

MANAGING THE INTERNATIONAL VALUE OF MONEY.Introduction.

Before World War I, the objective of monetary management was not divided as between the stability of international value of money and that of its internal value. These two fields of monetary management were not taken to be essentially rival. Maintaining the external value of money was the all comprehensive objective of monetary policy. Fluctuations in the balance of payments were the sign-posts of that policy and the quantity of money was its steering wheel. The mechanism of management was simpler, and, though its logic was merciless, its results were quick and conspicuous so far as the achievement of the goal was concerned. That system, known as the international gold standard, was attributed universal importance for monetary policies and its inanimate representative, gold, was enshrined in the inner sanctuaries of central banks.

In the years following World War First, there arose a questioning about the sanctity of the gold standard system. The adverse effects that that system used to exert on the internal economic situation became glaring and made the inherent rivalry of the ~~external~~ management of the external and internal values of money self-evident. A keen controversy arose whether the price that was to be paid in terms of internal instability was not too heavy for the objective of external stability and that the sacrifice of the latter would not prove a lesser evil. The reaction against the gold standard system became very strong and the internal stability came to be increasingly recognized as the supreme objective of monetary management and the stability of the external value of money was important, so long as it helped the objective of internal stability.

But the alternatives to the gold standard soon revealed the defects of an opposite extreme. The experiments that were carried on in the management of the exchange values of national currencies disclosed one important fact that the stability of the external value of currency was essential for even the internal stabilization and that stability would not be secured by each country adopting its individual policy but by co-operation of all the countries concerned.

Any international monetary system of stable exchanges which tries to supplant the gold standard must take into consideration certain fundamental conditions without which relatively stable exchanges are impossible. Further, it is necessary to ascertain whether a common domestic monetary policy pursued by several countries is also conducive to international monetary stability irrespective of their ^{international} payments position. If the domestic and external stability measures are conflicting, the causes of such conflicts should be studied individually for a country rather than explaining the conflict as a diversion from a theoretical rule. The logic of the theoretical gold standard is too simple in its calculations of the adjustment process which, though worked out itself ultimately, was the outcome of the forces which the gold standard theory hardly took into account. Again, the gold standard mechanism hardly made distinctions among countries with different economic situations and importance in international economic environment. It is ^{therefore} worthwhile to examine the gold standard mechanism and how the adjustment process took place under it.

The Gold Standard Mechanism.

The monetary policy of the gold standard system is based on the quantity theory of money. There is a fixed relationship between the volume of domestic currency and the monetary gold reserves of a country and the authorities are bound to convert the currency

in gold at a fixed rate on demand. Changes in the monetary gold reserves, therefore, would be transmitted to the volume of currency, causing fluctuations in prices as desired. The fluctuations in the gold currency reserves are ^{linked} ~~linked~~ with the balances of payments and, therefore, quantitative changes in the volume of currency are closely connected with the trends in the balance of payments of a country. As a mechanism of the adjustment of international payments, the theoretical working of the gold standard mechanism is somewhat as follows:

A country which is incurring a deficit in its balance of payments will soon begin to lose its foreign exchange reserves in the first instance. Next, the foreign exchange value of its national currency will be depreciated. Up to this stage the effect of the deficit on the exchange value of national currency is the same as it would be in a system of freely fluctuating exchange rates. Exports will become somewhat cheaper to the foreigner and imports will become dearer. In spite of this, if the deficit persists, the gold standard system will come into play. It would be worthwhile then for the deficit country to send shipments of gold as soon as the total amount of home currency necessary for making payments to the creditor country at a depreciated rate of exchange exceeds the total value in home ^{Currency} ~~currency~~ of a certain amount of gold necessary to pay for the surplus of imports plus the cost of transporting gold to the creditor country. As the surplus country is also supposed to be on the gold standard, it would be ready to receive gold for the payment of the surplus exports, since receipt of gold is as good as receiving payments in its own national currency. The impact of losing gold at once falls on the ratio of currency to gold, that is, on the quantity of money. The quantity of money falls with the consequent fall in ~~domestic~~ domestic prices and incomes. Exports become

cheaper while imports dearer. The deficit in the balance of payments is prevented from further developing. Now at the same time, if the gold receiving country pursues an inflationary policy, increasing the quantity of money to the extent of the gold receipts, the deficit country's exports would be more attractive in the creditor country. The former therefore, would have chance to recover its lost gold and thus, the price level and income would be restored to their original level. Thus, the gold standard mechanism, though caused temporary falls in prices, and contractions in domestic money incomes, ultimately restored equilibrium in the balance of payments and also restored domestic prices and income. It was calculated to facilitate international clearing due to the fact of gold being commonly acceptable as money both in the creditor and debtor country. The gold is equivalent to the debtor's currency in the debtor's country* and to the creditor's currency in the ^{creditor's} ~~creditor's~~ country.¹

Conditions of Adjustments under the Gold Standard System.

The adjustment process described above constitutes a general picture of the gold standard mechanism in its international bearing. The system was not imposing any legal obligation on either the deficit or the surplus country to pursue a deflationary or inflationary policy or, to say otherwise, to observe the so-called 'rules of the game'. It was difficult to define in precise terms what was implied by the rules of the game. The management of an international standard was considered to be an art rather than a science and no one would therefore suggest that it was possible to draw up a formal code of action admitting of no exception and qualifications, adherence to which was obligatory on peril of wrecking the whole structure.² But given the responsibility of monetary authorities to maintain free convertibility of paper money

1. R.G.Hawtrey. The Gold Standard in Theory & Practice. 5th Edn. 1947, p.37.

2. Macmillan Committee Report p.23.

in gold and vice versa, the mechanism would work without any superior international authority directing the countries concerned to follow the rules. In spite of this, the rules were, on any account, self-imposed discipline and, therefore, the need for an external authority legally empowered to bring into trim any recalcitrant member of the system would be especially felt when the creditor country fails to pursue an expansionist policy. So far as the deficit country was concerned, it would be obliged to follow a deflationary policy for otherwise it would completely ^{exhaust} ~~exhaust~~ its gold currency reserves which would mean the breakdown of the whole economic system. That is why it is alleged that the gold-standard mechanism is not symmetrical and has an inherent bias towards deflation.¹ Apart from the nonobservance of rules by the surplus country, but even if such a country may whole-heartedly try to pursue a policy of monetary expansion, it may not be able to immediately affect prices and incomes as it is generally assumed under the the gold standard mechanism. The effects of monetary impulses released by ^{the} a central bank of a surplus country would depend upon a number of factors. Firstly, the effect on prices of the increase in the quantity of money effected by the central bank, consequent upon gold inflow, would depend upon the elasticity of the credit system of the country. If the credit system is not sufficiently elastic, the money released by the central bank will lie idle somewhere in the banking system. This would be especially true in the case of undeveloped countries. If, therefore, the prices do not respond to the increased quantity of money, the monetary policy has little to be blamed. Such a situation is alleged to be prevalent in France during the crisis of the gold standard. The price level in France was comparatively insensitive to gold flow so that she found ^{much easier} to attract gold than to expel it. Gold inflow

1. Mrs. J. Robinson 'International Currency Proposals' E.J. Jun-Sept. 1943 p.161.

did not result in a proportional increase in bank credit especially due to the inelasticity of the French money market and more than necessary liquidity of banks. France in 1932 had 100% coverage in gold and gold exchange for its outstanding notes.¹ Secondly, the effect of the increase of the quantity of money on prices might differ from country to country. It would depend upon a number of factors such as population, economic organization, the organization and the working of the banking system, the methods of making payments etc. Countries are differing in their sizes and also the importance of foreign trade cannot be the same to all the countries. Gold standard theory was based on the principle ^{of} ~~on~~ interaction between homogeneous countries of approximately equal economic size. This condition can hardly be realised in practice. Despite that, certain special conditions in the financial relations of the world before 1914 helped the working of the gold standard. Thus, in the case of U.S.A. it is said that a substantial gold inflow would be likely to have a far less expansive effect there than the contractive effect upon the deficit countries.² Thirdly, there is general limitation of monetary policy. Cheap money policy may not receive an expected response from business. The experience of the thirties bears sufficient testimony to this inherent weakness of central banking as based on the quantity ~~of~~ ^{of money.} theory. The success of the central bank is more assured in the case of monetary contraction than in the case of expansion. The burden of adjustment, that is why, would especially fall on a gold losing country.

The adjustment process under the gold standard is a two-sided approach and as such it is truly characterised as a game. To the extent that the creditor country is willing and ready to undertake an expansive policy, the equilibrating movement would be shorter,

1. J.H. Williams 'Monetary Stability and the Gold Standard' in post-war Monetary Plans and other Essays, 1949 p.291.

2. Ibid p.173.

quicker and less burdensome for the deficit countries. In spite of the two-sided play, it is likely that some countries may not be able to balance their balance of payments. This is because a deficit country may be dependent upon one or few export commodities the supply of which may be inelastic or increased supply can be supplied only at increasing costs. Or it may be that the demand for the export commodities of the deficit country may be inelastic. This is generally the case with primary producing countries. In this case, the adjustment in the balance of payments is impossible unless the deficit country drastically cuts down its imports even at the cost of lowering its standard of living. But such a policy of deficit countries will adversely affect the export trade of surplus countries. In order that deficit countries may be able to purchase goods from countries which have a surplus, the latter shall have to give long-term loans to deficit countries in order to maintain their export trade. Thus, before 1914, France and Germany expanded their export trade ~~in~~ by advancing long-term loans to other countries. It is true that in the beginning foreign lendings were the result of advantages other than export surpluses. For, exporters of capital and exporters of commodities were two different sets of people. But afterwards export of capital came to be consciously regulated so as to gain commercial and industrial advantages.¹ Investments abroad and foreign trade were the dual aspects of virtually a simultaneous process.

The smooth working of international exchange of commodities requires that surplus countries should be accommodative as far as possible, in their own interests. In the case of deficit country, a great deal of flexibility is necessary in the economic structure of the country so that prices and costs may readily adjust themselves to

1. Carl Iverson .International Capital Movements 1935. Humphrey Milford, London p.82.

the changes in the quantity of money. The most rigid element in modern cost-structures is that of wage-costs which does not readily adjust itself to the changes in the volume of money. The modern complaint against the gold standard is that it attempts to limit the natural tendency of wages to rise beyond the levels set up by the volume of money.¹

Modus Operandi of Adjustment.

The classical theory of international payments attributed a certain automatism to the adjustment process through the working of the gold standard. The monetary systems of the countries concerned worked in such a way that equilibrium was restored.² If one country had a deficit in its balance of payments with another, the surplus of imports would be paid for in gold. This would cause changes in the gold currency reserves, and therefore, in the volume of purchasing power in the two countries. As a result of the increased supply of money in the surplus country and reduced supply in the deficit country, prices and costs would rise in the former and fall in the latter. The deficit country would then become a cheap market to purchase in. Its exports would, therefore, rise and its imports would fall. This process would continue until a ~~balance~~ balance between payments and receipts was again established. This sort of changes in the prices and costs are the consequences of the changes

1. J.M.Keynes. 'The Objective of International Price-Stability'. E.J. June-Sept., 1943 p.185.

2. This classical view of the adjustment process is typically described by David Ricardo by giving an illustration of trade between England and Portugal. Thus he writes: 'If the profits to be realized from an import of cloth from England in Portugal are £5 while the exchange rate is £2, cloth would be imported and money would be exported, till the diminution of money in Portugal and its accumulation in England had produced such a state of prices as would make it no longer profitable to continue these transactions'. David Ricardo. Principles of Political Economy. Everyman's Library 1937, p.85.

in the quantity of money. But if we take into account the wider meaning of the term 'money' which would also include bank-money, no precise relationship can be established between the changes in gold reserves and the volume of money and also between the latter and the fluctuations in prices and incomes. For, though there can be a mathematical and precise relation between the amount of gold and legal tender i.e. liabilities of the central bank, this sort of the relationship cannot be determined between the volume of bank reserves and the volume of bank-money supported by them. Such a close and exact proportion can be ascertained only when the banks keep themselves fully loaned up after maintaining the legal or traditional reserve ratios. This ^{may} ~~is~~ not be generally the case. However, such a precise relationship may not be found very essential. It would be sufficient ~~to~~ if the course of prices and incomes ~~is~~ is influenced in the desired direction. If an inflow of specie in a country causes prices and wages to rise, the consequences envisaged by the theory of international trade would take place irrespective of the exact degree of correspondence between the two movements.¹

However, the changes in the quantity of money and those in relative price-levels ^{surplus countries are only the superficial aspects of} in the deficit and other fundamental changes in the two countries. It can be shown that adjustment in the balance of trade can take place even without necessitating any gold movements and relative price changes between the two countries.

The most important economic effect of changes in the balance of ~~payments and~~ trade is that they bring about changes in the relative levels of incomes in the two countries by raising the level of income in the surplus country and lowering it in the deficit one. These changes in the levels of income in the two countries automatically bring about equilibrium in the balance

1. F.W. Taussig - International Trade - 1936, p.198.

of trade without necessitating any action on the part of monetary authorities of the countries concerned ~~in this~~ for the purpose of adjustment according to the principles of the gold standard. This can be well understood by taking a simple illustration. For the sake of simplicity only two countries, A and B, are assumed to be trading between themselves. It is further assumed that no capital movements take place between the two countries so that whatever international payments are to be made or received are purely on ordinary trade account. Starting from the position of equilibrium, suppose that, owing to a change in the tastes of B nationals for one

of A's exportable goods, they cease to import that good from A and instead prefer to buy one ~~extra~~ produced in their own country. All other things remaining the same, there is presently an excess of imports in A over her exports. According to the classical theory of the gold standard this deficit in the balance of payment of A can be removed either by following a deflationary monetary policy or by sending shipment of gold of the value of deficit to B. If A does not have surplus reserves of gold, the export of gold will bring about a ~~xxx~~ reduction in the quantity of currency which is just supportable on the now reduced gold reserves. This may be correct according to the theory of the gold standard. But a little reflection will show that the items other than gold are likely to move both in A and B in such a way that the movements towards equilibrium would be started almost automatically.

The process of adjustment can be examined under different conditions as regards the relative levels of employment prevailing in the two countries. Suppose that in both the countries, A and B, there prevails a situation of unemployment. Suppose further that as a result of the diversion of demand from the products of A to those of B, ^A suffers a net diminution in her exports to the extent of

Rupees one lakh. It follows that for country B, this means a net increase in the income to the full amount of Rs. one lakh. Though, this is ~~not~~ ~~the~~ the initial situation, the adverse balance of A will not in the short ~~term~~ ~~it~~ run be equal to this amount. The loss in income of the value of Rupees one lakh that the exports in A suffer initially causes a fall in demand and therefore, a further fall in income in A according to the multiplier effect. The fall in income and employment thus brought ^{about} ~~in~~ in A would reduce its propensity to import. This would check the balance of payments of A from further deteriorating. But a great relief to A will come from the developments in B. Country B experiences a rise in demand due to the increased income initially to the extent of Rupees one lakh. Supposing that there is unemployment in B, this initial rise in income will give rise to a cumulative process of income expansion. As a result B's demand for A's other exports would rise and thus the gap between A's exports and imports that was originally created by the ~~the~~ diversion of demand in B will be bridged. As A's exports increase in response to increased income and employment in B, a cumulative process will start in A which will restore A's income and employment to their original level. Thus, natural economic forces left to themselves will work out an adjustment beneficial to both A and B.

How does the process of adjustment work when there is full employment in B? Clearly, the existence of full employment in B ~~implies~~ implies boom conditions there and, therefore, prices in B will be higher than in A. In this situation a tendency for her exports to fall and for her imports to rise is already causing her balance of trade to turn adverse. A change in tastes of B's nationals or even A's national in favour of B's products at such a time is very welcome for B as well as for A, because, it will tend to correct B's adverse balance automatically and also it will enable the

boom to sustain for a longer time by raising the marginal efficiency of capital in B. The continuation of boom in B will protect A from the adverse repercussions of a crash in B by sustaining the demand for A's exports.

It can be discerned from the above illustration that there is no reason why interference of the monetary authority is necessary for correcting an ~~adverse~~ adverse balance of payments. ~~There~~ This is because the strategic factor which influences exports and imports is not the comparative price levels but the income levels in the two countries. Effective demand, whether for foreign goods or for domestic goods depends upon the incomes of consumers, which again are the outcome of employment. The explanation of the adjustment process essentially through income fluctuations rather than through price fluctuations is nothing but the application of Keynes's General Theory in its international aspect. There is close relation between exports and imports on one hand and the national income on the other. Changes in exports affect national income and changes in the latter in their turn affect imports. It is true that the actual ~~x~~ volume and composition of imports consequent upon an increase in income will depend upon a number of factors such as the preferences of the consumers, relative prices at home and abroad and also the distribution of the increase in income among individuals of different tastes and incomes. Nevertheless, the level of income is a dominating factor, higher incomes being generally associated with higher imports and lower incomes with lower imports.¹

The income and expenditure approach to the *modus operandi* of adjustment of the balance of payments explains at once what was a paradox to the ~~existing~~ traditional doctrine. The equilibrium would be restored even without price changes and changes in the quantity

1. William A. Salant, 'Foreign Trade Policy in the Business Cycle', in ~~Readings~~ Readings in the Theory of International Trade, A.E.A., London 1950, pp. 203-204.

of money brought about by the central bank.

The correlation between the domestic business activity and ~~some~~ ~~an~~ balance of payments is ~~an~~ almost self-evident. Despite that some of the empirical studies aimed at an inductive verification of the process of adjustment have not been able to arrive at a definite conclusion. One of such studies is that of Prof. Taussig. Referring to the balance of payments of the U.S. during the period just following the First World War, Prof. Taussig writes:

"The United States was completely and unequivocally on a gold basis. Here it would seem that the received doctrine should prove valid. Yet nothing points that way. The outflow of nearly 300 millions in the year 1919 had no visible effect in checking the rise in prices".¹

The rise in U.S. prices despite gold outflow appears paradoxical if one tries to seek an explanation in the traditional theory. ~~And~~ Prof. Taussig has disclosed this paradox but he has not been able to explain it. Being confused he has to mention : "Things just happened so". He seeks an ~~an~~ explanation desperately again in the traditional approach. "Without this (i.e. traditional view) theory", he writes, "it is impossible to explain the facts and especially the equalization of money values of exports and imports".²

The period with reference to which Prof. Taussig has examined the balance of payments of the U.S. was extra-ordinary in the economic history of the world. It was a period immediately following First World War in which capital assets of European countries were largely devastated. These countries, therefore, were obliged to make purchases in the U.S. despite higher prices prevailing in that country. But according to Prof. Taussig the points of contention are that why prices in the U.S. were rising despite there being a heavy outflow and how there was established a balance between money values of exports and imports. These

1. F.W. Taussig. International Trade, 1936 p.330

2. Ibid p.243.

points of contention are at once resolved if one refers to another study by Prof. J.W. Angell who has examined the process of adjustment of the U.S. balance of payments with reference to the same period as referred to by Prof. Taussig. Prof. Angell's study clearly indicates the correlation between domestic business activity and balance of payments. Immediately on the close of war there was rapid industrial and business expansion in the U.S. The contractionist effects of an outflow of 300 million were not felt at all because the expansion in bank money more than made up for the loss in purchasing power due to this outflow. Given the elasticity of the credit system the expanding business activity automatically draws out enough volume of money from the banking system. During this period there was a great demand for U.S. capital exports especially from the war-ravaged European countries. But those capital exports of the U.S. were at once counter-balanced by a rise in the U.S. imports of other commodities. This was quite natural. For, rising incomes in the U.S. considerably increased the propensity to import of that country. The whole line of causation has been well described by Prof. Angell thus:

" Our own rapid internal expansion in 1919 and 1920 caused us to increase our commodity imports very heavily - imports, be it noted, of kinds, in the main, quite different from the kinds of goods we were exporting. The aggregate result of all this was that our net export balances both trade and capital began to show a continuous decline" .1

It has been further pointed out by the same authority that as U.S. capital exports were rising, its imports were also rising almost simultaneously. The result of these offsetting forces in imports and exports was that money values of exports and imports came to be equalized as Prof. Taussig has stated.

Second important study of the process of adjustment is

1. J.W. Angell. Equilibrium in International Trade. The U.S. 1919 1926. Q.J. of E., 1928 p.437.

that of Prof. J. Viner which refers to the balance of payments of Canada during the period of 1900 to 1913.¹ During this period Canada borrowed on a large scale from other countries for financing her economic development. It is Prof. Viner's contention that the Canadian borrowings could be transferred to Canada in a way generally indicated by the traditional theory.² This means that the loans to Canada were for the most part ultimately paid in the form of goods and services and this was made possible by rise in Canada's domestic prices which discouraged exports and ~~and~~ stimulated the buying ~~power~~ of the lower priced foreign goods. The rise in domestic prices of Canada was brought about by the acquisition of foreign balances by Canadian Banks, which then expanded the volume of domestic money against the outside reserves. Such a rise in the volume of domestic money and therefore prices was as good as one that would have been brought about by specie inflow.

Here, though one finds an empirical proof of the traditional theory, Prof. Viner has not properly interpreted the sequence of events in Canada. The rise in domestic prices of Canada was brought about initially not by foreign funds but by its own ~~rapid~~ rapid industrial expansion after 1900. This initial rise in the prices gave rise to further impetus to investment. But due to shortage of capital and other factors of production, this expansion could not go further. Borrowing abroad, therefore, was the only alternative in the situation then prevailing in Canada.³ It is difficult to understand how the banks could have expanded the volume of money in absence of the expansion of domestic business activity taking the

1. J. Viner, Canada's balance of International ~~Debt~~ Indebtedness 1900 to 1913. Cambridge, Mass. 1924.

2. J. Viner 'Studies in the Theory of International Trade'. 1937, p. 413

3. Robert M. Carr. 'The Role of Price in the International Trade Mechanism' Q.J. of E., August 1931, p. 719.

lead in the whole process. Chronologically, the loans were not floated until domestic expansion reached to such an extent that the domestic supply of the factors of production began to fall short of requirements and therefore causing a rise in domestic prices. In the Canadian example also one finds that it is the rise in domestic business activity giving rise to higher incomes that plays a vital role in the adjustment process.

The predominant role that the relative levels of income at home and abroad play in the adjustment process is very glaringly pointed out by a study of the League of Nations relating to international currency experience during the inter-war period. Thus, in 1926 when Germany experienced a fall in her capital imports, it could adjust her balance of payments quickly without resorting to the expedients suggested by the traditional theory. When the expenditure financed out of foreign loans stopped, the level of income also displayed a recessionary tendency. The fall in income brought about a ^{corresponding} fall in the demand for foreign products. During this time there was active demand in most of the foreign markets which contributed significantly to the adjustment of the German balance partly through a rise in exports and mainly through a fall in imports. Thus : /fall in imports the German balance adjusted with astonishing rapidity. Yet none of the factors stressed by the traditional view seem to have played any part in this adjustment. In the first place, the central bank gained instead of losing gold. It did so in the main, by purchasing foreign balances from domestic customers who had acquired them by previous borrowings abroad. Secondly, in view of the increase in its reserves, the Reichsbank gradually lowered its discount rate from 9% in January to 6% in July, 1926. Thirdly, both note circulation and commercial bank deposits increased during the year. Fourthly, the domestic price-level as reflected in the cost of living index was slightly higher than in the previous year, while in other countries such as the U.S. and the

U.K. it showed a decline ^{during the period} from 1925 to 1926. All this was contrary to the classical explanation according to which, ~~in~~ the circumstances in Germany, referred to above, would have called for an outflow of gold, a rise in the discount rate, a contraction in domestic money and a fall in prices.¹

It is very interesting to note that Germany experienced again after 1929 a sharp decline in her capital imports and in her exports. This time Germany used the traditional methods of raising bank rate and sharp curtailment of credit. Prices as a result did fall. But the result of all these strenuous efforts to redress the balance of payments was only a small export surplus in 1930-32. The reason for the failure of the traditional methods of balancing the balance of payments was that after 1929 demand abroad was shrinking. In the absence of rising incomes and active demand abroad, even the most drastic use of the traditional instruments seemed incapable of securing an even balance.²

The Influence of Keynes.

The explanation of the adjustment process through changes in national incomes rather than through those in the national price-levels was presented even by older writers (e.g. Bastable, Nicholson) of the latter half of the nineteenth century.³ But so long as the classical explanation was conceived in a context of full employment, it was natural that prices rather than incomes were expected to play a dominant role in the adjustment process. The significance of the role of income could become evident only when the assumption of full employment was given up as being hardly present in reality. The income

1. League of Nations. International Currency Experience. 1944, p.102-103

2. Ibid p.103.

3. J.Viner. Op.Cit., p.415.

and expenditure approach could be given a further theoretical refinement after the publication of Keynes's General Theory. The process of adjustment by cumulative income movements could be studied aptly only under the multiplier analysis of the General Theory. When viewed in this way, the process appears truly and almost literally 'automatic' and 'self-righting'. Even the automatism of the gold standard required some management of the quantity of money by the central bank. An Automatism, as here conceived, implied only the absence of discretionary powers of the central bank. But the process of adjustment under the income approach is perhaps more automatic in the sense that it does not require even the manipulations of the quantity of money by the central bank. Under the new theory the central bank is divorced of all importance which was ascribed to ^{it} under the accepted doctrine.

If quantitative changes in the volume of money do not take place, there can be no significant rise in the price level. Whatever rise in the prices there may appear, it would be the result of the comparative immobility of the factors of production and it would be supported by the increased velocity of circulation of money. So long as factors of production are not fully employed, an export surplus will not influence prices. ~~Whatever price rise~~ But gradually as more factors of production will be employed, there will ensue a keener competition for them and as the level of full employment will approach the cost of production will begin to rise, raising ultimately the prices of goods. Thus, the rise in prices is only a remoter stage in the whole process. The incomes of the factors of production will be the first to be affected.¹ The possible effects on prices would depend upon the degree of unemployment of resources. If there is a widespread unemployment of resources in surplus country, prices will remain unchanged while output will expand, real and money incomes will rise and imports will rise due to higher level of income. Of

¹ I. H. F. Harrod . International Economics, London, 1948 p. 149. 114

course when the prices begin to rise as the level of full employment approaches, the income effects on imports will be reinforced by the price effects on exports which will begin to decline at an increased rate accelerating the adjustment process in the surplus country. It is not possible to distinguish clearly the effects of income from those of prices on imports and exports. But it is certain that if the income is not rising or at least is steady in the importing country, it would be difficult to make foreign goods attractive unless the fall in prices is considerable and drastic. Even if there may be a very steep fall in prices, one cannot speak of the result with any certainty. For, drastic fall in prices cannot but be accompanied by a sharp fall in incomes in the deficit country whose imports will fall. Thus, though in the beginning the deficit country will be able to balance her exports and imports by essentially ^{reducing} its imports, the effects on her exports will be uncertain. The fall in the imports of the deficit country is equivalent to the fall in the exports of the surplus country where there will commence a cumulative fall in income. The decline in the national income of the surplus country will exert an adverse effect on the exports of the deficit country. In such a case the price effects will be swamped by income effects. If the level of national income is low, the price elasticity of demand will be negligible. If this is so, price movements can hardly be relied upon as a motive force even remotely for a rapid process towards adjustment.

There can be no denying ^{of} the fact that the mechanism of adjustment based on income movements gives the most faithful representation of the ^{equilibrating} ~~equilibrating~~ process in the balance of payments. But so far as the policy recommendations are concerned, the new theory has nothing to suggest in preference to the older policy especially for balancing the deficit in the balance of payments. Fall in incomes is as necessary under the new theory as under the old. The

extent to which the fall in income will be necessary will depend upon largely the marginal propensity to import. Suppose in the first instance a country which has a low marginal propensity to import i.e. a country where a small part of the national income is spent on imports while a large part is spent on locally produced goods. In order to wipe out the deficit in the case of such a country a considerable fall in income and employment will be required. This is because the policy to reduce imports by a reduction in income will have to bring about a much larger fall in the demand for locally produced goods and the cumulative effect of the initial fall in incomes would be considerable according to the theory of multiplier. If the country concerned is largely the importer of essential food-stuffs and raw materials, i.e. the demand for imports is inelastic, the impact of the reduction in income and expenditure will especially fall on domestic goods. The adjustment ~~was~~ in such a case would be quite a long process and also painful lowering drastically the standard of living of the people.¹

Countries with relatively high marginal propensity to import would also be earning a substantial part of their national income from exports. If a deficit occurs in the balance of payments of such countries due to a fall in exports the process of adjustment would, no doubt, be automatic but it would be at the cost of a huge fall in income and employment. The proper remedy in such a case would be to increase exports, but the country in question would not be able to solve the problem individually. Increase in exports would largely depend upon the levels of income in other countries. Monetary cooperation of other countries would be very essential to equilibrate the balance of payments of the deficit country even under the assumptions of the new theory. In the event of an absence of such

1. F.W.Paish "Banking Policy and the balance of International payments In Readings in the Theory of International Trade Op.Cit.,p.46.

cooperation, the deficit country will have to bear all the responsibility of income adjustment necessitating considerable deflation. The easiness of the process of adjustment would largely depend upon the income expansion in surplus countries ^{and the} ~~consequent~~ ^{increase} ~~upon the change~~ in their demand for imports. Expansion of income in the surplus country can take place only when net domestic investment rises. That is to say that total investment in the surplus country ^{would} ~~exceed~~ the amount of export surplus so that the increase in income is greater than the one induced by export surplus alone. If the increase in investment just balances the export surplus the induced rise of income in the surplus country will offset only a part of the surplus in current account.¹

Even supposing that the total domestic investments required may be substantial to bring about a rise in incomes, such a rise can take place after a time-lag in the absence of other active measures on the part of authorities. Before the equilibrating forces have worked themselves out to right the balance, other forces may crop up which may change entirely the level and distribution of income creating altogether a different situation. Again, the time-lag will be different for different countries depending upon the marginal propensities to import. The export surplus in the case of a country with a high marginal propensity to import would bring about a quicker adjustment than that in the case of a ~~low~~ country with a low marginal propensity to import.²

Even if the surplus country may try to stimulate investments to expand incomes at a rapid pace, the scope of the desired results

1. Lloyd A. Metzler. 'The Theory of International Trade' in the Survey of contemporary Economics Ed. H. S. Ellis 1951. Asia Publishing House. Sec. Ed. Cal., p. 219.
2. Ragnar Nurske. 'Domestic and International Equilibrium' in New Economics . Op. Cit., p. 271.

to materialise will largely depend upon the level of employment. If the employment is already at a high level, the increased investment would lead to inflated prices and profits, the greater part of which may be saved and may not be spent on imports.¹ In such a case export of capital to the deficit country may be sought as a possible remedy. Thus, though the new theory of adjustment describes more truly the process of adjustment, it has not been able to reconcile the inherent conflict between the internal and external stability. Much would depend upon the ability and willingness of the surplus countries to expand incomes even according to the new explanation as it was the case according to the classical theory. Both point out to the same direction - that of cooperation on the part of surplus countries to help restore an equilibrium without drastic falls in income and employment in deficit countries.

A further point which may be noted with interest is pertaining to the role of quantity of money under the new explanation of the process of adjustment. Under the classical explanation quantity of money is assigned a leading role. Does the income and expenditure approach imply no changes in the quantity of money? The rise in business activity and incomes consequent upon an export surplus necessarily implies an expansion in the quantity of money. For, without an expansion in the quantity of money expansion of business activity can no longer be carried out. The increase in the quantity of money would be brought about especially due to the increase in the resources of the banking system consequent upon an export surplus. As the banks of the surplus country will accumulate outside reserves, they would be ready to expand credit. ~~Thus~~ Thus under the new theory of the process of adjustment the banking system plays the role of expanding the volume of money that is ~~assigned~~ assigned to the central bank under the traditional explanation. In the case of the

1. R. S. Harrod op. cit. p. 141.

deficit country irrespective of central bank policy, the banks would pursue a restrictive credit policy consequent upon the depletion of their foreign exchange reserves or the deposits of their customers in terms of national currency. In surplus country the expansion policy of banks will be helped by the rise in demand for bank credit due to expanding business activity. Thus, even under the new theory the quantity of money will change as a result of the changes in the balance of payments.¹

So long as the process of expansion of incomes and expansion of the quantity of money are almost ~~simultaneous~~ simultaneous, there is little difference between the two theories from ~~pure~~ purely practical point of view. Nevertheless, there is a vital difference between the two approaches in point of emphasis. The classical theory could not discern distinctly the more potent forces of income movements working behind the facade of price fluctuations. The gold flows were only stop-gap remedies filling in the time lags. They were meant to settle, for the time being, the discrepancies in the balance of payments, but they cannot eventually eliminate them without income movements.² It can be said to the credit of the classical theory that it recommends the policy to reduce bank rate when there is a net gold inflow to reinforce the expansionist movement. The classical theorists, it may be presumed, might be more interested in equilibrium or adjustment as such rather than in the mechanism of that adjustment and, therefore, they tried little to look ~~to~~ deeper into the process.

The new explanation, however, is a distinct contribution to the theory of ~~the~~ balance of payments and international trade in general.

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1. G. Haberler. The Theory of International Trade. London 1950, p. 52.
 2. International Currency Experience. League of Nations 1947, p. 100.

Technique of Adjustment.

The process of adjustment according to the theory of gold standard worked through changes in the cost-price levels. These changes were brought about by the bank rate or the discount rate technique of the central bank. The raising of the bank rate by discouraging borrowing from the central bank restricts the expansion of credit to the resources of the commercial banks which are compelled to restrict advances and discounts. There is consequently a gradual slackening of business activity reducing the remuneration of the factors of production, and therefore, ultimately prices.

If the country loses gold, the central bank will sell assets in the open market and contract the volume of money by reducing bank reserves. The opposite policy is pursued in the country with a favourable balance of payments. This sort of central banking technique presupposes the existence of perfect competition and also the same economic status of the countries belonging to the system.

These conditions can hardly be said to be present in any period in the history of the gold standard. The countries of the system were not at all of equal economic strength and importance in the world trade. On the contrary, in practice, the system was based on a centre country with which all other countries were connected through trade and finance. Such a country occupying a pivotal position in trade and finance was Great Britain before 1914. London was the clearing centre of all international financial transactions and England was the banker of the world. The national banks and also many governments maintained balances in London. Though the money payments and receipts arising out of trade were to be made in different national currencies the process was highly simplified, for, the remittances could be easily effected by credit and debit entries in the books of banking institutions of London. This being the case, the

effects of the technique of credit control according to the tenets of the gold standard were different in Great Britain from those in other countries. In England the effect of the rise in the bank rate was hardly contractionist, as it is generally supposed from the theoretical assumptions of the bank rate technique. This was because of the central position that England enjoyed in the international financial setup.

The bill portfolio of London banks consisted of two types of bills. The first type was represented by bills drawn to finance trade. The second type was the finance bills. The supply of the first type of bills was generally stable because of the position of England as an international banker. There was also a stable demand for these bills because the trade bills supplied secondary reserves and safe outlets for short term funds. The commercial borrowers likewise did not change long standing credit lines and banking connections for temporary interest advantage. Short term instruments of this type therefore remained stable irrespective of changes in bank rate. Changes in bank rate did not alter either the willingness of London banks to extend acceptance credit on good commercial risks or the demand for such credit. This being the case it can be obvious that raising of bank rate would not exercise a contractionist effect on internal costs and prices.

But the second category of bills viz., finance bills was highly sensitive to bank rate fluctuations. They in fact constituted the surface of the credit superstructure where waves of expansion and contraction were visible. When the bank rate was raised the foreign bills in the portfolios of London Banks (both foreign and British) were allowed to run down and they were replaced by sterling bills. Again, outside Britain, there were banks holding large amounts of sterling bills. ~~Again, outside Britain,~~ When the bank rate was raised, these banks would try to replace not only these bills with

those with higher yields but they would also be attracted to convert a part of their foreign portfolio into sterling bills. Thus, the higher bank rate left the amount of commercial bills stable while it attracted the mobile international loanable funds to London.¹ This sort of capital movement would increase the demand for sterling and thus would supply a main prop to the falling exchange value of sterling. For the country which is an international financial centre the adjustment of the ^{balance of payments} ~~exchange-rate~~ through capital movements may not even require the raising of the bank rate or may require the rise in it only to small extent. For, the banks of countries with favourable balances may like to keep the increase in their deposits due to favourable balance in the centre country itself. Again the favourable balance of other countries would cause a fall in the rates there and thus would drive mobile funds to the centre, where the rates would be steady or would have risen to some extent. Where the effects of an adverse balance are of this nature, it is obvious that the pressure on the banking system to restore equilibrium by restricting credit is much less. If the foreign bank balances are ^{of the centre country,} kept with the commercial banks, there is no direct incentive to contract credit.²

But the raising of interest rates in Britain had great influence on the economies of other countries. Firstly, as the mobile international funds would flock to London they would cause the bank deposits in other countries to fall and credit to contract. Secondly, a very large bulk of export trade of these countries was financed through London. As finance bills were in preponderance in the London

1. William Adams Brown (Jr) 'International Gold Standard Reinterpreted' New York 1940 Vol.I pp.666-67.

2. F.W.Paish Op.C&T, p.48/49.

discount market, tightening of rates would affect the prices of foreign goods more drastically and directly than domestic prices in Britain.

If the increased rates of interest in Britain were to exercise any influence on domestic prices, the British terms of trade would certainly deteriorate as a result. But one does not come across this particular effect of the raising of the bank rate during thirty years before the World War I. On the contrary the British terms of trade improved and the export prices increased relative to the import prices. The deterioration in the British terms of trade came very gradually after the increase in the discount rate. This is because the depressed business conditions elsewhere spread to Britain and not because of the direct effect of the discount rate on domestic prices.¹

The agricultural countries producing industrial raw materials are generally dependent upon industrial countries. Britain was the most important purchaser of raw materials and seller of manufactured goods. The amplitude of cyclical swings in such countries are considerably larger than in industrial countries. A small initial decline in the industrial activity in industrial nations would give rise to wide fluctuations in the prices of the exports of these countries, the supply of them being inelastic. It is obvious, therefore, that really depressive effects would appear in industrial countries

1. R. Triffin, 'National Central Banking & International Economy' Review of Economic Studies 1946-47 No. 36 p. 63.

because of the sympathetic movements of rates
High rates in London led rather to a world fall in prices, partly because elsewhere, partly because of the effects on British entrepot trade and British long term foreign investments. (P. B. Whale. The working of the Pre-war Gold Standard'. Economica Feb. 1937 New Series p. 27.

(and especially in a country whose exports were directed to less industrial countries) as a consequence of falling prices and incomes in primary producing countries.

The bank rate technique as used in England hardly seems to have been conformable to the requirements of the gold standard operating in a manner envisaged by the classical explanation. In fact, it exercised adverse effects on the economies of other countries. It helped Britain to prop up the exchange rate of sterling without an outflow of gold because of the capital movements. This was due to the central position that that country occupied in the financial and trade organisation of the world at that time. In the case of a favourable balance of trade in Britain, the reduction in the bank rate would be followed by sales of sterling by the foreigners who previously purchased it. The short term capital thus, would leave the shores of England for other countries where there would be the advantage of comparatively a higher yield. But the effects of this movement away from England were hardly contractionist as it could be in the case of other countries. For, in the case of Britain, only surplus balances in the hands of foreigners especially would be released.

In spite of all these considerations, whenever the Bank of England felt that the raising of the discount rate would disturb internal credit conditions, it avoided the use of bank-rate technique and preferred other devices.¹ When the Bank actually used the bank rate technique, it was based on the conviction that internal trade conditions would not be adversely affected. This was well borne out by Governor Norman while giving evidence before the Macmillan Committee. On being asked ^{by} the Chairman whether the raising of the bank rate

F.B.Whalen, Op.Cit., p.21.

did not exercise deterrent effects on domestic enterprise, the Governor replied that though some deterrent effects on domestic business enterprise were inevitable, on the whole advantages outweighed disadvantages.¹

The Breakdown of the Gold Standard System.

The pre-war gold standard in actual practice was hardly conforming to its theoretical postulates. That system as based on a single-centred international financial organization, was, in practice, a sterling exchange standard system. It was the role that England played and the confidence that it could inspire in the nations of the gold standard system, that helped the system to work and not the observance of the so called 'rules of the game'. It was, again, not the result of any volunteering on the part of England to steer the international financial mechanism smoothly. The system was the outcome of a steady growth of other non-monetary forces of economic development. England was the first country to lead the world in the march of industrialisation. She became the exporter of manufactured goods to the world at large and the importer of raw materials. This sort of commercial relationship soon gave rise to its financial counterpart. London emerged a clearing house for the world financial transactions. It provided a common medium of payment for financing the international transactions - not gold but its own national currency, sterling. All international transactions were settled in sterling. This sort of centralised financial system much economised gold as a means for the settlement of international monetary obligations. For all practical purposes, it was not gold but sterling that was the international standard.²

1. Macmillan Committee Vol. of Evidence I Q.3432 p.218.

2. A.D.Gayer. Monetary Policy and Economic Stabilization, London 1925 ~ 26

In the second place England helped the working of the international payments system based on gold standard by investing abroad and thus, making available the means of international settlements to countries with a deficit in the balance of payments. It is true that investing abroad was a policy complimentary to her foreign trade in general, for, the proceeds of the loans were largely used to purchase British goods. Such loans much reduced the disparities in the rates of interest in various countries of the system. Again, from the point of view of deficit countries, it was advantageous to use the proceeds of the loans in British ^{market} because Britain was generally the only supplier of certain goods or comparatively a cheaper market wherein the purchases could be made.

Thus, the financial system of the world centring in Great Britain and British policy of supplementing world trade by foreign investments, were the pivotal factors supporting the gold standard despite its many defects. The basic ^{needs} for the successful working of gold standard, such as an even distribution of gold, countries of approximately equal economic size, reciprocity in monetary policies as based on the 'rules' etc., had not arisen in all their seriousness as they did after the World War First.

After the war, the world witnessed the breakdown of the centralised financial system. Though the war itself was not directly responsible for a revolutionary change in the world financial organization, one is justified in attributing this great metamorphosis to the war. It hastened the forces of change to ^{its} completion. During the last decade preceding the outbreak of the war, it was becoming evident that certain favourable trends in the industrial life of England that had contributed to her ability to dominate the world exchanges were becoming weaker. But the war brought about enormous diversions in the world distribution of productive power. U.S.A. and Japan emerged as strong competitors of Britain in the world markets.

The decentralisation of the productive power was inevitably followed by the decentralisation of the financial system. "Monetary systems are instruments serving to facilitate the production and exchange of goods, and if these become decentralised the currency mechanism has to conform to this tendency. The highly centralised gold standard system before 1914 was in harmony with a highly centralised trade and industry".¹

After World War I, London no longer remained the only financial centre in the world. There arose rival money markets especially in New York and Paris which began to share international balances which earstwhile found home in London. The return of the gold standard after the First World War in 1925 ~~was~~ altogether took place in a different set of international economic circumstances. The essential difference between the international gold standard of 1925 and that of pre-1914 period was that that the former was built around a nucleus and not around a single centre. Now there arose a real need for international monetary cooperation among the different countries to work the system smoothly. There also arose the need for an even distribution of the total monetary stock of gold. But these requirements could not be fulfilled. The world's monetary gold stock came to be concentrated especially in two countries, France and the United States. The result was that other countries could not find sufficient gold to meet their requirements. England was such a country which ultimately was forced to abandon the gold standard in 1931.

The above representation of the forces which contributed to the unworkability of the gold standard after the war sounds correct. It cannot be denied that the centralized financial system

1. International Currency Experience. Op.Cit., p.197.

considerably helped the working of the pre-war gold standard inspite of its many defects. But it is too much to say that because in the post-First-World-War period this system gave way to a decentralised world productive and financial system, the gold standard could not work. Even if England would have continued to enjoy the status of a world financial centre in the post-war period, it could not have become possible to work out the gold standard. This was especially due to the emergence of wage-cost as the most rigid element in the industrial cost-structures of many countries. The period following the First World War marks the beginning of a new stage in the socio-economic relations of capitalist democracies. Fighting in the trenches for a World 'fit for heroes to live in' had made the masses conscious of their place in the world's ^{political and economic} set-up. They were no longer prepared to bear the brunt of the hardships caused by economic adjustments nor were they willing to consider major social hardships as 'acts of God'. The adverse social effects of the monetary policy of the gold standard had to be clearly recognised by the authorities. In the field of monetary management an era of conscious and deliberate management had to replace that of undirected natural evolution.¹

During the 19th Century, the degree of adjustment in money costs of production that the bank rate was asked to effect was very small. Not only that but the strain of adjustment was not felt because of the readily expanding world economy. The capitalist system had not reached a stage of 'stagnation' and therefore, efficiency of production was fast increasing. But in the post-First-World-War period, the degree of adjustment in the cost of production that a country was called upon ~~to~~ to make consequent upon its adverse balance of payments was comparatively larger. This difference between the effects

1. Macmillan Committee Report, p.5.

of the raising of the bank rate in the 19th Century and in the post-First World War period is well brought out by Keynes, as a member of the Macmillan Committee, in his discourse with Mr. Montagu Norman, the then Governor of the Bank of England. He stated that when England got out of adjustment internationally in the 19th Century, the degree of adjustment that was necessitated was very small. It was not more than was accounted for by the normal increase of efficiency consequen-
-tly . It was very seldom necessary to force money wages down. It merely meant one had to hold back a little from increasing money wages at a time when increase in efficiency would have justified that. But in the course of the last four or five years just before 1931, the bank rate was asked to effect a much greater adjustment and this too at a time when, for various reasons, the level of money wages was very sticky in England.

Rigidity of the wage-cost-structure was the fundamental reason which made the gold standard unworkable after First World War. For the purpose of maintaining internal stability, monetary policy ~~had~~ had to be freed from its international obligation to help the working of the gold standard system. This does not mean that monetary policy can secure internal stability by itself. But it implies at least ^{that} the adverse effects of the monetary policy aimed at maintaining a particular international monetary system can be removed by freeing it from such obligation.

It is interesting to note that though England ceased to be the single financial centre of the World, after 1918, it did ~~not~~ remain the most important and influential financial centre even after 1931. Many countries, not only within the British Commonwealth but also outside it, preferred to maintain the stability of the value of their respective currencies in terms of sterling. The central banks of these countries maintained fixed buying and selling rates of

sterling with only a very small range between them. Certain countries tried to maintain the sterling exchange rate as rigidly as they would have done under the gold standard. Thus, Denmark in 1935 preferred to check her domestic credit expansion rather than give up the sterling rate she had adopted early in 1933. Though there was considerable agitation in favour of depreciation, the policy of the authorities in the end was confirmed by the general election.¹ Even after the devaluation of the pound sterling in terms of gold in 1931, the United Kingdom continued to play a very dominant role both in the export and import trade of the countries which stabilised their currencies in terms of sterling. Not only that but it enabled other countries of sterling area in general to maintain the exchange stability of their currencies in terms of sterling by allowing to accumulate sufficient liquid reserves with which to meet temporary set-backs in their balance of payments. Within the sterling area at least Great Britain played the same role after 1931 as it played with reference to the whole world before ~~1914~~ 1914.

The above observations as regards the position of Great Britain after 1931 clearly indicate that decentralization of the World's financial system is only a partial explanation of the breakdown of gold standard and it bears only a secondary importance. Though the sterling area countries maintained stable sterling values of their currencies, they were free to alter their sterling rates without notice and without any loss of prestige which was feared in going off the gold standard. Whenever the considerations of internal stability required the sacrifice of external stability they easily changed their sterling parities. Thus New Zealand, a member country of sterling area changed her peg from £ (NZ) 110 to £ (NZ) 124 per \$100 in 1933.

1. International Currency Experience. p. 53.

Denmark raised in January 1933, her peg from about 20 kroner to 22.40 kroner to the pound.

The reaction to the ~~high~~ rigidity of the gold standard was drastic. It gave rise to an extremely uncoordinated and individualist policies of foreign exchange and foreign trade. There was no system as such which could be justified on some theoretical principles. There developed only certain methods according to the convenience of each country for managing the external value of domestic money.

The Era of Experiments.

The unpegging of the exchange values from an international standard left two alternatives for the exchange rate policy. Either the exchange value may be fixed at a lower parity which might be found convenient looking to the country's productive efficiency or the exchange value of the national currency may be allowed to fluctuate subject to the forces of demand and supply. The first alternative was chosen, especially by Great Britain in 1931 after its going off the gold standard. The troubles of England were due to the comparative overvaluation of the pound sterling looking to the post-war cost conditions in that country and, therefore, the pound sterling was devalued in terms of gold or the currencies whose values were fixed in terms of gold. This is what may be called devaluation of currency.

A country may not choose to stick to a fixed value and may ~~be~~ allow the external value of its national currency to fluctuate subject to the forces of supply and demand. There would not be any intervention in the foreign exchange market on the part of the monetary authorities. This sort of exchange policy is illustrated by one that was adopted in France in the period immediately following World War I up to 1926. The post-war history of the French franc illustrates such freely fluctuating and uncontrolled exchange value of franc. Exchange depreciation was adopted by several continental

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European countries in the early twenties, as a means of attracting foreign capital especially to meet the post-war working capital needs. The competitive devaluation of the thirties had a different purpose. It was meant to push the exports at the cost of other nations whose currencies were expected to remain stable.

The Rationale of Adjustment under Flexible Exchanges.

The rationale of flexible exchanges is that the adjustment in balance of payments which is the function of internal price changes under the system of gold standard becomes the function of changes in exchange rates. Necessary and timely changes ^{in exchange rate} will thus protect internal price level from adverse external influences. However, from the experience of the thirties this theoretical assumption can hardly be said to have been realised. This was primarily because of two reasons which were generally not expected by the ~~derain~~ devaluing countries. The first was the abnormal speculative capital movements which followed as a result of actual or anticipated exchange depreciation. In the midst of such speculative transfers of funds the distinct effects of exchange depreciation are hard to discern. The second was that the devaluations were competitive. The effects of devaluation on the balance of payments of a single country can be ascertained only when other countries keep the international values of their currencies relatively stable. Not only this, but also there should not be any kind of foreign trade controls imposed in the nondevaluing countries especially after devaluation by others. These particular conditions were conspicuous by their absence during the period of the thirties. All the countries of the world were trying to fight the depression by whatever measures that could be adopted and readjustment of the rate of exchange was only one of them.

Even if we suppose the absence of trade and foreign exchange controls and also devaluation by a single country, the success of

exchange depreciation as a measure for redressing the balance of payments is surrounded by many uncertainties. The theory of adjustment of the balance of payments through readjustments of the rate of exchange is ultimately based on price changes so far as the foreign consumer is concerned just as it is the case under the gold standard. Instead of reducing the domestic selling price (as under the gold standard system) the concession is shown in the amount of foreigner's currency that he has to pay for the purchase of a given amount of domestic currency in order to purchase certain amount of imports. Thus, when the total cost of imports to the foreigner is reduced, it becomes possible for him to sell imported goods in his domestic market at lower prices than before. Given this sort of price concession, the effects on the value of exports would largely depend on the elasticity of demand and supply. That is to say that elasticity of demand for imports both in the exporting and importing countries are to be taken into consideration along with the elasticities of supply in both of them. Given an elastic supply of exports the increase in the value of exports will be smaller the less is the foreign elasticity of demand. If the foreign demand is perfectly inelastic there will be no increase in the volume of exports and consequently no increase in their value.¹

The total amount of foreign exchange earned would likewise be governed by the elasticity of supply in the country whose currency has been depreciated. If the elasticity of supply is higher (given a high elasticity of foreign demand), then the amount of foreign exchange earned would be higher and the effect on the balance of payments would be favourable. The total effect on the balance of payments would be also partly the outcome of home elasticity of demand for imports. A fall in the exchange rates produces the maximum decrease in the value of imports when home demand is perfectly elastic. A

1. J. Robinson. The Foreign Exchanges, in Essays in the Theory of Employment 2nd Edn. 1947 p. 140.

distinctly favourable effect of exchange depreciation would be secured when the domestic demand for imports and foreign supply are both perfectly elastic.

The elasticity of supply of exports will also depend upon the home elasticity of demand for goods meant for exports, for, an inelastic home demand for export goods would spare less for exports and thus vitally affect the balance of payments of the devaluing countries.¹

This is rather a very complicated explanation of the conditions of adjustments in the balance of payments as a result of exchange depreciation. Despite that, if the price elasticity of foreign demand for imports is taken as a fact, this explanation can be accepted. But

the elasticity of demand as based on price variations is found in recent studies to be of little significance. As for example, during the inter-war ^{period,} price elasticity of British demand for imports was .59% while the income elasticity was 1.43%. It is true that there was positive degree of price elasticity of demand for imports but some/employment elasticity was far greater than price-elasticity.² If any favourable effect of variations in export prices on foreign demand is to be ascertained on the basis of elasticity of demand, we have to assume the level of income abroad to be constant or steadily rising.

The effects of exchange depreciation have been examined by Mrs. Joan Robinson especially in terms of four elasticities of demand and supply referred to above.³ Such an explanation does not take into consideration the trends of income and employment in the two countries entering into international trade. Mrs. Robinson has referred to the effects of the changes in the balance of payments on income

1. F. Machlup. 'The Theory of Foreign Exchanges. in Readings in the Theory of International Trade Op.Cit., p.113.
2. Tse Chun Chang. British demand for imports during the inter-war period. E.J. June 1946 p.188 and p.197.
3. Mrs. J. Robinson Op.C it.

and the effects of the latter on imports ~~of~~ ~~the~~ (i.e. balance of payments). But she has referred to the income factor in the case of depreciating country and only as secondary effects following from the change in the balance of payments consequent upon devaluation. Thus she writes:

" An increase in the balance of trade leads to an increase in home incomes and consequently to an increase in expenditure on imports. But these effects follow from the change in home income due to the change in the balance of trade and if the balance of trade does not alter the secondary effects cannot take place. It is therefore legitimate to discuss the initial effects on the balance of trade in terms of four elasticities abstracting them from the change in home incomes". 1

So long as there is a time-lag between the effects of devaluation on balance of payments and those of the latter on domestic incomes and therefore propensity to import, it is legitimate to discuss the initial effects of devaluation on the balance of payments by abstracting ^{them} ~~from the~~ ^{those} ~~effects~~ of devaluation on home incomes. But this time-lag would probably be very narrow so as not to warrant such abstraction as Mrs. Robinson makes. For, as per Keynesian Theory, income effects of the rise in exports would at once be felt as soon as foreigners have accepted the exports of the devaluating country. In such a case, rise in the home propensity to import shall have to be checked by means of direct controls. Further, the level of income in importing country should also be taken into account while examining the effects of devaluation. For, the efficacy of devaluation largely depends upon the level of income in the importing country. If in ~~employment~~ this country there is a declining trend of income and employment due to domestic causes, no amount of devaluation by other countries will be successful in driving exports to such markets. This is well borne out by the German experience in nineteen-twenties. 2

1. Ibid p.139.

2. See infra p. 249

In the present context U.S.A. is a country where the demand for imports (largely raw materials and luxuries) is elastic to income rather than to price. A slight downward pressure on the income of the U.S. is likely to exert proportionately a greater downward pressure on imports and so a corresponding decline in the exporting country's income and employment.¹ The consideration of the income factor is vital to the whole theory of value.² In the case of international trade the income level prevailing in the importing country is of especial interest to the exporting country. In fact, the lower or higher price - elasticity of demand is itself the function of lower or higher incomes to a large extent. When there are falling incomes elsewhere or in a country whose national income forms a large part of the total world income, the deficit in the balance of payments cannot be redressed by exchange depreciation. In such a situation the income effects will swamp the substitution effects which are, in theory, expected to stimulate exports through an inducement in the form of a lower price in terms of foreign money.³

The ultimate results of exchange depreciation, taking into consideration also the secondary effects thereto, would depend upon, in the first instance, the income movements abroad and the time lag between the primary effects and secondary effects in the devaluing country. If the incomes and employment are relatively steady abroad, the fall in the rate of exchange may stimulate exports provided that all other things remain the same in the importing country. This initial impetus to exports would have some

1. Kenneth K. Kurihara 'Towards a new monetary Sovereignty' J. of P.E. April 1949 p. 164.
2. J.R. Hicks, Value and Capital . 1948 Chap. II.
3. T. Baugh 'Exchange Depreciation and Economic Readjustments' R. of Eco. & Stat. November 1948, p. 278.

salutary effects on domestic incomes and employment. If the secondary expansion follows immediately upon the initial rise in exports, the propensity to import would be stimulated which may overtake rapidly the rise in exports and undo the advantages of devaluation.

But the rise in imports of the devaluing country would have favourable effects on incomes and employment elsewhere and these latter changes will redound favourably upon the exports of the devaluing country. Thus, not only that the initial rise in exports will be dependent upon the higher levels of incomes abroad, but the subsequent sustenance of the trend will depend upon the rise in income and employment in the devaluing country following closely the rise in exports. For, if the imports in the devaluing country take comparatively a longer time to rise, the increased exports will have depressing effects abroad and this will induce other countries to adopt beggar-my-neighbour policies. Even supposing that no retaliatory measure is adopted, the higher level of exports cannot be maintained unless other countries also have to share in the prosperity of the devaluing country. Other countries, therefore, would be released from the initial pressure produced by devaluation only if the cumulative expansion in the devaluing country is quick and certain.¹

The relative rates of exchange should be viewed in the context of the relative levels of incomes and employment rather than those of prices which are only incidental to the other two variables. It is difficult to segregate the price effects of demand from the income and employment effects. Nevertheless, the new rate of exchange will have to anticipate a certain level of income and employment at home and also in other countries for being effective.²

It may be argued that a relatively high level of employment

1. G.Haberler 'Prosperity & Depression' U.N. 1946 p.439
2. R.F.Harrod, 'International Economics Op.Cit.', p.118.

and income abroad will be a sufficient condition to support the policy of depreciation by a country with relatively lower level of income. Depreciation in such a situation will serve as a prop against income and employment falling further as a result of adverse balance of payments. Though theoretically relatively higher incomes abroad may prove of immense importance for the success of the policy of exchange depreciation, in practice this may not be a sufficient condition. For, here, it is the general atmosphere of optimism or pessimism that is relevant. Though the level of employment may be higher abroad than at home, it might not be high enough to inspire confidence necessary for increased investment and propensity to consume. Therefore, for increased exports of the devaluing country, a tolerably high level of income abroad is a prerequisite. The same is true in the case of domestic economy. If incomes and employment have sunk much down, a country cannot hope to relieve the situation by exchange depreciation. For, the general atmosphere of pessimism, which, if not otherwise helped to dispel, will not allow the enterprisers to accept the measure much favourably. Here, therefore, it would be quite incorrect to state that the rate of exchange and the levels of incomes and employment as against prices are two alternative instruments through which balance of payments is influenced, under all circumstances. The efficacy of the measure of exchange depreciation will largely depend upon the conditions of income and employment at a time when the policy starts. If it is that all the countries concerned have generally achieved fuller employment and now if unemployment is threatened in any one of them due to fall in exports, depreciation can be expected to help restore the balance if it is adopted before it is too late and other factors influencing the economy have not yet become overwhelming.

These limitations of exchange depreciation as a device

to redress the balance of payments when carried to the realm of practice are reinforced by other practical considerations, the important among which are the trade restrictions at home and abroad the number of countries that simultaneously depreciate and the length of time considered.¹

The Inter-War Experience.

The devaluation of the thirties were definitely followed by improvements in the balance of payments of the devaluing countries. Such an outcome of the policy seems to strengthen the case for devaluation. The policy was conceived in its traditional beating on the international selling prices of the exports of the devaluing countries. In this respect the exports of devaluing countries proved cheaper in the markets of gold standard countries. But the gains that accompanied the depreciation can hardly be said to have been the direct outcome of this sort of price concession to foreign importers, though the policy was adopted with the declared object of price competition.

On the assumption of price advantage, the direct outcome of the policy could be more exports to non-devaluing countries than to those which devalued. But the experience was quite the contrary. Though the countries which went off the gold standard could offer commodities at more competitive prices than those of their gold standard rivals, their exports to other devaluing countries were representing the bulk of total exports. Thus, in the case of Great Britain, the largest gains from exports were from the markets of Dominions (which depreciated their currencies along with the pound sterling), next largest gains were secured from the markets of countries on a depreciated standard and losses were suffered in the

1. A .I. Bloomfield 'Foreign Exchange Rate Theory and Policy' New Economics Op.Cit., p.312.

markets of gold standard countries.¹ It might be true that the gold standard countries would have adopted measures to discourage imports which diluted the price effects of exchange depreciation but the fact that the export trade increased among the devaluing countries themselves stresses the importance of factors other than purely price concessions.

The most benign effect of depreciation on the economy of the country concerned was exercised not so much through increased exports but through domestic expansion supported by cheap money policy. So long as the authorities were wedded to the policy of maintaining the rate of exchange, it was impossible to think of monetary expansion as an expedient of business recovery. A certain amount of monetary expansion was indispensable for providing a general atmosphere of confidence without which private investments could not have forthcome. Domestic monetary expansion was pursued by all the countries which devalued with the belief that their respective economies would be insulated by devaluation from external pressure. Thus, Belgium devalued in March, 1935 with a view to having a sufficient margin for domestic expansion. When the expansion of business activity actually materialised in Belgium, there was to be experienced an influx of foreign goods which, according to the theoretical assumptions, would be dearer and, therefore, would not be acceptable in ordinary course. It is curious to note that, though certain countries could and did pursue a policy of monetary expansion after depreciation, the policy as such was conceived on orthodox lines - that is, to render exports more competitive. Thus, in the case of the U.S., the policy in its original bearing was conceived to make exports more competitive. Exports of the

1. S.E.Harris, 'Exchange Depreciation' Harvard University Press 1936 p.11, p.467, & p.478.

U.S. had not fallen significantly as a result of exchange depreciation elsewhere while the amount of unemployment due to decline in American exports was relatively small. The U.S.A. had immense stocks of gold which were more than sufficient to withstand any external run on the currency. There was thus no need for devaluation in the U.S. especially to stimulate exports. Nevertheless, devaluation of the dollar went on a long way in assisting the economic recovery. This happened due to reasons entirely different from those which led the Administration to pursue the policy of devaluation. The Administration was, at the time, to embark on a large recovery programme which could and did raise internal price-level. This sort of rise in the internal price-level would have adversely affected the balance of payments and would have thereby caused a flight of capital abroad. Devaluation removed any possible danger that balance of payments difficulties would, in any way, interfere with the internal expansionist policy.¹

Similarly, in U.K. also the depreciation of pound sterling made possible the reduction in the bank rate from 6% to 2% and extensive open market purchases by the Bank of England.

It is now easy to understand that the increased exports of devaluing countries were due to increased business activity and rise ⁱⁿ incomes in other devaluing countries which were again partly the consequence of the policy of the exchange depreciation in those countries. By 1936 when almost all countries had devalued a veritable status quo was restored and, therefore, the devaluing countries could not be expected to export more when competitive advantage in terms of prices was lost. But, on the contrary, exports of all the devaluing countries began to display a rising trend and this too especially to other exchange depreciation countries. This was because the price effects were, properly speaking, swamped

¹. Royal Institute of International Affairs. The Economic Lessons of the Nineteen Thirties. 1944, pp. 38-39

by income effects. More exports by devaluing countries were obtained not at the cost of non-devaluing countries. Their gains were mutual and complimentary. "The relative gains of British trade are to be traced more largely to the improvement in the economic conditions of England's customers following depreciation of their currencies and to an improvement in their trade relations between Great Britain and their most important customers rather than to the gains at the expense of competitors to be associated with an improvement in the competitive position of Great Britain resulting directly from exchange depreciation".¹

Viewing the results of exchange depreciation in several countries one after the other: in this way, the deflationary pressure in some countries still on gold proved an unnecessary drag on world recovery. Some of the leading countries that had devalued earlier, far from wishing to preserve any competitive advantages, were in favour of the alignment of the gold block.²

Devaluation made possible the use of fiscal measures such as increased Government expenditures along with cheap money policy. It may be argued that such income generating fiscal-monetary policy could have been pursued even without devaluations for, ultimately the reactions of rising incomes in one country would definitely exercise salutary effects on balance of trade of other countries. In fact when all countries devalued and prices rose subsequently the exchange relationship among the countries concerned was more or less the same from which devaluations had started. But there was a serious disturbing factor which would exercise a deranging influence on the economy of the country which undertook expansionist

1. S.E.Harris Op.Cit., p.241.

2. International Currency Experience p.2 128.

measures without exchange variation. This was the speculative capital which would grow all the less confident of the steadiness of a country's currency in which compensatory government measures were adopted despite balance of payments disequilibrium. Thus even in the case of the U.S., a country with sufficient gold reserves to bear any external pressure for a long time, the monetary expansion by means of open market operations pursued in 1932 and early in 1933 was followed by losses of gold which neutralized new credit base created by means of open market operations.¹ Such a sequence of events strikes at the root of confidence of both the authorities and the private interests which were to be buoyed up by means of an expansionist policy. Anticipatory capital movements may affect a country not because of any disequilibrium in the balance of payments of that country but as a result of anticipated possible effects of devaluation by other countries on the balance of payments of the former.² Such a sequence of events is illustrated in the case of Sweden during the inter-war period. Sweden was forced to go off the gold standard only 8 days after the U.K. not ^{due to} any current disequilibrium in the balance of payments but by a sudden outward transfer of funds by both foreigners and nationals who realised that as Sweden's exports depended largely on the British market, the krona sooner or later would follow the pound. Similarly the flight of capital from France which started soon after the devaluation of the dollar and grew especially after that of the belga was largely prompted by the prospects of ~~imminent~~ devaluation-a prospect which ~~materialised~~ materialised after a long delay.³

1. J.H. Rogers 'Lessons of Monetary Experience' Ed. A.D. Gayer 1937 p.105.
2. G. Haberler Op.C&T., p.431.
3. International Currency Experience p.121.

Thus, if a policy of domestic expansion without devaluation would have induced speculative capital movements adversely influencing the country's international payments position.

The impetus to business activity was provided not by devaluation but by subsequent expansion of economic activity stimulated by fiscal and monetary measures, which could not have been adopted without some degree of devaluation. The efficacy of devaluation, therefore, is to be estimated against the background of proper ~~domestic~~ domestic policy in fiscal and monetary fields. When accompanied by such supplementary policies, exchange depreciation contributed to higher prices in national markets and therefore towards a smaller drop in world prices than would have occurred without it.

It is a strange experience that the policy which, when pursued by any one country, was regarded as a beggar-my-neighbour policy helped to enrich the world when several countries adopted it simultaneously. The benefits would have been richer and quicker still had there been a coordinated attempt on the part of the nations of the world which had been en masse the victims of a great cyclical depression. The experience points out in clear terms that unilateral action to fight world wide economic fluctuations is bound to be ineffective and would cause more harm than good. It, therefore, stresses the need for a common and well-coordinated plan to lift up the countries engulfed in a great cyclical whirlwind.
