## THE TRANSFER PROBLEM

------- A SELECTIVE SURVEY

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## PREFACE

The Transfer Problem bulks large in the literature of international trade theory, both because international economic relations have abounded in transfer problems of various kinds and because the problem offers an attractive opportunity for the application of new theoretical techniques.

- Johnson (1961)

To begin with, we have made an effort to disentangle some of the important strands of customary theoretical economics, which have to do with the elucidation of major conceptual and operational aspects of the Transfer Process. It includes the elaboration of application of the transfer theory, namely, "The Transfer Problem and Exchange Stability" by Johnson (1961), which is, in the opinion of Scammell (1974), "perhaps the most interesting single article" in the literam ture on the Transfer Problem. (Scammell, 1974, p. 567).

Machlup's (1964) later thinking has been highlighted, which unfolds the "Restatement of the Transfer Problem" and the formation of some new concepts. The information gained from the study of historical cases is used to assess the role of "Money Supply" and forces of "Economic Growth" on the Transfer Process. "Transfer Difficulties" have been identified
and their relative importance judged in the light of new experience. The link between the "Budgetary Problem" and the "Transfer Problem" is established, pointing out the futility of separating one from the other. He is an optimist and bea lieves that "changes in real incomes" are normally enough to bring out the real transfer.

The relevance of transfer propositions in the context of such international issues of today as "Petrodollars", "The Dollar Crisis", and "Developmental Finance" has also been studied, keeping in view the observations of Jones (1979), Chacoliades (1981), Kindleberger (1971), Heller (1977), Scammell (1974), and others.

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## CHAPTER I

## STATEMENT OF THE PROBLEM

## $1.1 \frac{\text { What Necessitates the Study }}{\text { of the 'Transfer Problem'? }}$

The major focus of attention for a balance-of-payments economist is directed on exports and imports of goods and services. They are typically the largest entries in the balance of payments. However, the other crucial categories of transactions encompass"Unilateral Transfers" and "Long-term Capital Movements".

The entries of unilateral transfers and long-term capital movements are studied simultaneously. A unilateral transfer is a gift - a movement of assets from one country to another without expectation of payments. A capital movement, on the other hand, creates future obligations leading to the expectation of interest or dividends plus the principal itself. However, as Chacoliades (1981) has pointed out, in the current period they both give rise to the need of transferring purchasing power from one country to another (from the donor to the beneficiary or from the lender to the borrower).

A capital movement can be broken down into two transfers : a transfer of the original capital from the lender to the borrower constitutes the first part; the second part includes the reverse transfer of paying back the principal and
interest or dividends. The repayment is usually spread over a series of managed instalments.
"The difficulties that arise when a country needs to transfer purchasing power to another country form the main elements of the "Transfer Problem". (Chacoliades, 1981, p.347).

The two striking examples of the transfer problem faced by the international monetary order of today are the 'Dollar Overhang' and the 'Petrodollars'. In the first case, because of the help given by USA after World War II to the war-ravaged countries and to some developing economies, the rest of the world has collected massive amounts of dollar claims against that country. The monetary system of USA has to adjust itself so that the dollar is saved from an excessive strain. The petrodollar crisis has arisen because of huge foreign exchange earnings of a small number of Middle Eastern and other oilmexporting nations. These vast resources accumulated over a relatively short period have to be used in an optimal fashion taking into consideration the desires of poor and rich countries involved in the turmoil.
1.2 $\frac{\text { Situations Requiring the }}{\text { Wransfer of Capital" }}$

The transfer of capital from one country to another is a common process of international trade. The savings of a rich country may be lent to the people or the government of a poor country. Developing countries are given grants-in-aid by
such competent authorities as are recognised to do so by the legal framework of the concerned nations. Defeated countries make reparations payments to victors. Corporations in one country acquire capital assets in another. 01d debts have to be settled. Immigrants transfer payments. All these are examples of capital transactions between countries. They involve money capital in one currency being transferred via the exchange market to another; they lead to the transfer of money as well as real resources.

The purchasing power of the residents of a borrowing country is enhanced by the money transfer. But, as noted by Scammell (1974), unless it leads to an exactly equal import surplus, there will be no "real transfer" of goods and services. The increased purchasing power will only press upon domestic goods, bidding up their prices if the country is already at full employment, or, raising income and output, if it is not.

### 1.3 The Definition

"The process of transferring the real wealth which is inherent in borrowing or lending is referred to as the "Transfer Problem". (Scammell, 1974, p. 370).

## $1.4 \frac{\text { Unilateral and Bilateral }}{\text { Transfers }}$

A bilateral transfer involves the exchange of commodities for cash. The two sides of the exchange here confront
each other directly. Expenditure on transport by tourists represents a bilateral transfer, since money is exchanged for real services.

Clear cases of unilateral transfers are free gifts.
There are intermediate cases also. If a loan is granted which is not expected to be repaid during the period of accounting, it is a unilateral transfer. Interest payments are in a sense bilateral transfers, since the use of capital is a real service. But as this item - the services of capital does not appear in the balance of trade and services, "interest payments must nevertheless be regarded as a unilateral transfer". (Haberler, 1956, p. 63).

## 1. 5 Domestic Trade and International

Trade in this Context
The balance of payments cannot be out of equilibrium in the long run. That is why unilateral transfers must be made in kind ultimately.

Then, it is alleged whether domestic trade payments differ in this respect from those of foreign trade. Foreign contracts are finally settled through the payments of goods and services and domestic payments are made in money. This distinction is not correct. A plurality of individuals within a country also cannot spend more than it receives in the long run. "Even in domestic trade, unilateral transfers are carried out finally in goods and services. But the flow of goods goes
unnoticed, because it does not pass a political boundary and is therefore not recorded". (Haberler, 1956, p. 64).

### 1.6 Financial Transfer Versus Real Transfer

A financial transfer has to be distinguished from a real transfer. Both of them, singly or simultaneously, can confront difficulties. The financial transfer refers to the movement of financial assets from the transferor to the transferee through the foreign exchange market. The real transfer refers to the induced movement of goods between countries.

Let a financial transfer of Rs. 100 be made from India to Japan. There is a subsequent movement of goods and services from India to Japan. If the value of this real flow is also Rs. 100, the transfer is said to be effected. The transfer is said to be overeffected if this resultant value exceeds Rs. 100; in case it falls short of the target, it is said to be undereffected.

A problem arises only if the transfer is overeffected or undereffected. A state of balance-of-payments disequilibrium is created, which must be corrected somehow.

The degree to which a transfer is actually effected depends on the manner in which the financial assets are raised in the transferor country and how they are used in the transferee country. If the funds come out of past savings in the transferor country and thereafter augment the savings in the transferee, the commodity flows will remain unaffected. In
contrast to this situation, if the funds to be transferred are raised by taxing the incomes of the concerned residents, to be actually spent on additional goods and services by the recipients in the other country, there will be definite repercussions on physical flows bringing out changes in the balance of payments of the two countries. The magnitude of the eventual real transfer is a function of marginal propensities to save and to import in both countries. Any one of the three possible situations can arise.

The real transfer takes the form of either increased exports or reduced imports by the transferor country, or both. This is the only way in which real capital can be transferred between countries.

The transfer problem is not concerned with the longrun effects of the movement of real capital between countries. As emphasised by Chacoliades (1981), the problem does not cover within its scope issues like the effects on the production possibilities frontier, comparative advantage, marginal proa ductivity of factors, and income distribution. The transfer problem is a standard exercise in the balance-of-payments adjustment mechanism. This fact explains why unilateral payments, such as reparations, not necessarily giving rise to capital formation in the recipient country, are lumped together with payments like corporate borrowing and direct investment, which do give rise to the formation of capital assets.
"The transfer problem may be viewed as the inversion of the balance-of-payments problem". (Chacoliades, 1981,p.349). Any actual balance-of-payments disequilibrium involves a real transfer from the surplus country to the deficit country. The correction of this disequilibrium can be viewed either as the generation of a real transfer of equal amount in the opposite direction or a money transfer of the same magnitude in the same direction. The corrective action may take place automatically or form a part of planned government policies. For example, India can wipe out a trade deficit of Rs. one million with France either by sending goods and services worth Rs. one million to France or by accepting a loan of the same amount from that country.

### 1.7 The Factor of Causality

We can think of the following three alternative situations.
(i) Money transfer causes real transfer;
(ii) Real transfer causes money transfer;
(iii) There is no causal relationship between the two and both occur because of some third phenomenon.

All the three situations are practical possibilities; i.e. each of them can exist.

The classical case (Scammell, 1974) as sumed a prior autonomous capital movement for some clearly distinguished purpose, such as development loans or reparations payments, and then induced by some process the trade deficit required.

However, a country may follow expansionary domestic policies, induce a high level of domestic investment leading to inflation, and an eventual import surplus may then be met by seeking funds abroad.

It is also possible to imagine the mutually dependent foreign borrowing and import surplus both arising because of inadequate domestic savings.

## CHAPTER II

## THE CLASSICAL THEORY IHE ROIE OF PRICES

### 2.1 The Classical Mechanism

The classical theory of the transfer process is in two parts : one is appropriate to gold standard conditions, the other to free rates of exchange and a paper currency.

Let us suppose that Canada borrowed from England. The gold standard mechanism comes into operation as the money borrowed on the London Capital Market is exchanged in the foreign exchange market for Canadian dollars. The pound sterling is depressed to the gold export point; gold flows out of England and into Canada. Interest rates may rise in England and this, combined with the loss of gold, would have contractual influence on the English economy. Prices are lowered in England. Conversely, in Canada, prices are raised as gold flows in and interest rates fall. Changes in the price levels of the borrowing and lending countries are the crucial steps in the mechanism. They lead to balance-of-trade changes.

The real transfer of goods from England then reverses the process. England's export surplus and Canadian import surplus cause gold to flow into London from Canada. With the total transfer of capital in the form of goods, there is a
complete reversal of gold movement. This picture, of course, ignores the effects of the interest payments by Canada and also the productivity of capital in Canada, showing their impact on the Canadian price level. "This entire process has been one in which the terms of trade have turned against the lender and in favour of the borrower during the process of transfer, but the real transfer causes them to revert to their former level". (Scammell, 1974, p. 373).

Three major points of criticism have been levelled against this classical view of the transfer mechanism under the gold standard.

Firstly, there is no need for the marginal propensity of the borrowers to spend borrowed funds abroad to be the same as the country's marginal propensity to import. To the extent the proceeds are spent immediately in England, transfer takes place automatically in real terms with no money transfer effected or required. However, even if a part of the loan was spent in Canada, the increase in demand for Canadian goods would increase their prices and divert demand to imports. The import surplus for the borrower would occur anyway.

The second objection stems from the reliance on the acceptance of the quantity theory of money and its implicit as sumption of full employment. In underemployed economies, the quantity of money is not a determinant of the price level. Money might be held in idle balances. Even if it was spent immediately, output rather than prices would increase.

The third and the final comment says that there is an implicit assumption in the working of the theory regarding the sum of the two price elasticities of demand in the two countries being greater than unity. Then alone we can expect the emergence of an export surplus in England and an import surplus in Canada of such magnitudes as are needed to bring about the real transfer of the desired amount from England to Canada. Large price elasticities of supply are also presumed.

The second classical version of the transfer mechanism deals with transfer under conditions of free exchange rates. In this case, the monetary transfer of the loan from England to Canada would depreciate the exchange rate for sterling in the market as the loan was attempted to be converted into dollars. The extent of depreciation would increase with the size of the transfer. English export prices would be lowered for Canadians in terms of Canadian currency and prices of imports from Canada would be raised in terms of English currency. Still assuming high price elasticities of demand and supply, the process would increase the demand for English exports in Canada and diminish the demand for Canadian goods imported to England. In this way, the necessary overall export surplus for England is created. When all the funds borrowed by Canada have been transferred and the real transfer through the export surplus completed, the sterling exchange rate would appreciate to its former level.

Both versions employ the same common mechanism intended
for adjusting a balance-of-payments disequilibrium. If international transactions are initially in balance, the unilateral capital movement produces disequilibrium in independently motivated transactions. It needs to be corrected. Also, if there are any stabilising short-term capital movements, the paperstandard mechanism closely resembles the gold standard. In the absence of short-term capital movements, under the paper standard, money transfer and real transfer have to take place simultaneously.

Taussig (1927) made efforts to perfect the classical theory of the transfer mechanism and his students tried to verify it in the real world. The theoretical objections to it were found to be less significant than the facts. The process worked without marked pressures leading to gold flows or changes in exchange rates, though "time was presumably required for changes in money supply and prices and then in exports and imm ports". (Kindleberger, 1971, p. 314).
2.2 Are Price Changes Essential to Bring
Out an Effective Transfer'?

One can think of both cases; a transfer may involve changes in the general price level, or, it may not involve them. "The terms of trade may remain unaffected, they may move against the country paying reparations, or, they may move in favour of it. Transfer may therefore involve a loss, but, on the other hand, it may involve a gain". (Haberler, 1956, p.73).

The shift of prices is to be expected in the normal case where the direct influence of changes in demand on the balance of trade is insufficient to create the necessary export surplus, because "foreign countries spend only a small part of their receipts from reparations on the purchase of German exports" (Haberler, 1956, p. 74), Germany being a paying country.

### 2.3 Factors Affecting Price Changes

By how much the prices of German exports must fall depends, first, on the elasticity of demand abroad. In contrast to Mr. Keynes (1929), Haberler (1956) is of the opinion that demand is as a rule very elastic. The world market is, after all, large compared with the volume of exports from any single country. Moreover, the fact that Germany has no monopoly but competes with other countries, also works in the same direction. A fall in prices does not only stimulate demand as a whole but will also drive some foreign competitors out of the market. This is rendered easier by the fact that in the country receiving reparations demand for domestic goods has risen, and, in consequence, the necessary adjustment there is already under way.

The extent of the fall in prices depends, secondly, on the conditions of supply in Germany and also in the compēting industries abroad. If, for example, the output of German exports could be expanded under diminishing costs per

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unit, Germany's difficulties would obviously be reduced. If the law of constant costs prevails in the concerned industries, no shift of prices will occur on this score.

The ultimate result depends on how long one allows for supply to adjust itself. The longer one allows, the smaller will be the necessary price changes. For, once the obstacles to an expansion of exports have been swept aside by an energetic undercutting, they can afterwards be maintained in the channels thus opened even at a rather higher price than before.

The relevant factors and their possible repercussions are in concrete examples so complex that the price changes involved by transfer can hardly be worked out. But in any case, as pointed out by Ohlin (1929), it is an oversimplification to say that prices fall in the paying country and rise in the receiving one. "The analysis must be in terms not of general but of sectional price levels". (Haberler, 1956, p. 76).
2.4 Limits to Transfer Through Price Changes - Keynes's Views (1929)

The classic paper by J. M. Keynes (1929) has studied this problem in the context of the possibility of the effective payment of German Reparations to the Allies. The Budgetary Problem of extracting the sums of money out of the pockets of German people was easy, but converting the German money so received into foreign currency involved the difficult Transfer Problem.

Those who took the transfer problem lightly thought that the foreigners demanded the same goods that the German people were compelled to forgo, or, any small discrepancy between the character of two sorts of goods was rectifiable by changing the structure of production within a reasonable length of time. Such a situation was indeed possible if one could imagine in an extreme case that German factors of production produced nothing but exports and consumed nothing but imports. Then the issue had to resolve only the Budgetary Problem.

But if German factors of production were not capable of increasing their production of exports in the prevailing situation, or, the demand of the rest of the world for German goods had an elasticity of less than unity with respect to their prices - the more she exported the smaller would be the aggregate proceeds - the Transfer Problem was paramount and indeed insoluble.

It was the question of the distribution of German factors of production as between different uses and the execution of some possible machinery which would bring about that ideal distribution.

Thus the solution of the problem entailed the transferring of labour from all other employments to export indu. stries. Having created an additional capacity for producing German exports, the efficiency of their manufacture must rise faster than that of their competitors elsewhere. Only then, they could hope to sell their increased output at a profit. This outcome could be realised only if:
(i) German industrialists increased their efficiency;
(ii) Rates of interest in Germany were lower than those in other countries;
(iii) Gold rates of efficiency wages fell from their earlier levels.

In Keynes's (1929) view, only the third alternative offered some scope to be realised.

Now a reduction in the money-rate of efficiency wages might not help her, and might injure her, in the following cases:
(i) Where the output could not be exported anyhow; e.g. personal services or buildings;
(ii) Where the world's demand for Germany's goods had a price elasticity of less than unity;
(iii) Where Germany's foreign competitors fought to retain their present trade connections by reducing their own rates of wages PARI PASSU;
(iv) Where Germany's foreign customers, reluctant to allow that more intensive competition, met it by raising their tariffs.

That was not all. Even if a very elastic demand for German goods was visualised, the total sales proceeds might not be very substantial. A reduction in price of $10 \%$, stimulating the volume of trade by $20 \%$, increases the value of exports only by 8 per cent; $(1.2 \times 90)=108$.

Also, reducing money wages is not that easy in any country at any time. However, if at all there is some fall in the money wage-rate, a fall in real wages might be less, since the prices of home goods for home consumption might be expected to fall. On the other hand, such reduction in real wages as does occur may hurt efficiency, in which case a still greater reduction in money wages per head would be necessary to secure a given reduction in efficiency wages.

Keynes (1929) concludes : "My own view is that at a given time, the economic structure of a country, in relation to the economic structures of its neighbours, permits of a certain "natural" level of exports, and that arbitrarily to effect a material alteration of this level by deliberate devices is extremely difficult. Historically, the volume of foreign investment has tended ... to adjust itself - at least to a certain extent - to the balance of trade, rather than the other way round, the former being the sensitive and the latter the insensitive factor. In the case of German Reparations, on the other hand, we are trying to fix the volume of foreign remittance and compel the balance of trade to adjust itself thereto." (Keynes, 1929, p. 167).

Ohlin (1929) took up these Keynes's (1929) thoughts and later replied that the Transfer Problem did not at any rate involve such a hopeless situation.

## CHAPTER III

THE MODERN VIEN - A MAJOR ROLE FOR INCOMES

## 3.1

Ohlin's (1929) Sharp Reaction to Keynes's (1929) Version

Keynes's (1929) line of thought has been criticised by Ohlin (1929) on the ground that it ignores changes on the demand side. Ohlin (1929) urges that the payment of reparations by Germany involves IPSO FACTO a transfer of purchasing power to the countries receiving it. This means that their demand for goods increases and that of Germany diminishes. The geographical distribution of demand changes. After the capital movement, the receiving country buys more and the paying country less of their combined production than before. The two groups together purchase the same quantities as before.
M. Jacques Rueff (1929) calls this the principle of conservation of purchasing power. It "simply states that never in the course of various economic transformations that occur is purchasing power lost or created, but that it always remains constant。" (Rueff, 1929, pp. 389). Haberler (1956) concludes that the loss of one party is exactly balanced by the gain of the other party. The country paying reparations can never lose more purchasing power than the amount of the
payments themselves. There is thus no secondary burden. Ohlin (1929) has been accused by Keynes (1929) and others on the ground that there is no shift of purchasing power until the sum paid has actually been transferred. "Germany can acquire such bills if she has already sold the necessary exports". (Keynes, 1929, EJ, pp. 407-8). In Haberler's (1956) view, however, this criticism is invalid, since it is only reasonable to assume that every Central Bank possesses a certain stock of international means of payment, out of which the first instalment can be made. If the Bank has no cash reserves or if the country receiving payment does not react to the inflow of gold by expanding the circulation, then a part of the mechanism is put out of action.
3.2 Ohlin's (1929) Actual Treatment

The actual situation about exports from Germany was grim; true. But Ohlin (1929) draws Keynes's attention to the influence of German borrowings. "Nothing is said about the influence of German borrowings, which being far greater than the reparation payments, seem to me to be the real explanation why the excess of imports into Germany is what it is o" (Ohlin, 1929, p. 172). They also explain satisfactorily why Germany's productive resources have to such an extent been used for production of capital goods for the home market and have not increased the output and marketing of export goods.

These borrowings, in so far as they had exceeded the
reparation payments, had not only increased the buying power in Germany and thus its imports of foreign goods, but had also reduced the buying power in the lending countries, and thus, their imports of German goods.

## Importance of Indirect Effects

$A$ and $B$ are two countries with normal employment for their factors of production. A borrows a large sum of money from B this year and the same sum during each of the following years. This transfer of buying power directly increases A's demands for foreign goods while it reduces B's. Thus, A's imports grow and its exports fall off.

If the sum borrowed is 100 million marks a year, the excess of imports in A brought about in this direct manner may be 20 million marks. For in large countries, only a small part of demand turns directly to foreign goods or to export goods. The rest, 80 million marks, increases the demand in $A$ for homemarket goods.

Evidently, Keynes (1929) and the school of economists who share his views think that this is the end of these 80 million marks. As they do not directly increase the excess of imports, they can have no effect whatever on the balance of trade. They can be left out of the reasoning altogether. Ohlin (1929) suggests that, on the contrary, this amount of borrowed buying power deserves special attention. It sets in motion a mechanism which indirectly calls forth an excess of imports in $A$ of about the same magnitude.

The increased demand for home-market goods in A will lead to an increased output of these goods. Labour and capital that would otherwise have passed to export industries and industries producing goods which compete directly with import goods now go to the home-market industries instead. Output of these import - competing goods and of export goods increases less than it would otherwise have done. Thus, there is a relam tive decline in exports and increase of imports and an excess of imports is created.

A corresponding adjustment takes place in B. Homemarket industries grow less as a result of reduced demand for their products, and the labour and capital turn in greater proportion to export and import-competing industries. The outcome is an excess of exports. B finds a widened market for its goods in $A$ as a result of the adaptation of production which takes place in that country. Thus, the readjustment of production is the consequence of the change in buying power in the two countries.

The monetary mechanism which brings about the change varies with the organisation of the monetary system. In all cases of fixed foreign exchanges, however, there is an increase in monetary buying power in $A$ and a decrease in B, which may be much larger than the 80 or 100 million marks. A secondary "inflation" and "deflation" may be necessary to bring about the adaptation of production and trade quickly enough. The more sudden the readjustment has to be, the
greater this inflation in $A$ and deflation in $B$, and greater the changes in sectional price-levels that are called forth.
"It is not necessary that A's export prices should rise and $B^{\prime \prime}$ s fall. Thus $B$ need not offer its goods on cheaper terms of exchange to induce $A$ to take a greater quantity of them. Indirectly, however, ... a certain shift of the termsfof exchange will take place. The increased buying power in A will to some extent affect also the prices of its export goods. and its im-port-competing goods in an upward direction, while the corresponding classes of goods tend to become cheaper in B. In that way, the readjustment of the balance of trade is made easier." (Ohlin, 1929, p. 174).

### 3.3 Comment

It is to be noted that these price changes are quite different from those assumed by the classical barter theory, which seems to underlie Mr. Keynes's (1929) analysis. Mill (1844), Edgeworth (1894), Taussig (1927), and their followers would say that B must offer its goods on cheap terms of exchange in order to induce A to buy more. Thus, the primary price change is one between the prices of import and export goods in both countries, not between prices of international goods and of home-market goods, as discerned by Ohlin (1929). "It seems therefore very misleading to represent the increase in-B's exports as due entirely to a reduction in its export prices." (Ohlin, 1929, p. 175).

Ohlin (1929), of course, does not intend to deny the very existence of transfer problem. If the policy of protection and of preference to home-made goods is intensified in Great Britain when German exports begin to grow, and is used consistently to prevent such exports, then the reparation payments may become impossible. German competitive power and sales in other countries must be given an opportunity to develop themselves leading to a suitable organisation of production there. German industries also must rationalise themselves raising the effectiveness of production, while keeping the monetary wages constant.

In the ultimate analysis, the transfer problem must be capable of being solved through an "organised shifting of demand". This is, in principle, the simplest and safest way of organising the German reparation payments, aiming at a policy of deliveries in kind from Germany to receiving countries, which require imports of many commodities German industry is well able to produce. The success of such a policy, however, depends on the extent of cooperation it is likely to get from the corresponding powerful industries situated in other countries like Great Britain and America. (Ohlin, 1929). 3.4 Factors Helping the Real Transfer

Kindleberger (1971) cites the following factors: 1) The course of spending and income in the lending
2) The course of spending and income in the borrowing country;
3) The Marginal Propensity of the borrower to import out of borrowings;
4) The responses of the banking systems, etc.

The international capital transfers in money may be transferred in goods through income changes, in part, in toto, or in excess (a larger real transfer than the original money payment), the greater the extent to which, other things being equal:

1) Spending and income fall initially in the lending country in the process of raising the money capital;
2) The loan is spent by the borrowers in the lending country;
3) Money income rises in the borrowing country due to
a) A low marginal propensity to save,
b) A positive marginal propensity to invest,
c) Government debts and taxes are reduced;
4) The foreign repercussion of both countries is low;
5) The banking systems of both countries respond to the movements of short-term capital and gold.
"The less that the above conditions are realised, the greater is the likelihood that the capital will not be fully transferred through income changes arising out of the capital movement itself. Under these circumstances, gold flows will be needed on the gold standard, which may induce income changes
of a banking origin; or an exchange-rate adjustment will be needed to accomplish the remaining transfer through price changes." (Kindleberger, 1971, p. 318).

### 3.5 Metzler's (1942) Analysis of Real Income Adjustments

He sets up a simplified model of trade between two countries, in which changes of prices, interest rates, and exchange rates are impossible. The assumptions of unemployment, rigid monetary wage structures, competitive industries, and constant returns are sufficient to insure that changes of monetary demand will affect levels of output rather than prices. Monetary assumptions necessary to isolate real income effects are
(i) the maintenance of constant interest rates in both countries and
(ii) the maintenance of fixed exchange rates.

Figures of income and its components are given in the currency of the paying country. Income is measured as the sum of consumption of domestic goods, domestic investment implying the net increase of producer's goods and stocks, and exports.

The system is in equilibrium to begin with. Any differ. ence between exports and imports of one of the two countries is offset by private capital movements. Now an international transfer amounting to 10 monetary units disturbs this equilibrium. The mechanism of monetary transfer need not be discussed; as long as interest rates and exchange rates are not
altered, the effects of the transfer upon incomes are independent of the types of financial arrangements. The income effects depend entirely upon the fiscal policies of the two countries. There are three cases to be considered:
(i) A transfer accompanied by increased taxes in the paying country and reduced taxes in the receiving country;
(ii) A transfer accompanied by increased taxes in the paying country but with no change in tax rates in the receiving country;
(iii) A transfer accompanied by reduced taxes in the receiving country but with no change in taxes in the paying country.

The original changes of monetary incomes brought about by changes in taxes must be distinguished from secondary movements of consumption and investment in subsequent periods, induced by the initial purchasing power shift. Metzler (1942) calls the initial change as a "direct" or "primary" income effect and the induced change as the "secondary" one. Consumption of income is supposed to lag one period behind its receipt. Also, induced private investment in a given period depends upon income of the previous period.

A country is called "stable in isolation" if its marginal aggregate propensity to consume plus its marginal propensity to invest is less than unity. For example, if spendable income is increased by 10 in a country whose aggregate MPC is 0.5 and whose MPI is 0.1 , the additional incomes
generated in this and the subsequent periods will be a convergent series of the form $10+6+3.6+2.16+\ldots \ldots \ldots$ If the sum of these propensities exceeds unity, a spending programme sets in motion a series of increasing differences between the actual and the equilibrium levels of income. No tendency exists in this case for a return to the old equilibrium position and the country is "unstable in isolation". The world economy must be stable, of course.

Metzler (1942) now evaluates the importance of real income adjustments, induced by shifts of purchasing power, in creating a favourable change in the trade balance of the paying country. It is clear from Table 3.1 that such adjustments will not produce a sufficient surplus unless (a) one of the two countries is unstable in isolation and (b) the unstable country permits the transfer to affect its income directly.

Empirical evidence is inadequate to determine how often such a situation may be encountered. Most investigations of consuming and importing habits have revealed marginal aggregate propensities to consume considerably less than unity. The "normalm case of stability in both countries appears to be the most probable one. If this is true, real income movements induced by shifts of purchasing power may be expected to create only a part of the surplus required for capital transfers.

Table 3.1 : Summary of Transfer Results

Income affected directly
in both countries
Income affected directly
in paying country only
Income affected directiy
in receiving country only

1) Income falls in both countries.
2) Trade balance moves in favour of paying country by less than amount of transfer.
3) Income falls in both countries.
4) Trade balance moves against paying country.
5) Income falls in both countries.
6) Trade balance moves in favour of paying country by more than amount of transfer.
7) Income rises in both countries.
8) Trade balance moves in favour of paying country by less than amount of transfer.
9) Income rises in both countries.
10) Trade balance moves in favour of paying country by more than amount of transfer.
11) Income rises in both countries.
12) Trade balance moves against paying country.
13) Income falls in paying country,rises in receiving country.
14) Trade balance moves in favour of paying country by less than amount of transfer.
15) Income rises in both countries.
16) Trade balance moves in favour of paying country by more than amount of transfer.
17) Income falls in both countries.
18) Trade balance moves in favour of paying country by more than amount of transfer.
Both
countries
stable in

Paying country stable in isolation, receiving country unstable

Paying country unstable in isola tion, receiving country stable

For results of some of the numerical examples, please see the Appendix to Chapter IV.
Source : Metzler, 1942, p. 195.

## CHAPTER IV

RECONCILIAITION OF THE CLASSICAL<br>AND KEYNESIAN APPROACHES

4.1 The Classical Transfer Problem

On classical assumptions, the question whether the transfer would be undereffected or overeffected at constant prices is simple to deal with, since the assumption of automatic full employment implies that the transfer must be financed and disposed of in such a way as to reduce aggregate expenditure by the transferor and increase aggregate expenditure by the transferee by the amount of the transfer, and thus rules out any, multiplier effects (Johnson 1961). The transferor's balance of trade is improved both by the reduction in its expenditure on imports and by the increase in the transferee's demand for its exports. The total improvement, expressed as a proportion of the transfer, will be equal to the sum of the proportions of the expenditure changes in the two countries, which fall on imports. It is assumed that there are no trade impediments of any variety. Trade is balanced initially.

A Criterion for an Effective Transfer under Classicism without Altering the Terms of Trade

Imagine that the governments of the rest of the world, must pay $K$ units of the first commodity, their export, to the
government of the home country. We wish to know the effect on the payment on the terms of trade, $p$, and, in particular, we wish to know the conditions under which the payment will have no effect on the terms of trade. It will be assumed here that each country varies the average rate of personal income tax to absorb the shock of the payment.

Before the payment is made, the receiving country imports $E_{1}$ of the first commodity. After the payments, its imports rise to $E_{1}+m_{1} K$, where $m_{1}$ is its marginal propensity to import.

The imports of the rest of the world fall from $E_{2}$ (expressed in terms of second commodity) to ( $\mathrm{p} \cdot \mathrm{E}_{2}-\mathrm{m}_{2} \mathrm{~K}$ ) the whole term being expressed in terms of first commodity.

The condition of international equilibrium is that the receiving country's imports should exceed the value of the rest of the world's imports by K .

$$
\mathrm{E}_{1}+\mathrm{m}_{1} K=\mathrm{p}_{0} \mathrm{E}_{2}-\mathrm{m}_{2} \mathrm{~K}+\mathrm{K}
$$

... (all terms in terms of first commodity)
Since trade is balanced initially, $\mathrm{E}_{1}=\mathrm{p} . \mathrm{E}_{2}$

$$
\begin{aligned}
& \therefore \quad m_{1} K+m_{2} K=K \quad \ldots . . \text { (Transposing) } \\
& \therefore \quad K\left(m_{1}+m_{2}\right)=K \\
& \therefore m_{1}+m_{2}=1
\end{aligned}
$$

Thus, the terms of trade will be unaffected by the payment,

$$
\text { if } m_{1}+m_{2}=1 \text {, }
$$

that is, if the sum of the two marginal propensities to import is unity.
"This result is quite independent of the initial value of K." (Кетр, 1966, р. 81).

If $m_{1}+m_{2}<1$, the surplus generated by income effects alone is inadequate and must be augmented by an adjustment of the terms of trade favouring the receiver.

If, finally, $m_{1}+m_{2}>1$, the income-generated surplus will be more than enough to effect the payment. Terms of trade will change in favour of the paying country. 4.2 The Keynesian Transfer Problem

Two peculiar features of this model distinguishing it from the classical (real) case are: (i) The process of financ. ing and disposal of transfer need not lead to changes in aggregate expenditure in the two countries of the same magnitude. The funds may come out of dissaving or go into saving. (ii) Because of the existence of unemployed resources, any changes in expenditures brought about by the financing and disposal of transfer will have multiplier repercussions on the balance of trade between the countries.

## Assumptions

(i) The world consists of two countries $A$ and $B$, producing and exporting, respectively, A-goods and B-goods.
$A$ is the transferor and $B$ the transferee.
(ii) Output in each country is in perfectly elastic supply at a fixed domestic - currency price level.
(iii) Output, income, and employment in the country are determined by the level of aggregate demand for output.
(iv) Each country fixes its exchange rate and various interest rates by appropriate monetary action in accordance with the requirements of the situation.
(v) Apart from accommodating financial transactions between monetary authorities, international capital movements are independent of the levels of national incomes.
(vi) This particular system embodies further simplicity by assuming the absence of government, business, and transport sectors. Goods are utilised only for direct consumption. Aspects of more complicated systems can be easily represented, however, by redefining the symbols.
(vii) All marginal propensities to consume, to import, and to save are positive. This assumption is sufficient to guarantee stability of the system. The marginal propensities to $s$ ave in the two countries are $S_{a}$ and $S_{b}$. The system is in equilibrium to begin with.

Multiplier Fquations
These assumptions permit the presentation of multiplier equations relating changes in the national incomes of the countries and in the balance of payments between them to the
various autonomous changes in demands for goods and transfers which may occur.

$$
\begin{aligned}
& Y_{a}=I_{a}+C_{a} Y_{a}+M_{b}+m_{b} Y_{b} \\
& Y_{b}=I_{b}+C_{b} Y_{b}+M_{a}+m_{a} Y_{a} \\
& B_{a}=M_{b}+m_{b} Y_{b}-M_{a}-m_{a} Y_{a}-T \text { (Johnson, 1961, p.177) }
\end{aligned}
$$

where $Y_{a}, Y_{b}$ and $B_{a}$ are the total changes in the two countries' national incomes and in country A's balance of payments (all measured in international currency units); $I_{a}$ and $I_{b}$ are autom nomous changes in the countries' demands for their own outputs; $M_{a}$ and $M_{b}$ are autonomous changes in their demands for each other's outputs; $T$ is an autonomous change in capital movements from $A$ to $B ; C_{a}$ and $C_{b}$ are the marginal propensities to spend on the purchase of domestic output; $m_{a}$ and $m_{b}$ are the marginal propensities to spend on imports.

Now, we are in a position to see the Keynesian picture of transfer in its proper perspective. We need substitutions for the various autonomous changes in demands in the multiplier equations the proportions of the transfer by which the demands for domestic and foreign goods are reduced in the transferor and increased in the transferee.

However, it is more convenient to work with the changes in demand for imports and in saving associated with the transfer, using the property that the transfer must alter either the demand for home goods, or the demand for imports, or the
accumulation of assets through saving. "Representing the changes in demand for imports and in saving directly due to the financing and disposal of the transfer, expressed as proportions of the amount transferred, by $m^{\prime}$ and $s^{\prime}$, respectively, the multiplier equations yield the following solutions for the resulting changes in incomes and country A's balance of payments". (Johnson, 1961, p. 179):

$$
\begin{align*}
& Y_{a}=\frac{1}{s_{a}}\left(B_{a}+s_{a}^{\prime}{ }^{T}\right) \\
& Y_{b}=-\frac{1}{s_{b}}\left(B_{a}+s^{\prime} b^{T}\right) \\
& B_{a}=\left(m_{a}^{\prime}+m_{b}^{\prime}-\frac{m_{a}}{s_{a}} s_{a}^{\prime}-\frac{m_{b}}{s_{b}} s^{\prime}{ }_{b}-1\right) \\
& x \frac{s_{a} s_{b}}{\Delta} T \tag{E}
\end{align*}
$$

where $\Delta=s_{a} s_{b}+s_{a} m_{b}+s_{b} m_{a}$
(Please see the Appendix to this chapter for the elaboration of Equation (E).)

From this formulation, it follows that the transfer will be undereffected or overeffected according to whether $m^{\prime} a^{+}{ }^{\prime \prime}{ }_{b}$ (the sum of the proportions of the transfer by which expenditure on imports is altered by the financing and disposal of the transfer) is less or greater than

$$
\frac{m_{a}}{s_{a}} s_{a}^{\prime}+\frac{m_{b}}{s_{b}} s_{b}^{\prime}+1
$$

(1 plus the sum of the proportions of the transfer by which saving is altered - expenditure NOT changed - by the financing and disposal of the transfer, each weighted by the marginal propensity to import to the marginal propensity to save in the country concerned). (Johnson, 1961)

The criterion just established, like the one for the classical model, permits the transfer to be either undereffected or overeffected, according to the magnitude of various param meters. This result is contrary to the findings of Metzler (1942), whose analyses led to the conclusion that the transfer would necessarily be undereffected in the case under discussion (that is, on the assumption of positive marginal propensities to save in both countries). However, the contradiction is attributable to the adoption of special assump. tions, namely, that the financing and disposal of the transfer does not directly affect the demand for imports and that it changes the demand for domestic goods either by the amount of the transfer or not at all. (In terms of the present system, the m's were assumed to be zero, and the s's to be either zero or unity, which, with positive marginal propensities, insures that the transfer cannot be effected in full). (Johnson, 1961).

The present model determines the behaviour of incomes by whether the transfer is undereffected or overeffected. It reminds us of the classical model with the exception that
switches of demand from one country's output to the other's influence outputs instead of prices.

If the usual assumption of the classical analysis is chosen - that the transfer affects demands in the same way as any other change in income - with the difference that it also affects saving (that is, $m^{\prime}=m$ and $s^{\prime}=s$ ), the transfer cannot be effected in full if the marginal propensities are positive, since the equation for the change in the transferor's balance of payments reduces to

$$
\begin{equation*}
B_{a}=-\frac{s_{a} s_{b}}{\Delta} T \tag{r}
\end{equation*}
$$

(Johns on, 1961, p. 181)

### 4.3 Reconciliation

In conclusion, it would be appropriate to comment on a paradox suggested by Samuelson, namely why, when the transfer is treated as an income change, the Keynesian analysis gives a definitely negative result, whereas in the classical case, the result depends on the marginal propensities to buy foreign goods. To begin with, it may be pointed out that the transfer criterion for the Keynesian case can be made precisely the same as that for the classical case, by redefining the 'proportion of the transfer by which expenditure on imports changes' to allow for the indirect effect on import demand of the failure of the transfer to be fully reflected in a change in expenditure.
(Johnson, 1961). This effect is represented in equation ( $E$ ) by the deduction from the direct effects of the transfer on import expenditure $m^{\prime}$ of the quantities $\frac{m}{s} s^{\prime}$, which stand for the effects on import demand of the changes in income that would result from the missing changes in expenditure, if trade were kept balanced so that the closed - economy multipliers ( $\frac{1}{\mathrm{~s}}$ ) applied. If the terms $m^{\prime}-\frac{m}{s} s^{\prime}$ are taken as the proportions of the transfer by which expenditure on imports changes, then the Keynesian transfer criterion is the same as the classical, namely, whether the sum of these proportions is greater or less than one. "But where the transfer is treated as an income change, it so happens that the indirect effect exactly offsets the direct effect of the transfer on import demand, so that the total effect is zero." (Johnson, 1961, p. 182)

## Appendix to Chapter IV for <br> Equations (E) and (E!)

Ellsworth (1969, p. 388) gives the equation (originally given by S. Alexander) (1959) for the unfavourable balance of payments, accompanying the expected expansion of exports and contraction of imports, and caused by various induced changes in income. This is called the "Reversal Effect". This effect has been neatly expressed in a reversal coefficient stated in terms of the marginal propensity to save and the marginal propensity to import. If the economy is less than fully employed, then with reasonably normal values of $s$ and $m$, the adverse reversal effect on the balance of payments will be of a smaller magnitude. If, however, the economy is fully employed, money income but not real income, will increase; domestic prices will rise, and expenditure will be shunted on to imports and exportables, greatly raising the value of $m$. Under inflationary conditions, the marginal propensity to save will tend to be very low. Any favourable influence on the balance of payments of the transferor country will then be largely swamped by the reversal effect induced by changes in income. The Reversal Coefficient

$$
\begin{aligned}
R C & =\frac{1}{1+\frac{m_{a}}{s_{a}}+\frac{m_{b}}{s_{b}}} \\
& =\frac{s_{a} s_{b}}{s_{a} s_{b}+s_{b} m_{a}+s_{a} m_{b}}
\end{aligned}
$$

$$
=\frac{\mathbf{s}_{\mathrm{a}} \mathbf{s}_{\mathrm{b}}}{\Delta}
$$

In our equation (E), this reversal coefficient is multiplied by the bracketed term, the logic of which is explained in Section 4.3. The product of these two terms gives the change in the transferor's balance of payments. In the equation (E') the term in the bracket becomes - 1.

This is the most general expression and the results of various economists in this context can be treated as the special cases of this formulation.

We propose to study some cases here.
(A) Let $m^{\prime}{ }_{a}$ and $m^{\prime}{ }_{b}$ be each equal to zero as per the usual thinking of Metzler (1942). Let $s^{\prime}{ }_{a}$ and $s^{\prime}{ }_{b}$ be each equal to 1. That is, the proportion of change in saving to the amount of transfer in each country is unity. The amount to be transferred comes from dissaving and goes into saving. Then $B_{a}=-T$ and the transfer is completely prevented from being realised, all propensities being positive. The bracketed term becomes $\frac{-\Delta}{s_{a} s_{b}}$.
(B) All the nine results derived by Metzler (1942) can be fitted into this general formula. We study three cases.

We know that $\mathrm{m}^{\prime}$ for each country in this context is zero.
$A$ is the paying country and $B$ is the receiving country. Their marginal propensities to import and to save are,

$$
40
$$

respectively; $m_{a}, m_{b}, s_{a}$, and $s_{b}$. If the income is directly affected by the transfer, $s^{\prime}$ is zero; otherwise, it is 1.
(I) Both countries are stable in isolation.

$$
\begin{array}{ll}
s_{a}=0.5, & s_{b}=0.5 \\
m_{a}=0.2, & m_{b}=0.1
\end{array}
$$

(i) Income is directly affected in both countries.

$$
\begin{array}{r}
B_{a}=\left(m_{a}^{\prime}+m_{b}^{\prime}-\frac{m_{a}}{s_{a}} s_{a}^{\prime}-\frac{m_{b}}{s_{b}} s_{b}^{\prime}-1\right) \\
\times \frac{s_{a} s_{b}}{\Delta} T
\end{array}
$$

where $\Delta=s_{a} s_{b}+s_{a} m_{b}+s_{b} m_{a}$.

$$
\begin{aligned}
& B_{a}=\left[0+0-\frac{m_{a}}{s_{a}}(0)-\frac{m_{b}}{s_{b}}(0)-1\right] \\
& \quad \times \frac{(0.5)(0.5)}{(0.5)(0.5)+(0.5)(0.1)+(0.5)(0.2)} \mathrm{T} \\
& =\frac{0.25}{0.25+0.05+0.10} \mathrm{~T} \\
& =\frac{-5}{8} \mathrm{~T}
\end{aligned}
$$

Trade balance moves in favour of paying country by less than amount of transfer. The transfer is undereffected.
(ii) Paying country is stable in isolation, receiving coūntry unstable.

$$
\begin{array}{ll}
s_{a}=0.7, & s_{b}=-0.2 \\
m_{a}=0.1, & m_{b}=0.8
\end{array}
$$

Income is directly affected in both countries.

$$
\begin{aligned}
\mathrm{B}_{\mathrm{a}} & =(-1) \times \frac{(0.7)(-0.2) \mathrm{T}}{(0.7(-0.2)+(0.7)(0.8)+(-0.2)(0.1)} \\
& =(-1) \times \frac{-0.14}{-0.14+0.56-0.02} \mathrm{~T} \\
& =-1 \times \frac{-14}{40} \mathrm{~T} \\
& =\frac{7}{20} \mathrm{~T}
\end{aligned}
$$

The transfer is overeffected.
(iii) Paying country is unstable in isolation, receiving country stable.

$$
\begin{array}{ll}
s_{a}=-0.1, & s_{b}=0.6 \\
m_{a}=0.8, & m_{b}=0.2
\end{array}
$$

Income is directly affected in Receiving Country only.

$$
\begin{aligned}
\mathrm{B}_{\mathrm{a}} & =\left[\begin{array}{ll}
\frac{-0.8}{-0.1} & (1)-1
\end{array}\right] \times \frac{(-0.1)(0.6) \mathrm{T}}{(-0.1)(0.6)+(-0.1)(0.2)+(0.6)(0.8)} \\
& =(8-1) \times \frac{-0.06}{-0.06-0.02+0.48} \mathrm{~T} \\
& =7 \times \frac{-6}{-6-2+48} \mathrm{~T} \\
& =\frac{-21}{20} \mathrm{~T}
\end{aligned}
$$

Trade balance moves against the paying country.

$$
42
$$

(C) We can also determine the direction and magnitude of Changes in Real Income by using the relevant formulae. Using the data in (iii) above, we get:

$$
\begin{aligned}
Y_{a} & =\frac{1}{s_{a}}\left(B_{a}+s_{a}^{\prime} T\right) \\
& =\frac{-1}{-0.1}\left[\frac{-21}{20} T+T\right] \\
& =\frac{1}{2} T . \\
Y_{b} & =-\frac{1}{s_{b}}\left(B_{a}+s_{b}^{\prime} T\right) \\
& =-\frac{1}{0.6}\left[\frac{-21}{20} T+0\right] \\
& =-\frac{5}{3} \times \frac{-21}{20} T \\
& =\frac{7}{4} T .
\end{aligned}
$$

Real Income rises in both countries.

## CHAPTER V

THE EXCHANGE STABILITY PROBLEM :
(AN APPLICATION OF THE TRANSFER THEORY)

### 5.1 Statement of the Exchange Stability Problem

There is an aspect of the adjustment mechanism connected with the balance of payments and directed at aggregate incomes and expenditures in the concerned countries. This is not the theme of our present chapter. Our present efforts want to study an interesting application of the transfer theory to the effects of changes in relative price levels on the balance of payments. Such changes in relative prices may be brought about either by deflation or inflation of domestic currency prices at a fixed exchange rate, or, by alterations in the exchange rate with domestic currency prices remaining unchanged.

The central theoretical problem concerns the conditions under which a reduction in relative prices of exports would tend to improve a country's trade balance, so that the stability of the foreign exchange market is maintained with out calling for the intervention from the monetary authorities.

Separate criteria are derived for the classical case and for the Keynesian case under the respective assumptions, spelt out explicitly in Sections 4.1 and 4.2, respectively. The transfer theory is applicable directly, because the
criteria which assure that the transfer will indeed be effected can be transformed into criteria for exchange stability。

## $5.2 \frac{\text { The Exchange Stability Problem }}{\text { as Stated by Johnson (1961) }}$

A reduction in the price of A - exportables relative to $B$ - exportables carries with it a transfer from $A$ to $B$ equal in amount, so far as $A$ is concerned, to the increase in the cost of A's initial volume of imports, and, so far as B is concerned, to the reduction in the cost of B 's initial volume of imports. With initially balanced trade and a small price change, these two measures of the transfer will be approximately equal.

Let $E=C+p M$ be aggregate expenditure, measured in exportables, where $\dot{C}$ and $M$ are quantities of exportables and imports consumed, and $p$ is the price of imports in terms of exports. Then the effect of a change in the price of imports (dp) is

$$
d E=\frac{\delta c}{\delta p} d p+p \frac{\delta M}{\delta p} d p+M \cdot d p
$$

The first two terms on the right amount to the change in expenditure measured at the initial price of imports, the third is the change in the cost of the initial quantity of imports. These two changes will be equal in magnitude and opposite in sign if, $d E=0$.

The exchange stability problem is the problem whether the effects of the price change on expenditures will be
sufficient to effect the transfer implicit in the price change itself.

### 5.3 Criteria for Stability under <br> Classical Conditions

In the classical case, the assumption that all income is spent insures that the transfer is accompanied by equal changes in the two countries' expenditures (valued at pretransfer prices). The transfer will be overeffected or undereffected and the exchange market stable or unstable, according to whether the sum of the proportions of the transfer by which the two countries' expenditures on imports change, is greater or less than unity. These proportions are equal to the price elasticities of demand for imports of the countries, so that the market is stable or not according to whether the sum of these elasticities is greater or less than unity. (Johnson, 1961).

The change in expenditure on imports, valued at pretransfer price, is p. $\frac{\delta M}{\delta \mathrm{p}} \cdot \mathrm{dp}$ 。

$$
\text { p. } \begin{aligned}
& \frac{\delta M}{\delta p} \cdot d p=\left(\frac{-p}{M} \cdot \frac{\delta M}{\delta p}\right)\left(\rightarrow p M \frac{d p}{p}\right) \\
&=\eta_{m} \times \text { Implicit Transfer. }
\end{aligned}
$$

Thus, the change in expenditure on imports expressed as the proportion of the transfer is $\eta_{m}$.

The argument leads us to the familiar Marshall-Lerner condition. Since the elasticity of demand for importables
consists of the sum of the marginal propensity to spend on importables and the 'compensated' or 'constant-utility' elasticity of demand, any ins.tability requires both a marginal bias toward the consumption of exportables, and, a low degree of substitutability between importable and exportable goods in consumption in the two countries. In case, both countries produce both goods, instability also requires a low degree of substitutability in production in the two countries.

That is, both income and substitution effects should favour the effective transfer. The paying country demands (relatively) less of its imports and the receiving one more of its import good. Such a situation is helpful for achieving stability. A substantial demand is created for the export good of the paying country.

Though the absence of trade impediments is assumed here, the stability criterion remains unaltered by the introduction of tariffs or of transport costs incurred in the imported good, since the expenditure change in these cases depends only on the elasticity of final demand for imports. 5.4 Criteria for Stability under Keynesian Conditions

In the Keynesian case, the transfer analogy (Sec. 4.2) leads to the conclusion that the exchange market will be stable or unstable according to whether the sum of price elasticities of demand for imports of the two countries is greater or less than

## 47

$$
1+s^{\prime} a \frac{m_{a}}{s_{a}}+s^{\prime} b \frac{m_{b}}{s_{b}}
$$

where $s$ and $m$ represent. the marginal propensities to save and to import, respectively, of the subscript country; s'a represents the proportion of the transfer by which saving from the pre-transfer level of income is reduced (expenditure at pre-transfer prices not reduced) in $A$ by the increase in the price of A's imports; and $s^{\prime} b_{b}$ represents the proportion of the transfer by which saving from the pre-transfer level of income is increased (expenditure at pre-transfer prices not increased) in $B$ by the decrease in the price of B's imports.

At this stage, we confront an interesting debate among economists, regarding the magnitude of the critical value to be crossed by the sum of the two price elasticities of demand for the respective imports, so that the exchange market is stable under Keynesian conditions. We make an effort to analyse their premises and conclusions.

Harberger's (1950) argument gives a basic result that transfer affects saving in the same way as any other increment of income. Thus $s^{\prime}=s$ and the critical value has to be $1+m_{a}+m_{b}$. It certainly exceeds unity since we assume all propensities to be positive. The argument denies any possibility of substitution between saving and imports. It also asserts that the effect of a relative increase in import prices on saving is not different from that coming into existence by virtue of changes in output at constant prices.

Saving, measured in exportable goods, is a function of real income only. Also, the real income falls if the import prices rise.

Laursen and Metzler (1950) studied the statistical evidence and stated that, in the 'short run' of the cycle, a rising proportion of the real income is saved. The critical value can easily exceed unity. White (1954) has disputed this behaviour of the saving function and noted that time lags make this ratio constant in the long run. However, we observe that the critical value will still exceed unity unless $s^{\prime}{ }_{a}=s^{\prime}{ }_{b}=0$.

Here, we approach Johnson's (1961) interpretation of Harberger's (1950) analysis. It says that all expenditure is consumption expenditure only, and, with initially balanced trade, there are no accumulated savings. If there is any positive marginal propensity to save (hoard), both in money and real terms, the critical value of the stability criterion under the circumstances, will have to exceed the classical unity.

We would reach the same conclusion by following a somewhat similar path. The spirit of the Keynesian analysis assumes the absence of "Substitution Effects". With positive propensities to save and import in both countries, the transfer Is necessarily undereffected through income effects alone. Thus the sum of the two price elasticities of demand for imports must necessarily exceed one in order to realise that part of transfer, which is yet to be effected.

Day (1954) says that imports and saving may be substitutes, since imports may be durable goods yielding a flow of satisfaction similar to the interest on saving. Spraos (1955) then concludes that Harberger (1950) overestimates the critical value in question; it has to be less than the stipulated value because of the possibility of purchases of cheaper imports in greater quantities facilitating the transfer. Pearce (1955) draws our attention to the fact that Day (1954) overlooks the effect of a change in the price of im. ports on the real value of interest. If this aspect of change in the real value of interest is considered, no distinct conclusion can be drawn regarding the direction of substitution between imports and saving. Pearce (1955) sees clearly the two forces acting on saving in opposite directions and is thus doubtful about the net and ultimate behaviour of saving function. Spraos (1955) argues that the MPS from the change in import prices is likely to be much greater than the MPS from a change in output at constant prices. Thus Harberger's (1950) critical value has been underestimated. The value has to be higher than his stipulation, since purchases of imports may be discouraged, even when they have become cheaper in the receiving country. Also, there can be only a small curtailment in the purchases of costlier imports in the paying country. Johnson (1961) has derived an expression which makes s' necessarily positive. He assumes
(i) Absence of substitution between imports and saving;
(ii) Absence of 'Pigou Effect' of import prices on saving;
(iii) Saving is intended to be spent on imports and exportables in the same ratio as current consumption expenditure;
(iv) Real saving is a function of real income.

$$
s^{\prime}=\frac{\bar{s}}{1-\bar{s}}\left(\epsilon_{s}-1\right)
$$

(Please see the Appendix to this Chapter 5 for the derivation of this result.)
where $\overline{\mathbf{s}}$ is the average propensity to save and $\mathcal{E}_{\mathrm{S}}$ is the income elasticity of demand for real saving.

Now, if some imports are required for investment, and, investment expenditure is fixed in real rather than money terms, since we carry out transactions with fixed interest rates, we get

$$
s^{\prime}=m_{c} \frac{\bar{s}}{1-\bar{s}}\left(\epsilon_{s}-1\right)+m_{i}
$$

where $m_{c}$ and $m_{i}$ are the proportions of the initial volume of imports devoted to consumption and investment, respectively.

This last result suggests that, though the Harberger (1950) and Laursen-Metzler (1950) finding making the critical value greater than unity "implies a questionable assumption about the behaviour of the savings ratio, it can be supported by the introduction of investment imports". (Johnson, 1961, p.190).

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Even if $\epsilon_{s}$ becomes one, $s^{\prime}=m_{i}$ and $s^{\prime}$ is positive. A reduction in import prices affects money saving in two ways; it increases consumer's real income and reduces the cost of investment imports.

## Appendix to Chapter V

Let the initial volume of domestic output be $Y$ and the initial quantities of domestic and foreign output consumed be $C$ and $M$, respectively, these quantities being measured in units such that the initial domestic prices are unity.

Real income $Y_{r}$, may be measured by output deflated by a price index, so that

$$
Y_{r}=Y \quad \div \frac{C+p M}{C+M}
$$

where p represents the (real) price of imports, initially unity; and real saving, $S_{r}$, is a function of real income only and its money value (value in terms of domestic output) is

$$
S=s_{r} . \quad \frac{C+p M}{C+M}
$$

Hence the change in money saving due to a reduction in the price of imports, expressed as a proportion of the initial value of imports, is

$$
s^{\prime}=-\frac{1}{M} \quad \frac{\delta s}{\delta p}
$$

Deriving $\quad \frac{\delta S}{\delta \mathrm{p}}$

$$
\begin{aligned}
S & =S_{r} \cdot \quad \frac{C+p M}{C+M} \\
& =S_{r^{\prime}} \cdot t
\end{aligned}
$$

where $t=\frac{C+p M}{C+M}$

$$
\begin{align*}
& \frac{\delta s}{\delta p}=\frac{\delta s_{r}}{\delta p_{p}} \cdot t+\frac{\delta t}{\delta p} s_{r}  \tag{1}\\
& \frac{\delta s_{r}}{\delta p_{p}}=\frac{\delta s_{r}}{\delta Y_{r}} \cdot \frac{\delta \mathbf{Y}_{r}}{\delta t} \cdot \frac{\delta t}{\delta p} \tag{2}
\end{align*}
$$

Now $\quad \frac{\delta Y_{r}}{\delta t}=\frac{\delta Y t^{-1}}{\delta t}$

$$
\begin{equation*}
=-Y t^{-2}=\frac{-Y}{t^{2}} \tag{3}
\end{equation*}
$$

Also $\quad \frac{\delta t}{\delta \mathrm{p}}=\frac{(C+M) M-(C+p M) 0}{(C+M)^{2}}$

$$
\begin{equation*}
=\frac{M}{C+M} \tag{4}
\end{equation*}
$$

Substituting (2), (3), (4) in (1), we get

$$
\begin{aligned}
\frac{\delta S}{\delta p} & =\frac{\delta s_{r}}{\delta \frac{Y_{r}}{Y_{r}}} \cdot \frac{-Y}{t^{2}} \cdot \frac{M}{C+M} \cdot t+s_{r} \cdot \frac{M}{C+M} \\
& =\frac{\delta s_{r}}{\delta Y_{r}} \cdot \frac{-Y}{t} \cdot \frac{M}{C+M}+S_{r} \cdot \frac{M}{C+M} \\
s^{\prime} \quad & =+\frac{1}{M}\left(\frac{Y_{r} M}{C+M} \cdot \frac{\delta s_{r}}{\delta Y_{r}}-S_{r} \cdot \frac{M}{C+M}\right) \\
& =\frac{Y_{r}}{C+M} \cdot \frac{\delta s_{r}}{\delta Y_{r}}-\frac{s_{r}}{C+M} \\
& =\frac{S_{r}}{C+M} \quad\left(\frac{Y_{r}}{S_{r}} \cdot \frac{\delta s_{r}}{\delta Y_{r}}-1\right) \\
& =\frac{\bar{s}}{1-\bar{s}} \quad\left(\epsilon_{s}-1\right)
\end{aligned}
$$

where $\overline{\mathbf{s}}=\frac{\mathbf{S}}{\mathbf{Y}}=\frac{Y-C-M}{Y}$
and $\epsilon_{s}=\frac{Y_{r}}{S_{r}} \frac{\delta S_{r}}{\delta^{Y_{r}}}$.

## CHAPTHR VI

TERMS OF -TRADE AND TRANSFER
PAYMENTS - SOME OBSERVATIONS
6.1 $\frac{\text { Terms of Trade after Transfer }}{\text { Without Impediments }}$ without Impediments

Samuelson (1952) analysed this issue. He made some simplifying assumptions to begin with.
(i) There are two countries whom we call Europe and America.
(ii) Europe's specialisation lies in the production of clothing and food constitutes a bulk of America's production.
(iii) Production of both goods is constant.
(iv) Tastes between food and clothing are identical for all citizens of both countries. Any indifference curve of normal curvature will do.
(v) Europe and America trade under perfectly competitive conditions, with no transport costs or trade barriers.

There exists some pre-transfer, markets-clearing, clothing-food price ratio in all cases to be considered.

Now a unilateral transfer payment is introduced from Europe to America. The payment can be done either in units of
clothing, or in units of food, or in terms of any combination of them, or in terms of any acceptable purchasing power.

## Findings

The "classical" or the "orthodox" view indicated deteriorated terms of trade for the paying country in order to effect the financial transfer payment.

Samuelson (1952) reached the conclusion that the "orthodox" result could not be obtained under all circumstances. The paying country's (Europe's $)$ terms of trade will deteriorate, only if each dollar of income lost by Europe went relatively more largely for its own product than did each dollar of extra Income received by America. Such a situation creates on excess supply of Europe's product (clothing) at the initial clothingfood price ratio.

If and only if, one country gives up the goods in exactly the same proportion as the other country takes them on, there will be no change in the terms of trade.

## Absence of Probability Presumptions

The criterion involves marginal physical income propensities of the different countries and goods in an essentially symmetric way, so that in the complete absence of all trade impediments, no probability presumptions concerning the terms-of-trade change are possible. We have to study the econometric facts of each situation and be prepared for a change in the terms of trade in either direction in the face
of total absence of impediments.
"In the absence of knowledge concerning the pattern of complementarity, and provided the traded goods were absolutely free of transport costs and non-localised in their demand, it was just as easy to imagine a world in which the paying country produced an export (good) that would appreciate rather than depreciate in relative value." (Samuelson, 1952, p. 1010).

For some sort of vindication of the orthodox presumption implying the deterioration of terms of trade for the payer, some element of asymmetry must be introduced into the problem. For example, Viner (1960) makes his domestic good infinitely substitutable for the region's export-good production and not at all substitutable for the import-good production. The presumption is realistic enough.

Johnson (1961) states that in the free-trade and no-transport-cost case, the prices facing consumers are the same in both countries. Consequently, the classical presumption requires either that the countries differ in tastes and are biased toward consumption of their exportables, or that, tastes being identical, the goods differ in degree of necessity and the country with the higher income per head produces the more "luxurious" good for export.
$\begin{aligned} & 6.2 \text { Terms of Trade after Transfer } \\ & \text { in the Presence of Real } \\ & \text { Impediments }\end{aligned}$
Samuelson (1954) retains the first four assumptions
under Section 6.1. He introduces (real) transport costs for both countries incurred in the transported good itself, though other alternatives can also be considered. There are no tariffs.

## The General Statement

"When there are real transport costs, the payer's terms of trade will improve, remain unchanged, or deteriorate, depending upon whether the payer's marginal (income) propensity to consume its own product is less than, equal to, or greater than the receiver's marginal (income) propensity to consume that same product". (Samuelson, 1954, p. 1030).

## Special Cases

(i) If we adhere rigidly to the strict Pigou (1947)
model of
(a) identical unchanging tastes;
(b) independent marginal utilities;
(c) strictly linear marginal utilities;
then, an "anti-orthodox" result is inevitable. Terms of trade change in favour of the paying country.
(ii) Even with unitary income elasticities (MPC = APC) and identical tastes, either change can occur depending on whether elasticity of substitution along an indifference curve is numerically greater than one (orthodox) or less than one (anti-orthodox). "Elasticity of Substitution" of less than one implies that dearer imports cause relative expenditure on imports to rise. (Samuelson, 1954).

Thus, there are Inconclusive Results in case of real impediments. The cheapening of one's export good will affect its relative marginal (income) propensity to consume. Its physical output can be expected to decline relatively, but no presumptions are possible concerning MPCs with reference to income.

### 6.3 Equilibrium with Artificial (Tariff) Impediments

The first four as sumptions under Section 6.1 continue to hold. Tariffs do not literally use up goods as do transport costs. Each Government is assumed to distribute the receipts to the (representative) consumer in a lump-sum fashion, so that each consumer can act as if the true price to him for any expansion of purchases is equal to the price quoted within his country's markets. There are no transport costs.

In this case, the general criterion depends upon relative physical marginal propensities to consume in the two countries.

## Case I

With the strict Pigou (1947) case of independent and linear marginal utilities, Europe marginally contracts its purchases of America's product (relative to its own product) faster than America expands its purchases of its own product (relative to Europe's product). (Samuelson, 1954).

Thus, an excess supply is created for America's product (food) at the pre-transfer clothing-food price ratio.

An anti-orthodox result occurs; there is an improvement in the paying country's (Europe's) terms of trade.

## Case II

If we adopt Viner's (1960) single best assumption of equality between APC and MPC, the orthodox expectation is vindicated. Assuming tastes to be the same, we would still have no change in net terms of trade until we introduce trade impediments. Here, after the tariff has made imports dearer and shifted each country's physical consumption toward its own local goods, as a nation buys relatively more of its own good, we see that the paying country's (Europe's) terms of trade deteriorate in the orthodox fashion. (Samuelson, 1954).

In this case, we can apply the following statement by Mundell (1968) to America, which is the receiving country recording an improvement in its commodity terms of trade. The price of its good (food) rises relative to that of clothing. "If the marginal propensity to consume domestic goods in the receiving country exceeds the foreign marginal propensity to import, the result of the transfer will be an excess demand for domestic goods and a surplus in the balance of payments, which will induce an increase in the domestic price level as money flows in". (Mundell, 1968, pp. 125-126).
6.4 Concluding Remarks and Relaxing

Following Samuelson (1952) and (1954), we studied
some cases affecting the terms of trade of the paying country
in the absence of and in the presence of trade impediments (real and artificial) under the most simplifying assumptions. We found that the paying country had to face a Secondary Burden in the form of deteriorated terms of trade only in two cases, vindicating the orthodox expectation.
(i) With Viner's (1960) Basic Convention of MPC $=$ APC and identical tastes for both countries, an orthodox result was observed in the case of real impediments (transport costs), only if the numerical value of the "Elasticity of Substitution" along the indifference curve exceeded unity.

- (ii) Again with Viner's (1960) Basic Convention, in the case of artificial impediments (tariff barriers), the paying country's terms of trade deteriorated in an orthodox fashion.

In the remaining cases with impediments, there was an improvement favouring the paying country.

With variable outputs of export and import goods, all the results derived by Samuelson (1954) continue to apply, but with "less leverage".

If there are "domestic" goods, the orthodox view is favoured, provided domestic goods are more competitive on the production side with export goods than with import goods. (Samuelson, 1954). Johnson (1961) agrees with this conclusion, but in addition, emphasises the substitutability of non-traded goods in consumption also for exports, so that the classical presumption is strengthened. However, when one is dealing with many commodities or many countries, the direction of change in
the commodity terms of trade is not uniquely determined by whether the transfer is undereffected or overeffected at pretransfer prices.

The importance of transport costs being incurred in one good relative to the other has also been highlighted. There are various possible formulations. However, Mundell (1968) says, "The greater the share the transferring country has in providing transport services for its own exports, and the smaller the share it has in transporting its own imports, the more likely it is that the terms of trade will move in favour of the transferring country." (Mundell, 1968, pp.79-80).

Johnson (1961) provides us with a general rule in case of two countries and two goods, when he says that the transfer will be undereffected if the countries are biased (at the margin) toward the purchase (direct and indirect) of their exportables. The classical orthodoxy is then justified.

If the receiving country gets the purchasing power in terms of capital goods and the enlarged productive capacity greatly augments the supply of its exportables, it can face worsening terms of trade for it, vindicating an antiorthodox expectation. (Jones, 1979).

## CHAPTER VII

SOME RECENT ISSUES RELATED
TO THE TRANSFER PROBLEM
7.1 $\frac{\text { The Measure of the Severity }}{\text { of the Problem }}$

Machlup (1964) studied the four historically famous transfer payments and arrived at some interesting conclusions regarding the measure of the severity of the problem.

The four case studies from the history were:
a) Between 1793-1816, Britain had to grant subsidies and loans to its allies and prospective allies in Europe to enable them to fight against Napoleon.
b) France was committed to pay victorious Prussia five billion francs as indemnities between 1871-1875.
c) The defeated Germany after the World War I was to pay reparations to the victorious nations between 1924-1932.
d) Between 1950-1963, after the military operations of World War II had been terminated, the United States embarked upon a massive course of generous grants and loans of funds to assist both the exhausted allies and the defeated enemies and, later on, also to underdeveloped nations.

He studied the ratios of the foreign remittances to national income and the foreign-trade volume - the value of exports and imports taken together. He found:
i) The ratio of foreign payments to national income does have relevance for indicating the magnitude of relative burden. However, a given percentage burden may weigh more heavily on small incomes than on larger ones. Hence, relatively low ratios of remittances to national income need not indicate at the end of the 18th century the same "light" burden which they would mean in the 20th century; and the relatively high ratios of payments to national income in the United States at present may, in view of high per capita incomes, be regarded as entirely tolerable. Secondly, if a part of foreign payments is effected not out of current income but through borrowing from abroad or through the use of gold stocks and liquidation of foreign assets, the immediate "pinch" on domestic consumption and investment is less than what it apparently looks. ii) The relevance of the ratio of foreign payments to foreign-trade volume rests on the probability that a given absolute amount of adjustment in the trade balance can be more easily achieved if it is associated with a large volume of trade. This does not imply, however, that equal ratios of foreign payments to foreign trade indicate equal ease or equal difficulty in achieving the required adjustment of the trade balance. To achieve a given percentage increase in the value of exports with ease would depend on the larger elasticities of foreign demand for the country's exports. Likewise, a given percentage reduction in the value of imports can be more easily achieved if the elasticity of foreign supply is small, because import
prices would fall and physical imports need not decline so much.
There are also other factors which are likely to affect the comparative difficulty of the transfer of foreign payments; but the two mentioned above have the merit of being measurable as well as relevant.

### 7.2 Money Supply and Trade Balance

Let us follow the Sequence Analysis of the process involved in the payment of reparations. Let us suppose that Germany has to make payments to USA. This occurs through the stages marked out below:
i) Taxes are collected and deposited.
ii) Domestic circulation of money is reduced.
iii) Incomes and prices decrease.
iv) Exports are stimulated and imports are restricted.
v) Exports fetch dollar balances.
vi) The dollars are sold to German Central Bank which issues marks to pay for them.
vii) Domestic circulation of money is increased.
viii) Incomes and prices increase.
ix) The accumulated marks are used to buy dollars for reparation payments.
$x$ ) The dollar remittances use up the dollar
balances.
(Machlup, 1964, p. 413 with modifications).
Machlup (1964) remarks that, in the sequence of these
events, the inflows and outflows of dollars are clearly seen. But the function of these dollars leading to the transmission of purchasing power is not properly appreciated. This transfer of purchasing power is crucial for any credit transaction. "The movement of goods is the sum and substance of the movement of capital. Receiving loans means more imports; repaying loans means more exports, with the movements of goods not a precondition but instead a consequence". (Machlup, 1964, p. 408). Thus one cannot infer from the present state what the future state of the balance of payments will be. The question arose in 1928, when the economists thought it impossible for Germany to pay the reparations as it was having a large import surplus then. Machlup (1964) pointed out that the German balance-of-payments deficits were the result of foreign loans received by Germany. It could not necessarily be a cause for its possible inability to pay back the debts, for, the balance of trade is not an autonomous or an independent factor.

With the flow of dollars as the intermediate step and the movement of goods as the ultimate result, the change in domestic circulation acts as the motor-force of the international movement of capital under the system of fixed exchange rates. Even under the system of flexible exchange rates, in so far as the narrowly limited flexibility of rates is insufficient to act as the motor-force, the transfer process can work only by means of changes in domestic circulation. Effective circulation is first contracted and then again restored in the course
of repaying foreign loans, and, between the down and up lies the increase in exports. In the view of Machlup (1964), the responsible authorities should not obstruct artificially these important changes in circulation, if the transfer process is expected to be a smooth one.

Machlup (1964) is an optimist when he hopes that, once the funds are raised and kept out of effective circulation in the paying country, the cancellation of domestic purchasing power will bring about the ultimate real transfer. That is, the transfer problem is solved if the budgetary problem - the problem of raising the domestic funds without resorting to credit creation - is solved.

However, he hastens to add that the pure theory of automatic transfer may be inapplicable in a real world addicted to protective tariffs. Machlup (1964) reminds us of Hans Simon's (1927) statement going to such an extreme as to attribute the existence of the transfer problem "solely" to the absence of free trade.

Machlup (1964) considers three cases as to what may happen in the event of receiving countries erecting tariff walls. The paying country finds it difficult to build an export surplus of the required magnitude.

Firstly, if every reduction in German export prices is associated with an equal increase in all foreign import tariffs, every tax collection will have deflationary effects not offset by reflationary export increases. The transfer will
be limited to the size of such export surpluses as can be created through reductions in German imports.

Secondly, under the assumption of perfect wage and price flexibility, the unwillingness of foreign countries to accept additional German goods however cheap, would frustrate the transfer of reparations, but there need not be reductions of real income produced by Germany. What is not exported remains available to the German economy, though at ever-decreasing prices.

Thirdly, and finally, if wages and prices are inflexible, the tariff barriers in foreign countries coupled with preparation for reparations in the home country, must lead to unemployment and reduced production in the home country. Imports are liable to fall drastically; some of the collected funds will thus be transferred. But even more important and surprising will be another consequence. It would be difficult to raise funds for reparations. In other words, the budgetary problem soluble at full employment, may become insoluble under the circumstances associated with unemployment and poverty.

Machlup (1964) is now forced to conclude that "the successful raising of the domestic funds will as a rule lead to the possibility of transferring them, but where this is not so, the impossibility of transfer will eventually inhibit the further raising of the domestic funds. Thus, the two are ... closely linked with each other : either both problems are solved or neither". (Machlup, 1964, p. 416).

The central pillar of the analysis in this section rests on the order of the events; i.e., changes in trade balance follow the movement of capital. This order may not, however, hold good for all types of capital transfer. There is a famous Chicken or Egg controversy. Both these relationships are "true" depending on the definition of "Capital Movements". Autonomous movements of long-term capital will, with great probability, effect a flow of goods in the same direction; whereas net capital movements, comprising both autonomous and induced flows, will be the logical consequence of the trade balance.

Thus the first proposition is true, stating a causal relationship; the other is a truism, stating a tautology. Also, in the context of Capital Account, "induced" capital transactions are not those which are "directly induced by a change in income", a meaning which one has in connection with imports. Those capital transactions are "induced" which are merely "responses" rather than "forces" in the markets of foreign and domestic funds. "Autonomous" capital transactions do not mean "not induced by any changes in income" but mean instead "not in response to other changes in the international balance of payments". (Machlup, 1964)

Finally, Machlup (1964) advocates the need of a further careful research to study the adjustments between capital transactions and their ultimate effects on trade through changes in primary disbursements of the citizens in the concerned countries. Such studies should include money markets,
security markets, foreign-exchange markets, and commodities markets.

### 7.3 The Transfer Problem Restated by Machlup (1964)

If country $A$ is supposed to pay to country $B$ an amount of X dollars per period and accordingly reduces its domestic disbursements by this amount, may one confidently expect that its trade balance will become more positive (less negative) by X dollars and provide the foreign exchange needed for the payment?

Strictly speaking, there is no reason to expect an improvement of A's trade balance permitting the required transfer if there is neither an increase in disbursements in $B$ nor a decrease in disbursements in $A$. In the context of economic growth, however, we may grant a "smaller than otherwise warranted" expansion of domestic disbursements as equivalent to an absolute curtailment of domestic disbursements in the absence of growth.

Curiously enough, all historical situations in which "transfer problems" arose were characterised by expansions, not contractions, of domestic demand, although the theoretical discussions always started from the as sumption that the domestic funds set aside for transfer had been successfully "extracted out of the pockets of the people". In fact, the analysts lost sight of the reality that the budgetary problem had not been solved and no solution had even been attempted. "The possible
reconciliation through explicit references to economic growth also did not occur to any of the earlier writers on the subject". (Machlup, 1964, p. 434).

Though one can define the scopes of the "budgetary" problems and "transfer" problems, the distinction is not very helpful for attempting the practical solution of transfer problems. The solution of one may or may not solve the other; also, the transfer problem may be solved in certain situations before attempting the solution of the budgetary problem.

The budgetary problem refers to difficulties in adjusting domestic spending to the requirements of foreign obligations, whereas the transfer problem refers to difficulties in adjusting production and trade to an accomplished reduction in domestic demand in such a way that an increase in exports and/ or a decrease in imports produce the foreign exchange for converting the accumulated funds.

The trade conditions, some of them lying beyond the control of the transferor country, may prevent the solution of transfer problem even when the belt is tightened at home. On the other hand, if an expansion of effective demand takes place abroad which suffices to "pull in" the goods and services of the paying country, or, if efficiency in production allows reductions in costs and prices in the paying country, the transfer problem can be solved without budgetary exertions and restrictions.
7.4 Transfer Difficulties Identified by Machlup (1964)

Three main categories are considered.
I) There is a shortage of foreign exchange needed for the transfer.
a) The foreign exchange is not available.
b) Foreign exchange is available partially and conditionally. Given the general behaviour patterns or "structural parameters", particular fiscal and monetary policies can secure such adjustments in the balance of trade as will provide foreign exchange to meet larger or smaller portions of transfer obligations.

For conditions in which no price-effects and only in-come-effects operate in the adjustment mechanism, quantitative relationships between changes in primary disbursements (domestic investment and consumption), total national income, and the balance of trade are studied.

If $\boldsymbol{\Delta I}$ is the curtailment in primary disbursements, $\Delta B$ the resulting improvement in the trade balance, and $\Delta Y$ the ultimate reduction of national income, one may express the shortfall of the transfer by $\frac{\Delta B}{\Delta I}, \frac{\Delta I-\Delta B}{\Delta I}$, or $\frac{\Delta B}{\Delta \mathbf{Y}} \quad$ (Machlup, 1964, p. 437).
II) There are political difficulties in executing policies consistent with the transfer. The possible examples
are: the outcome of an election, the resignation of a cabinet, demonstrations by street mobs, etc.
III) There are economic sacrifices and losses of real income or intake associated with the transfer, the meaning of intake being what is available for domestic investment and consumption.
a) Primary Burden : This is the reduction in domestic intake resulting from the induced increase in exports and decrease in imports of goods and services, valued at prices prevailing before the collection and the transfer of funds.

## b) Secondary Burden or Price Effects

i) Terms-of-Trade Effects : If export prices fall in relation to import prices, this represents a loss of real national income and can be interpreted as an extra burden upon the paying country. However, the secondary burden would well be negative if the decline of demand in the paying country is especially heavy with respect to imported goods and the increase in demand in the receiving country favours products of the paying country.

But, changes in terms of trade need not necessarily reflect a secondary burden. The statistical evidence is not in itself conclusive. For example, "the terms of trade moved very much in Germany's favour between 1928 and 1931 in spite of German reparations, because the price of raw materials which constitute the greater part of Germany's imports, fell more
sharply than the manufactured goods, which Germany exports". (Haberler, 1956, p. 69).
ii) Pricemeflation Effects on Fixed Obligations: If prices in the paying country are reduced as a result of the contractionary policies normally connected with the extraction of funds for payments abroad, whereas foreign obligations are fixed in terms of money, the commodity equivalent of the payments is increased. The effect is independent of movements in the commodity terms of trade. The "real reparations" may become heavier even if imports become cheaper relative to exports.
c) Output Losses : There is a failure in using available inputs in an optimal fashion. In the course of the deflationary process normally connected with unilateral payments, these losses occur, unless all prices including those of labour are perfectly flexible. The greater the rigidity the greater are the losses.

1) Transitional unemployment and work stoppages might result because of imperfections in the labour market - downward rigidity of wages, collective agreements, legal clauses, strikes, lockouts, etc.
ii) Transitional misallocation of resources is the result of differences in the speed of adjustment of different prices to reductions in demand. There is a temporary loss of real national income because of an inferior composition of output which is not optimal from a long-run viewpoint.
iii) Long-run unemployment is apt to result
during the deflation connected with the collection of funds to be transferred, given the downward rigidity of wages.

This last factor has been assigned a leading role in the most recent analysis of the transfer problem. "Income Approach" has gained preference over "Price Economics". With the assumptions of wage rates, prices, interest rates, and exchange rates being fixed, the only possible adjustments are those of output and employment, and the transfer problem has only to study the relationship between the induced change in the trade balance and the associated change in the real income.

To conclude, if the six economic losses chalked out above are not scrambled together as "transfer difficulties", analysts of the transfer problem will not be confused and realise the futility of separating budgetary and transfer problems when practical solutions are sought to be struck.

### 7.5 Transfer under Conditions of Growth

Transfer under conditions of growth is not essentially different from that between stationary economies. The problem is to ascertain the "warranted" rate of primary dism bursements in the paying country; that is, the rate, which given the rate of primary disbursements abroad and given the countries' propensities to save and to import, is apt to create the desired increase in its balance of trade. Price effects are assumed to be absent. (Machlup, 1964)

Wanted is the "warranted" increase in primary disbursements in the paying country, $I_{A}$. They are new additions
to the income stream (domestic investment and consumption outlays) not induced by changes in income; in contrast, are secondary disbursements by income recipients who respend some or all that they have received. Given are $I_{B}$, the actual increase in primary disbursements in the receiving country; $T$, the amount to be transferred each period; $s_{A}$ and $s_{B}$, the respective MPS; $m_{A}$ and $m_{B}$, the respective MPM in the two countries. We express the warranted $I_{A}$ as a ratio of the actual $I_{B}$, that is,

$$
\begin{equation*}
I_{A}=q \cdot I_{B} \tag{1}
\end{equation*}
$$

(Machlup, 1964, p. 441).
The condition which makes $q$ the warranted ratio is that an export surplus will develop in A of the size $T$, the amount $A$ is obligated to transfer per period. There will be increased exports from $A$ (induced by $Y_{B}$, the increased income in $B$ ), reaching a magnitude of $m_{B} Y_{B}$. There will be also increased imports in $A$ (induced by $Y_{A}$, its own increased income) reaching a magnitude of $m_{A} Y_{A}$. Since, eventually, the induced exports are supposed to exceed the induced imports by an amount $T$, we have

$$
\begin{equation*}
m_{B} Y_{B}=m_{A} Y_{A}+T \tag{2}
\end{equation*}
$$

(Machlup, 1964, p. 442).
Now we come to equilibrium conditions in the two countries. Since incomes will go on changing as long as induced savings exceed or fall short of the sum of the changes
in home investment and trade balance, equilibrium presupposes the following two equalities:

$$
\begin{align*}
& I_{A}+T=S_{A} Y_{A}  \tag{3}\\
& I_{B}-T=s_{B} Y_{B} \tag{4}
\end{align*}
$$

(Machlup, 1964, p. 442).
The three linear equations (2), (3) and (4) have three unknowns, $I_{A}, Y_{A}$, and $Y_{B}$.

The six given values $m_{A}, s_{A}, m_{B}, s_{B}, T$, and $I_{B}$ determine the magnitude of $q$.

Logically, it is obvious that the warranted increase in domestic disbursements in the paying country will be larger if its transfer obligation is small, its import propensity low, and its propensity to save high; and, furthermore, if the other country increases its spending by large amounts, has a high propensity to import, and a low propensity to save. The value of $q$ will be higher if $m_{A}, s_{B}$, and $T$ are smaller and $m_{B}, s_{A}$, and $I_{B}$ are larger. Also, it is assumed that $T$ is sufficiently smaller than $I_{B}$.

A study of certain special cases can be quite interesting. If $s_{A}$ were zero, we see from equation (3) that $I_{A}=-T_{0}$ Primary disbursements in $\mathbf{A}$ must be reduced and numerically it must be equal to $T$, however high primary disbursements in $B$ are raised.

If $s_{B}=0$, equation (4) tells that $I_{B}=T$. This means that $I_{B}$ is no longer given as a policy variable which the receiving country may be free to set at will, but it must be made equal to $T$. In this case, $I_{A}$ becomes independent of $I_{B}$.

If $m_{A}=0$, equation (2) tells that $m_{B} Y_{B}=T$. Again, the responsibility of achieving the transfer will be on the receiving country. At given prices, no change in incomes in the paying country can induce any change in imports; only an increase in exports can achieve the transfer. $I_{B}$ cannot be independently given, but, as can be seen from equation (4) being subtracted from equation (2) and rearranging the terms, it must be made equal to $\left(s_{B}+m_{B}\right) Y_{B}$; that is to $s a y$, it must be so adjusted that sufficient income is generated to induce enough purchases by the receiving country from the paying country to effect the transfer. Again, $I_{A}$ is independent of $I_{B}$. (Machlup, 1964).

The conclusions are qualitatively applicable when both countries have increasing amounts of real resources available and can increase their primary disbursements and their total incomes every period.

With the possibility of growth, thus, the paying country may even increase its domestic disbursements period after period and still maintain an export surplus sufficient to furnish the required foreign exchange. However, if domestic spending increases faster than the supply of resources, price inflation
results and the required export surplus cannot be maintained. The realised growth in the receiving country, the propensities to save and import in both countries, and the size of the transfer obligation are other determinants with which the rate of domestic disbursements and the rate of their increase in the paying country are relatively linked to those in the receiving country.

### 7.6 Recent OPEC Policies: Developed and Developing Countries

## The Purpose

Jones (1979) has tested the relevance of the transfer literature to the problem of accumulation of "petrodollars" with the oil-rich countries, resulting from a steep increase in the prices of oil and its products. This Section gives a summary of his findings.

The Organisation of Petroleum Exporting Countries (OPEC) increased the relative price of their exports to other countries in 1973 and continued to pursue the same policy afterwards to the best of their ability. Jones (1979) brings forth not only an implicit transfer of purchasing power from the net losers to the net gainers associated with such a step, but arrives at some conclusions based on the theory of value and the empirical evidence. His findings are related to:
i) Changes in the standards of living of developed countries (DCs) and less developed countries (LDCs);
ii) Changes in the prices of nontradeables, general
price levels, and demand for money in DCs and LDCs;
iii) Prospects of aid from OPEC to LDCs;
iv) Availability of international commercial loans to LDCs; and
v) Possibilities of unemployment and its spread among the different countries of the world. Jones's (1979) View of the Situation

The traditional transfer theories study either how markets are disturbed by one country making a payment to another assuming the constant terms of trade, or, whether there is any change in the terms of trade caused by a transfer.
"Nonetheless, recent events have been dominated by significant changes in the terms of trade, not because of transfer payments, but for reasons having to do with the success of the OPEC Cartel and the general changes in world demands and supplies of basic commodities. These changes in the prices of internationally traded commodities are themselves the instigators of the transfer." (Jones, 1979, p.156).

To elaborate, any change in a relative price implies a transfer of real income from the net buyer of the commodity that has risen in price to the net seller. Thus the core of the 'transfer problem' can be found in the analysis of the impact on an economy of an exogenous change in prices, assuming that the economy adjusts its spending fully to the new circumstances.

## Observations and Conclusions

i) DCs have not registered any appreciable fall in their standards of living.
ii) LDCs are just "bystanders" in the world market. Their fate depends on the tastes and production differences of and the competition between the two giants - OPEC and DCs. Though LDCs are not active participants in the drama, every LDC need not necessarily suffer a loss of real income. If an LDC is fortunate enough, because its product is demanded by OPEC, it may reap even a net gain. For example, India has gained to some extent by exporting the services of its skilled labour to OPEC.
iii) Prices of nontradeables are most likely to fall in LDCs. However, if there is no local production of importables, the change in the demand for money will be negligible, because real-income effects are likely to cancel price-level effects in the face of increased prices of imports, constant prices of exports, and decreased prices of nontradeables.

The assumptions on the basis of which this conclusion is derived are:
a) The supply of money is controlled;
b) The elasticity of demand for money with respect to real income is unity;
c) All income is derived from current production and is currently spent;
d) The local products of LDCs are poor substitutes (in production and consumption) for their imports.

The demand for imports in LDCs is thus price-inelastic. Expenditure on imports will rise as a result of their increased relative price. Less money will be left to be spent on nontradeables. The excess supply of nontradeables at earlier higher prices will be cleared only at lower prices for them.
iv) The demand for money is most likely to rise in DCs. The assumptions (a), (b), and (c) under (iii) above are true here also. But the local products of DCs can be good substitutes (in production and consumption) for their imports. Also, they may produce some importables to some extent domestically. Thus, prices of nontradeables and the general price level are likely to rise sufficiently in DCs. The price-level effects may outweigh the real-income effects resulting from the costlier imports and unchanged prices of exports.

Under these conditions, the monetary approach to the balance of payments says that, an increase in demand for cash can only be met by running a surplus in the balance of payments. However, this is clearly not the case with a typical Western European oil-importing country. "A rise in oil prices was matched by balance-of-payments deficits. In part, of course, this reflects the accompanying "transfer" from OPEC to the oilconsuming countries". (Jones, 1979, p. 159).
v) OPEC aid to LDCs will enable the latter to tolerate the pinch of the rising import prices.
vi) OPEC are not ready to recycle their petrodollars through the financial institutions of LDCs. Even then, LDCs will gain indirectly, because international commercial loans will be available to them in greater quantities and on better terms.
vii) If there is, after all, a net transfer of real income to OPEC, and if their MPS is pretty large, there will be unemployment. It will hit those countries the aggregate effective demand for whose products has fallen.

## CHAPTER VIII

## SUMMARY AND CONCLUSIONS

## 8.1 $\frac{\text { "What" and "Why" of the }}{\text { Transfer Problem }}$

"The question whether a financial transfer of say \$ 100 million from the United States to the United Kingdom will result in the subsequent movement of $\$ 100$ million of commodities from the U.S. to the U.K. has attracted much attention". (Heller, 1977, p. 146). If the subsequent flow of goods and services worth the value of the financial transfer is indeed realised, the transfer is said to be effected. The effected transfer is not associated with any form of the transfer problem. The undereffected and the overeffected transfers lead to balance-of-payments disequilibrium for the countries, which must be rectified.

If, for example, the abovemmentioned financial transfer from the UoS. is followed by a physical flow worth less than \$ 100 million, there is an excess supply of dollars relative to their demand at the ruling exchange rate. These circumstances will promote, through gold flow or exchange-rate variam tion, a continued change in the external balances of the two countries, so as to even up supply and demand of the two currencies in their international market.

Figure 8.1 portrays the supply and demand schedules


The Transfer Problem

Source: Heller, 1977, p. 148 (Adapted)
for U.S. dollars given its rate of exchange in terms of pound sterling. The initial supply and demand (for dollars) curves are $S_{0}$ and $D_{0}$, resulting in equilibrium at the exchange rate $r_{0}$. Now, if the U.S. makes a transfer payment equal to $A B$, the dollar supply curve shifts to the right by that amount to $S_{T}$. The transfer is effected if the demand for dollars due to foreign purchases in the U.S. increases by the same amount $A B$, shifting the demand curve for dollars to $D_{T}$. The new equilibrium point is $B$. The exchange rate will then remain at $r_{0}$. $A$ smaller increase in demand will be sufficient if the supply curve undergoes a leftward shift to $S_{1}$ as a result of reduced American imports. It is enough if the demand curve shifts to $\mathrm{D}_{1}$. The combination represents an increase in the dollar volume of U.S. exports by AC and a decrease in the dollar volume of U.S. imports by BC.

In case, the demand for dollars remains unchanged, the exchange rate of dollar in terms of pound sterling sharply falls to $r_{T}$, given the transfer payment. The equilibrium point in this case is D.

Unless the transfer is exactly effected, further adjustments of exchange rates, prices, or incomes are required. If the costs of these secondary adjustments are positive, the total cost of a transfer to the transferor will be greater than its budgeted cost.

### 8.2 The Transfer Literature

Chronologically speaking, the oldest piece of literature in the context of the Transfer Problem, referred to by this study, was written by Mill (1844). However, there were writers even before Mill, who not only thought and wrote about the problem, but also foresaw the strands of knowledge related to this issue, which are claimed as "modern" today. In any case, "Mill summed up their work". (Schumpeter, 1954, p. 1107)。 Mill's (1844) account was inadequate in so far as he put the burden of adjustment on the price level alone. Thus the first stage of the evolution of the Transfer Literature includes Mill (1844) and his predecessors.

At the second stage, we come across the researches of Taussig (1927) and his students. The most important contribution of Taussig (1927) was his finding that the empirical data and the actual observations about the financial and the real transfers between nations revealed the remarkable ease and smoothness with which the process had operated. The concepts of Gross and Net Barter Terms of Trade constituted his another contribution. His leadership inspired his pupils. Viner (1960) turned out to be his most reputed student.

The third stage is marked by the hot controversy about German Reparation Payments in the late 1920s. Keynes (1929) though put forth his pessimistic theory, gave no doubt a description of his limiting case, in which the transfer of goods and services by the lending country could not be effected with
ease. Rueff's (1929) "The (Law) of Conservation of Purchasing Power" can be compared with similar laws in physical sciences. Ohlin (1929) put down Keynes's fears as unfounded. He emphasized the role of shifts of demand in both countries (paying and receiving) after the financial transfer. He underlined the role of domestic non-traded goods also in the moulding of foreign-trade balance through their altered relative prices reallocating the use of resources among alternative lines of production. Metzler's (1942) article about the magnitude of foreign-trade balance attained through changes in real incomes of the two nations after transfer, with the given Marginal Propensities to save and to import, is the basic work in this regard. Haberler (1956) and Machlup (1964) are two other stars who started their work during this period and continued it for a long time. They have exercised a sizable influence on the writers of present generation.

The fourth stage is marked by the emergence of such stalwarts on the scene as Meade (1951), Samuelson (1952) and (1954), and Johnson (1961). Their contribution lies in the fact that they clarified the existing concepts and posed the existing problems with greater clarity. They used numerical examples and tools from Algebra, Geometry, and Calculus for arriving at scientifically derived results. Their successors have largely used their findings and their methods of attacking the problem.

The fifth and the present stage is related to writers
like Kemp (1966), Mundell (1968), Heller (1977), Jones (1979), and others. They have been applying recent ideas in Economic Theory to the Transfer Problem and testing the relevance of its literature to the present-day problems.
8.3 $\frac{\text { Do Transfer Payments Pose }}{\text { an Insoluble Problem? }}$

Should the paying country alone shoulder the entire burden and botheration of effecting the financial transfer in the absence of proper cooperation and initiative expected from the receiving parties?

Machlup (1964) assures us that we need not lose courage. Theoretically, he has constructed limiting cases, in which the problem cannot be solved at all. But neither the logical reasoning nor the statistical evidence supported by the actual case studies point to the existence of such limiting cases. (Machlup, 1964).

Limiting Case 1 : There is a single good which can be exported by the paying country, the foreign demand for which is price-inelastic. There is a ban on foreign tourists, so that the possibility of invisible exports is also ruled out. A good which is not exportable today will never be exportable. Tastes of the people in this particular country are completely different from those of all other peoples in the world.

Limiting Case 2 : Foreign tariffs prevent the increase in payer's exports. There are no short-term or long-term home securities, which foreign capitalists may want to purchase.

Imports to the paying country cannot decline, either because there have not been any or because both price elasticities and income elasticities of demand for them are zero. "Thus, by excluding reductions in commodity imports and increases in capital imports, and by assuming increases in foreign tariffs, we have set up the worst imaginable conditions". (Machlup, 1964, p.421).

## A More Plausible and Realistic Case

Let the primary disbursements and prices fall in the paying country. No change is contemplated in the receiving country.

The paying country gets
(a) Price-induced additional exports. They form a small part of their world supply. Some goods which are not exportable today may become so tomorrow. Foreign demand for them is priceelastic.
(b) Price-induced fall in imports. Prices of domestic goods have fallen. There must be substitutions of domestic for foreign goods, to some extent.
(c) Income-induced fall in imports. If all the three factors are pulling together, "it is not impossible that onehundred per cent of the levy can be transferred without too much of a secondary income contraction in the paying country". (Machlup, 1964, p. 431).

Should now the expansions of primary disbursements in the receiving countries take place, a foreign-induced increase in exports will join the above-mentioned three factors in
creating the export surplus for the paying country. If prices also in the foreign countries move favourably upwards, the transfer pessimism will vanish altogether. 8.4 Distinction between Classical and Keynesian Transfer Models

We consider two countries and two goods.

## (i) Assumptions

(a) The classical model assumes full employment of resources. Any disturbance caused by a transfer affects spending patterns and perhaps production, but not employment. (Jones, 1979).

Thus, there is no "multiplier". There are no savings. All income is derived from current production and is currently spent. Money is needed only for carrying out transactions.
(b) The Keynesian variant assumes rigid prices, unemployed resources, and positive MPS (normally) in both countries. It is a model in which output and employment are demanddetermined.

Only a part of the increased disposable income spills over into increased expenditure. There exists a "multiplier" operating on the output and employment. It results from an initial change in expenditure. The amount to be transferred can be raised by dissaving or by printing currency notes. The transferred amount in the receiving country can go into saving. Money functions as a "store of value" also in addition to a medium facilitating transactions.

## (ii) Necessity of Adjustment Mechanism

Both models believe in an automatic mechanism of effecting the transfer. Trade is balanced initially.
(a) In the classical case, no deliberate adjustment policy is needed if $m_{a}+m_{b}=1$. Terms of trade remain unchanged. ( $m_{a}$ and $m_{b}$ are Marginal Propensities to import in the two countries.) Any deterioration in the terms of trade of the paying country is called for only if this sum is less than unity.
(b) In the Keynesian model, the automatic mechanism operates through changes in real income. However, with positive marginal propensities to save and to import in both countries, the entire transfer cannot be effected by changes in income taxation equal to the amount to be transferred (at the initial income levels). That is, at the initial income levels, even if both countries allow their income to be affected directly by the full amount of the transfer, it cannot be effected in full.
(iii) The Type of Deliberate Adjustment Policy

If at all, a deliberate adjustment is called for, we face the following policies.

Let the transfer be undereffected.
(a) In the classical model, priority is given to securing deteriorated terms of trade for the transferor, so that the excess supply of its good at its pre-transfer relative price is cleared.
(b) In the Keynesian model, priority is given to the deflation of effective demand in the paying country. Unemployment of resources is created in the paying country.

Both the above-mentioned policies imply a Secondary Burden for the paying country.

If the transfer is overeffected before adopting any deliberate policy, similar steps are taken in the receiving country.

## 8.5 $\frac{\text { Terms of Trade after Transfer }}{\text { and Less Developed Countries }}$

Again we consider two countries, each of which produces a good and exports a part of its production. The system is in equilibrium to begin with.

At present, the fact that a larger part of capital is transferred through changes in real income is well accepted. "If income changes fail to transfer all the capital, additional capital is left to be transferred through price changes". (Kindleberger, 1971, p. 323). Thus price changes have to play a residual role. A vast literature on the terms-of-trade aspect of transfer payments is certainly out of proportion relative to its importance.

After all, the final outcome about the direction and the magnitude of the change in terms of trade is the net result of various forces acting upon it. If this net result creates an excess demand for the good of a particular country relative to its supply at its initial price, the relative price of that good will rise.

We study two basic forces and apply the findings to the development loans given by advanced industrial countries to the less developed countries (LDCs).
(i) Marginal propensity to import;
(ii) Supply elasticities.

The borrowing (less developed) country will spend more for its own output than for the output of the lending (advanced) country. A transfer from the advanced country will release less of the less developed country's product than what the latter is ready to absorb. Thus the borrowing LDC will record an improvement in its terms of trade.

The force of Supply Elasticity also favours the borrowing LDC. The LDC is generally a raw material country and the lending advanced country a manufacturing one. The supply from the borrowing country is likely to be price-inelastic. The price of its product will rise, at least in the short run, as a result of an increase in spending. On the other hand, there is some excess capacity in the lending manufacturing country. The supply from such mature countries is price-elastic so as to absorb changes in spending without reflecting them in the changed price of its product.

Thus under "normal" conditions, terms-of-trade changes will favour the borrower and be adverse to the lender. This presumption is supported by the empirical evidence cited by Heller (1977). The U.S. enabled foreigners to purchase American goods by granting them generous payments. The U.S. has been
recording sizable surplus on its balance of trade. But, the overall U.S. balance of payments have been showing deficits during most of the period after World War II. A large part of these deficits emanates from the undereffected transfer payments made by the U.S. The U.S. is forced to bear a secondary burden.

The presumption favouring the borrowing country is thus small but positive. However, this statement may not be applicable to all sorts of transfer payments. Every transfer payment is different from the other by virtue of circumstances and political trappings accompanying it.
8.6 Transfer Propositions in the Context of Developmental Finance

The task of highlighting the real motivations behind the much talked about "Aid for Developmental Purposes" is important enough. Let us observe a few facets of this economic issue which cannot be separated from its political overtones.
(i) Governments of the developed countries or very influential private parties associated with them offer loans on different terms and grants to the Governments and other bodies concerned with the less developed countries (LDCs).
(ii) There are occasions when such aid is channelised through such international financial bodies as the IMF, IBRD, and IDA.
(iii) The world is divided between two zones influenced by the U.S. and the U.S.S.R. respectively. The degree of
influence may not be uniform over all regions. The communist countries are not members of the above-mentioned international financial intermediaries. They happen to be controlled by the Governments of the advanced capitalist countries.
(iv) The aid is, at least to some extent, offered with a hidden intention of gaining political control over poor LDCs. It is not that LDCs do not get any benefits. They do get sophisticated equipments, strategic imports, and advanced technology, depending on the nature of the contract and the behaviour of an LDC. We know that India has failed to get enriched uranium and spare parts from the U.S. as stipulated in the contract.
( $v$ ) Aid to LDCs is also in the interest of the economies of the advanced countries. They want to maintain the aggregate effective demand for their products like arms and heavy equipments. The junk is sold to LDCs.
(vi) In spite of a talk about the optimal allocation of world resources, paying and receiving countries do not follow the monetary and fiscal policies dictated by the transfer theory. Every country wants to pursue a dual aim of full employment and price stability at home and current-account balance with the external world. (Scammell, 1974). Tariff walls raised all over the world are really discouraging.
(vii) Lending countries often borrow as well, thus spreading the burden of net lending over a longer period. "Large capital transfers between countries are high politics". (Scammell, 1974, p. 386).
(viii) "Tied Aid" is one more feature of the policies adopted by the lending countries. Such aid undoubtedly removes the likely secondary burden to be faced by the lending country. But it deprives the borrowing country of the advantages of "multilateral" trade. The borrowing country now cannot buy in the cheapest market and sell in the dearest market. The "tied" aid forces the borrowing country to spend the proceeds of loans and grants in the markets of the lending country alone. If the aid is not "tied", bilateral agreements can be consistent with the benefits of multilateral trade, because of the existence of international markets for commodities and foreign exchange.
(ix) Thus, spokesmen sympathetic to LDCs advocate "trade" between nations rather than "aid" to the LDCs.

That is how the transfer literature is very much relevant to the understanding of and for the solution of problems related to the movement of financial and real assets between nations today. The transfer problem continues to be an issue attracting the attention of research scholars.

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