right proportions to maintain full employment total demand for output (foreign plus domestic) while reducing total domestic demand for foreign and domestic goods below the level of total domestic output by fiscal or monetary restraint. Similarly, the non-devaluer must inflate expenditure.

The association of a trade balance improvement with a devaluation depends on fulfillment not only of the "elasticity criterion" (the sum of the elasticities of import demand being greater than unity) but also of the "classical transfer criterion" (the sum of the marginal propensities to import out of expenditure being less than unity).

Johnson (1976a) has pointed out that the Keynesian "policy" approach ignores the stock-flow adjustment consequences of reserve flow associated with a BoP deficit or surplus. This adjustment process means that the combined policies of devaluation and deflation cannot produce a flow equilibrium BoP surplus. Instead, period-by-period expansion of cash balances consequent on BoP surplus will gradually raise the level of expenditure with an increase in domestic price level sufficient to reduce exports and increase imports sufficiently to make room for additional domestic demand. Such an increase is equivalent to an appreciation of foreign exchange rate, which partially offsets the initial devaluation; and in the long run the economy must return to equilibrium position i.e., nominal devaluation is exactly offset by an inflation of domestic prices.

It may be remarked that the absorption approach is analytically superior

to elasticity approach. However, neglect of the importance of elasticities and relative prices is not justifiable because price effects and income effects cannot be dichotomised. Relative price changes, combined with elasticities, affect income, and income changes affect relative prices and elasticities. Hence it may be concluded from the foregoing discussions that the absorption and elasticity approaches to the analysis of devaluation would lead to the same conclusions.

2.3. THE MONETARY APPROACH

The monetary approach to BoP (MABP) represents a revival of the price-specie-flow theory originally advanced by David Hume. The monetary approach was first outlined in the treatment by Hahn (1959) and further developed by Mundell (1968), Johnson (1972), Swoboda (1973), Dornbusch (1973), and Mussa (1974). It suggests that reserve flows are essentially a monetary phenomenon and thus, can be analyzed in relation to small country's money market. Hence it is argued that any disequilibrium in BoP is a reflection of disequilibrium in money markets.

The Monetary approach emphasizes on the monetary aspects of BoP adjustments under a system of fixed exchange rates rather than relative price and income effects that were the preoccupation of the elasticities approach and formed a major part of the absorption approach. It recognizes the fact that real variables affect BoP and exchange rates but they operate only through monetary channels.

The MABP may be explained with the help of a model which consists of five equations. The first element of the model is demand for money. This is taken to be a stable function of real income(Y), rate of interest(i) and price level(P)

$$M_d = L(Y, i, P) \quad (2.11)$$

$$L'(Y), L'(P) > 0 ; L'(i) < 0$$

The second element is supply of money, which is defined as the sum of domestic assets of the banking system (domestic credit, D) and country's foreign exchange reserves (R)

$$M_s = D + R \quad (2.12)$$

Abstracting from the short-run adjustment process, in the long-run there is equilibrium in money market. Thus

$$L(Y, i, P) = D + R \quad (2.13)$$

From equation (2.13), we have

$$\Delta R = \Delta L(Y, i, P) - \Delta D \quad (2.14)$$

Since $\Delta D = DCE$ (domestic credit expansion), we have

$$\Delta R = \Delta L(Y, i, P) - DCE \quad (2.15)$$

The above equation summarizes the basic contention of the MABP that a deficit or surplus - as represented by changes in country's foreign exchange reserves is equal to the difference between change in demand for money and change in domestic credit. It follows that a continuous BoP deficit can occur only if authorities allow domestic credit to expand faster than demand for money.

The essence of the MABP is based on the Walras' Law according to which the sum of excess demands for goods and services, bonds and securities and money is zero. Thus

$$ED_g + ED_b + ED_m = 0 \quad (2.16)$$

when subscripts g, b and m represent goods, bonds and money respectively.

In a fully employed economy closed to international trade in goods and assets, excess demand will be eliminated by changes in prices. But in an open economy such excess demand will be reflected in different net international flows in BoP accounts.

The BoP is constrained by :

$$(X_g - M_g) + (X_B - M_b) + (X_m - M_m) = 0 \quad \dots(2.17)$$

where X and M represent exports and imports. Thus the three accounts, current, capital and money must sum to zero. The budget constraint implies that if two markets are in equilibrium so too must the third market be. Thus an analysis of BoP could concentrate on current and capital accounts and ignore money account.

Though the MABP has emerged as the most celebrated model of BoP in international monetary theory, it is argued that, the model suffers from some internal contradictions. Many economists have questioned the validity of fundamental propositions of the approach that a surplus or deficit in BoP reflects stock disequilibrium between demand for and supply of money. The direct link between BoP and excess demand for money is of questionable **validity**. **Rabin** (1979) has demonstrated that a surplus in the BoP may be accompanied by an excess supply of money, while a deficit in the BoP may be accompanied by an excess demand for money by considering equilibrium in the market for non-traded goods. According to him a change in tastes in the home country away from traded goods to non-traded goods creates an excess supply of money through a BoP surplus. This excess supply helps generate upward pressure on price of non-traded goods.

Another notable point is that the proponents of the MABP contradict themselves with regard to specification of money demand function. Different versions of demand for money function are used either for exposition of the theory or for application of the theory to particular problems. According to Tsiang (1977) "there are two basic types of demand function for money employed in the monetary theory of BoP. Either nominal money balances are described as a function of real income, interest rate, and price level, or nominal money balances are treated as a function of money value of total real wealth and interest rate".

The MABP has been criticised for ignoring fiscal aspects of creating domestic credit. Kreinin and Officer (1978) has recognised the need to treat government budget constraint as one of the sources of domestic credit. According to them, government deficit may be financed by sales of government securities to private sector. However, the implications of government budget constraint are ignored by the MABP. Thus no specification is given of the means by which the money supply is expanded.

2.4. ANALYSES OF BoP DISEQUILIBRIUM : A SUMMARY

The three major approaches viz., elasticity, absorption and monetary approaches are distinct in their nature because each employs its own distinct concepts and looks upon the question of correcting BoP disequilibrium from different angles. These give each approach an advantage over the other in drawing implications from certain types of empirical facts and in handling certain questions.

The elasticities approach attributes a deficit on current account of BoP to wrong prices, including exchange rates, and centers attention on how sensitively imports and exports respond to price changes. The absorption approach views a deficit specifically on current account as an excess of

country's total absorption of goods and services over its total production. The MABP on the contrary links a deficit to an excess supply of money. The elasticities and absorption approaches deal with BoP surpluses or deficits as flow equilibria, assuming either explicitly or implicitly, that the monetary implications of a lasting deficit or surplus on external account can be offset or sterilized by monetary authorities. A distinctive feature of the MABP however, is that it examines the implications for stock equilibrium of continuing flow of financial assets required to finance a continuing BoP surplus or deficits. According to Johnson (1976b) : "the essential difference between the MABP and the other post-Keynesian approaches ... is that the MABP formulates the problem of BoP as a monetary phenomenon to be analyzed with the tools of monetary theory, whereas the other approaches formulate it as a residual difference between real flows determined by other flows and relative prices".

2.5. THE MISSING LINKS

In one way or other, the various approaches/theories reviewed above are insufficient to analyze BoP. None of the underlying macro-theoretical frameworks in isolation can be used as a guide for the construction of an integrated model of BoP for a developing country like India because all of the models do omit certain essential components of analysis of BoP.

Miller (1978) questions the very monetarists' perspective on the relationship between state of money market and level of international reserves or BoP. He has pointed out that there are two situations where BoP bears no necessary relationship to money market. First is the situation when the central bank pursues an interest rate target type monetary policy rather than using a monetary aggregate as target. At any point in time the authorities will automatically adjust money supply so that money market clears at the desired rate of interest. Thus the MABP cannot be used to explain BoP when

the authorities control interest rates.

The second situation as Currie (1976) has pointed out, arises when there is a nonzero value for the government budget. The MABP formally ignores government spending and taxing, and government budget constraint. Currie has argued that the MABP had implicitly omitted to allow for the effects of government budget constraint and necessary longer run interrelationship between government fiscal surplus and BoP surplus. Further, BoP can be seen not to be automatically equilibrating (except perhaps through slow working and costly price adjustments), so that discretionary government intervention is seen as necessary to maintain external equilibrium.

Currie has pointed out that a disequilibrium in money market does not necessarily have to be reflected in a BoP surplus or deficit, because it could be offset instead by a deficit or surplus on government budget i.e., inflow (outflow) of money from a BoP surplus (deficit) need not disturb equilibrium of money market if accompanied by a government budget surplus (deficit). Any model for a developing country must recognize the linkage that exists between government fiscal operations and supply of money because government budget constraint and BoP constraint are precisely analogous to an open economy, and must necessarily be analyzed together. Against this, Nobey and Johnson (1977) counterpose the argument that governments are neither able to sustain continuing depletion of foreign reserves nor willing to accumulate reserves indefinitely.

Adherents of the MABP tend to assert that only monetary policy can have a lasting effect on BoP by reducing growth of domestic credit relative to growth in money supply; and that conventional policies like tariff, quota, devaluation etc., can have only a transitory effect. In this context Mussa (1976) argues that, for both the Keynesian fixed-price models and monetarist flexible price models, "in the long run, tariff has no effect on the BoP but

does have an effect (under fixed exchange rates) on the level of a country's foreign exchange reserves, brought about by a temporary change in the BoP". Currie has pointed out that this view is erroneous for underemployment Keynesian fixed-price models. For such models expenditure-reducing and expenditure-switching policies in the form of changes in government expenditure or tax revenues, imposition of import quotas or tariffs, or devaluation are shown to have permanent effects on BoP. With regard to the Keynesian model of BoP, Kuska (1978) argues that almost all models in the Keynesian BoP literature suffer from internal contradictions and deficiencies which make them unsuitable to provide a comprehensive Bop theory.

2.6. CONCLUDING REMARKS

This chapter has examined the basic theories of BoP found in the literature. It is observed that the conventional models including the Keynesian model are not adequate for analysis of BoP phenomenon. The survey reveals that omission of certain essential components of analysis of BoP including fiscal operations of the government and monetary policy of the central bank, render the theories unsuitable in certain contexts. In a country like India where persistent budget deficits exist, the link between budget deficit and BoP has to be recognized. None of the models reviewed seem to emphasize on this linkage. However, the monetary model to a certain extent can explain the problem. While all the theories together have identified the most important causes of BoP problem, each of the theories in isolation seem inadequate. It is evident from this review that the existing theories do not fare well in the Indian context in view of the fact that they do not agree upon the simultaneous interaction of real and monetary forces, consistent with institutional realities to determine the payments position. Hence, a broader analytical approach/model should be developed so that all the proximate causes - both monetary and non-monetary - of BoP problem be properly identified and corrective mechanisms suggested.