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BOOK FOUR

Disintegration, 1931-1934

PART I

The Nature of the Disintegration

CHAPTER 29

The Major Characteristics of the Period following September 1931

The Gold Standard (Amendment) Act of September 21, 1931 ended the brief history of the gold bullion standard in Great Britain. It inaugurated a period during which the pound sterling declined in terms of the dollar, the franc, and all other currencies which, through the mechanism of the international gold standard or otherwise, were kept in an unchanged and stable relation to these two currencies and to one another.

The Concept of the Breakup of the Nucleus as opposed to the Concept of the Depreciation of Sterling

This situation is simply described by saying that the pound sterling depreciated 'in terms of gold,' or still more simply that it 'depreciated.' In the use of these terms, which might be applied equally to the currencies of Peru, Spain, or Australia, there is a danger to clear thinking, not because they do not accurately describe the surface facts, but because they carry certain implications. To say that sterling has depreciated in terms of gold implies that nothing very serious has happened to gold as an international monetary standard, and that the international gold standard system continues to operate as before, with only the loss of one of its members. It also implies strongly that stability continues to reside in gold standard countries, and that instability has taken up its abiding place in sterling. These implications are avoided by considering England's abandonment of the gold standard as the breakup of the nucleus around which the world's system of foreign exchange rates clustered.

At the conclusion of our discussion of the effects of the World War upon the forms of the gold standard, we said that because of the profound influence of the war upon the structure of the world's credit system and upon the economic environment in which it operated, 1914–19 was a period that marked the breakdown, rather than the suspension or modification, of the pre-war international gold standard system.[1] Because these changes were fundamental and enduring the hard test of experience proved that there was no true restoration of the system after the war, but merely experimentation with it to meet a series of emergency situations in the hope of gradually achieving a genuine return to 'normal.' This hope proved illusory and the experimentation itself left its own inheritance. Therefore, when England suspended the convertibility of sterling in 1931 the international gold standard as a world institution entered into an historical phase which must be described by a stronger term than breakdown. September 1931 marked the beginning of its disintegration. This emphasis is not brought out adequately by approaching the task of interpreting the meaning and describing the consequences of England's suspension of gold payments from the viewpoint of sterling depreciation 'in gold.' It was in protest against such an approach that J. M. Keynes uttered his famous bon mot that sterling had not left gold but that gold had left sterling. This bon mot, however, plunges into the opposite error. The simple fact is that the Gold Standard (Amendment) Act ended a certain system of stable exchange relationships between the center countries. It did not alter the basic characteristics of the decentralized post-war world credit structure. It did not alter the triangular pattern of the world's exchange markets or end the use of the London market as a channel of remittance. It did not convert Great Britain from a center into a periphery country. It revived

[1] Cf. Ch. 6, passim.

in an acute form the question 'Who is Leader?' in the world currency system. It intensified the struggle for the international shifting of economic burdens. We said in Chapter 21 that the period of Restoration was a window through which the real nature of the problems inherited from the war and carried forward into the period of the return to gold could be seen clearly. England's abandonment of the gold standard in September 1931 half reopened that window, and through it could be seen clearly the nature of the problems inherited from post-war reconstruction. When the United States left the gold standard eighteen months later the window was opened wide.

The Possible Modes of Behavior of any Foreign Exchange Triangle

The use of the concept, the Breakup of the Nucleus rather than Depreciation in Gold, places the relations between the pound, the franc, and the dollar in the foreground of our analysis of the period of Disintegration. Together these three currencies continued to constitute a triangular system of rates to which other currencies had in some way to adjust themselves. In 1933 and 1934 when the United States had followed England 'off' the gold standard the attractions and repulsions within this triangle were fully revealed in the daily fluctuations in the exchange rates. But they neither began in April 1933 nor ended in March 1934. They were of fundamental importance during Experimentation and continued to be so during the first years of Disintegration.

From 1931 to 1934 the three rates that composed the sterling-dollar-franc triangle exemplified the most important of the mutual relationships possible in a system of three exchange rates. Each rate was subject to many forms of pressure arising from its position in the central triangle. Each rate, moreover, formed one leg of many other foreign exchange triangles of which the other two legs were exchange rates of countries not members of the central nucleus. The behavior of these other triangles exemplified the other relationships possible in a system of exchange rates but not illustrated by the behavior of the central triangle. Through them the pressures on the central triangle were intensified and multiplied. It will therefore be helpful, as a preliminary to our discussion of the Disintegration period, to consider the possible modes of behavior of any foreign exchange triangle and some of the forms of pressure to which they may give rise.

It is a fundamental principle that, in a system of three exchange rates, only three modes of behavior are possible as long as exchange arbitrage and remittance from one center to another through the third center are not prohibited:

1) All three rates may be stable.
2) All three rates may fluctuate in such a manner as to eliminate the arbitrage profits arising from the movement of any one of them.
3) One rate may be stable while the other two fluctuate in the same manner and degree.

In active and well organized markets this is due to the simple fact that the exchange operator who for any reason wishes to transfer funds from one market to another has the alternative of purchasing the currency he wants directly in the market for it or of buying a third currency and purchasing his requirements with that. He will choose the cheapest method of remittance, and the cost of remittance from one market to another by direct or indirect means consequently tends to become equal. Until it does an arbitrage opportunity is open. Provided that in at least one of the three markets concerned speculative transactions in the exchanges are allowed, the arbitrageur will close the gap.

Under all three possible modes of behavior various forms of pressure are continually being experienced throughout the system. If the three rates are to be kept stable these pressures have to be relieved through the 'corrective forces' described by orthodox gold standard analysis or by filling in the gaps in the mutual exchanges between the three countries by credit operations, or by some form of exchange control or pegging, using that term in its broadest sense to include direct control over trade and capital movements, or by some combination of these. The real cost of relieving these pressures will, when the three currencies are of major importance, be distributed widely throughout the system, but the whole weight of our analysis in these studies shows that they will not be distributed equally.

If none of the rates is fixed, then the pressures will find partial expression in changes in all three, which will produce a new dispersion of prices within each of the three countries, will influence marginal elements in all the items in their respective balances of payments, and will effect a somewhat different distribution of the real costs of economic adjustment throughout the system. If one of the three rates is fixed, the double fact that the other two are free to move, but that, if they do move, they must move together, introduces a different set of variables into the process by which the exchange triangle perpetuates itself as a system of rates. No effort to establish a fixed ratio between any two of the three currencies, and especially no effort to establish an arbitrary ratio between them, can be immune to influences affecting their relations to the third currency. When the three currencies are all of major importance the resulting position may be extremely complex. It may be defined by a series of abstract statements in which the pound, the franc, and the dollar are used as illustrations. When one rate in this triangle is assumed to be fixed and the other two free, the abstract generalization is established and can be applied to the two other possible positions by transposing the currencies in the statement. But since, after 1931, each of the three legs of the central triangle was in turn the fixed point to which the system had to adjust itself, the three possibilities are stated in full and the reader is not left to apply one illustration, mutatis mutandi, to the other two:

If the pound is kept stable in terms of the dollar and at the same time there is a strong tendency for the franc to rise or fall in terms of the dollar, then this tendency can fully express itself only if the franc rises or falls in the same degree in terms of the pound also. Such a movement may not be in harmony with the basic relations between the franc and the pound. There will be a compromise result in which the franc rises or falls in terms of both the dollar and the pound, but comes to rest at a point that is not appropriate to its fundamental relations to either. If there is a strong tendency for the franc to rise or fall in terms of the pound, there will be a similar compromise result. If these relationships cannot be maintained, then the dollar-sterling stabilization must break down. As long as they are maintained there will be pressures throughout the system that must be relieved by fundamental economic adjustments, by credit operations, by exchange control, or by some combination of these. Only if there is a natural tendency for the franc to rise or fall in terms of both the dollar and the pound will there be no pressure on any of the three rates in the triangular system that can be attributed directly to the attempt to keep the dollar-sterling rate stable.

If the pound is kept stable in terms of the franc, and at the same time there is a strong tendency for the dollar to rise or fall in terms of the franc, this tendency can express itself fully only if the dollar rises or falls in terms of the pound also. This may not be in harmony with the basic relations between the dollar and the pound, and there will be a compromise result in which the dollar rises or falls in terms of both the franc and the pound but comes to rest at a point that is not appropriate to its fundamental relations to either. If there is a strong tendency for the dollar to rise or fall in terms of the pound, there will be a similar compromise result. If these relationships cannot be maintained the sterling-franc stabilization must break down. Only if there is a natural tendency for the dollar to rise or fall in terms of both the pound and the franc will there be no pressure on any of the three rates in the triangular system that can be attributed directly to the attempt to keep the sterling-franc rate stable.

If the dollar is kept stable in terms of the franc and at the same time there is a strong tendency for the pound to rise or fall in terms of the dollar, then this tendency can fully express itself only if the pound rises or falls in the same degree in terms of the franc also. Such a movement may not be in harmony with the basic relations between the pound and the franc. There will be a compromise result in which the pound rises or falls in terms of both the dollar and the franc but comes to rest at a point that is not appropriate to its fundamental relations to either. If there is a strong tendency for the pound to rise or fall in terms of the franc there will be a similar compromise result. If these relationships cannot be maintained the dollar-franc stabilization must break down. Only if there is a natural tendency for the pound to rise or fall in terms of both the dollar and the franc will there be no pressure on any of the three rates in the triangular system that can be attributed directly to the attempt to keep the dollar-franc rate stable.

Two assumptions are implicit in these statements:
1) The rate that is kept stable in the system is fixed at a point that is not artificial and that will not itself be likely to set in motion forces strong enough to break down the stabilization.
2) All three rates are sufficiently important so that the behavior of any one is an active influence upon the behavior of the other two.

Either assumption may be untrue. A stabilization in which one currency was continually on the defensive would result in a strong tendency for remittance to the stronger partner in the stabilization from the weaker partner through the third market. Under- and overvaluation problems, moreover, cannot be confined to the two countries directly affected, but by their very nature spread their influence throughout the system. Stabilization of one leg of the triangle at an artificial level would be an active force in influencing the common movement of the other two rates. It is quite clear that a situation is possible in which neither the common movement of the two rates free to move nor the figure at which the third rate is fixed may be appropriate to the basic requirements of the system as a whole.

It is clear also that the three legs of the triangle are never of equal importance and that this is an active force in determining the common movement of the two rates that are free to move. If in the first of the three abstract statements the Peruvian sol were used illustratively instead of the franc, it is quite clear that there would be no pressure upon the dollar-sterling stabilization, whatever the natural tendency of the sol might be to move either in dollars or in pounds. The sol-dollar rate and the sol-pound rate would simply move together, which might create problems in Peru but not in Great Britain and the United States. If the Peruvian sol were substituted for the franc in the second and third of these abstract statements, their wording would at once appear absurd. It is quite plain that no stabilization between the sol and the dollar, or between the sol and the pound, would stand in the way of or seriously modify fluctuations in the dollar-sterling rate. There would of course be a force exerted, but it would be far too small to come within the realm of measurement. If the sol-dollar stabilization were maintained, then indeed the other two rates, the dollar-sterling and the sterling-sol rates, would move together, but the sterling-sol rate would be simply a reflection of the dollar-sterling rate. Similarly if the sol-pound stabilization were maintained, the movements of the sol-dollar rate would be simply a reflection of the movements of the sterling-dollar rate.

The substitution of the sol for the franc in these illustrative cases may have the appearance of a trivial mental exercise and an unnecessary draft upon the patience of the reader, but the point it illustrates is not trivial. It calls attention to a fundamental characteristic of the world's exchange markets which, under certain circumstances, is entirely obscured by the use of the term 'depreciation in gold,' and of which it is necessary to take account in setting out the possible modes of behavior of any foreign exchange triangle. As shown in other parts of these studies the channels of international remittance are not all equally free and well marked. Some are broad and deep, some narrow and lightly traveled. In many foreign exchange triangles one leg is of infinitely greater importance than the other two. In many others one leg is merely a cross rate. This does not alter the three alternative modes of behavior of the three rates but it profoundly alters their significance and the way in which the pressures within the system are distributed and resisted. The first alternative—that all three rates remain stable—no longer means that there is a mutually determining system that is maintained by a mutual sharing of the adjustments necessary to resist the pressures arising within it. It means either that one rate is fixed and constitutes a fixed point of reference upon which the stabilization of the other two is based, or that two rates are fixed while the third rate merely records or reflects the stability of the other two. The third rate in this case is not a dynamic influence in the system. When, for example, the sterling-dollar rate and the sterling-rupee rate are fixed, the dollar-rupee rate is fixed also, but the dollar-rupee rate is not a strong influence upon either the sterling-dollar or the sterling-rupee rate. The second alternative—that all three rates fluctuate—no longer means that the system is kept in balance by a three sided adjustment. The dollar, the sol, and the franc may constitute a system of rates, fluctuating in such a manner as to eliminate arbitrage profits arising from the movement of any one, but the fluctuations in the sol-franc and sol-dollar rate do not influence those of the dollar-franc rate materially. The adjustments by which the system is closed must be made by the Peruvian exchanges.

In the third alternative—that one rate is fixed—it becomes a matter of great moment whether the rate that is fixed is or is not a cross rate. If the rate that is fixed is not a cross rate, then the movement of the cross rate merely reflects the movement of the third rate in the system. Any attempt to fix a cross rate, or a rate that is very much the least important of the three, will meet with great, and in most cases insuperable obstacles. For illustrative purposes the difficulties of fixing the dollar-South African pound rate and thereby forcing the South African pound-pound sterling rate to follow the fluctuations of the dollar-sterling rate may be cited.

The above discussion has been abstract in the literal sense. It does not fill in the flesh and blood of the world's foreign exchange system, which is, indeed, the task of our analysis as a whole. It does not allow for the intricate interaction of economic and financial influence flowing in every direction. It *abstracts* from the total situation certain aspects of the structure of the foreign exchange markets that are easily lost sight of if attention is concentrated upon the relations of each individual currency to gold, no matter how startling may be the transformations in the role of gold as standard or as reserve.

The Major Characteristics of the Central Foreign Exchange Triangle, 1931–1934

Before September 21, 1931 the exchange rates of the three center countries acted according to the first of the three alternative modes of behavior. In Chapter 21 we stressed this fact by saying that in 1928–29 a temporary union of discordant elements was established under the general designation of the gold standard. After September 21, 1931, when sterling had broken away from this union but the franc and the dollar were still linked together through gold, the three rates behaved according to the third alternative. The franc-dollar rate being fixed, the sterling-dollar and sterling-franc rates had to move together. This was a fact of vital importance, for the sterling-dollar and franc-dollar rates were the most important legs of the triangle, while the dollar-franc rate had some of the characteristics of a cross rate.[2] As long as the dollar-franc stabilization was maintained the movement of the sterling-dollar rate had to be a compromise between the forces playing directly on it and those playing upon the sterling-franc rate. Since from 1927 to 1931 no really complete adjustment had been worked out between the three curren-

[2] Cf. Ch. 33, The Triangle, 1933–1934—graphically presented.

cies, no perfectly satisfactory basis for a new system of rates could be achieved by a common movement of sterling in both dollars and francs. A new exchange rate between London and Paris, for example, calculated to eliminate the problems left over from the initial undervaluation of the franc in 1927, was almost certain to require a sterling-dollar rate that would slightly overcorrect the remaining traces of the initial overvaluation of sterling in 1925. A three way adjustment of rates was the ideal solution of these difficulties, but this was excluded by the maintenance of the gold standard in France and America.

Furthermore, as long as the pound was free to move in terms of both the franc and the dollar, and this movement was subject to many powerful short run influences, it was possible that sterling might become substantially undervalued in terms of both. Because of the unequal importance to the United States of the sterling-dollar and the dollar-franc rates, and the unequal importance to France of the sterling-franc and the dollar-franc rates, such an undervaluation of sterling was bound to bring pressure upon the dollar-franc stabilization. As long as international gold standard arrangements prevailed in both the United States and France there was a possibility that a British return to gold at a new and lower gold content for the pound sterling might perpetuate these pressures under a new stable system of rates until either they were in some way absorbed or a new breakdown occurred. On the other hand, it was also possible that the common movement of sterling in francs and dollars might come to rest at a point where the pressures were at a minimum, and that the basis for a new system of stable rates with maximum chances of survival might thus be established, because the dollar-franc stabilization represented a point of reference for a new sterling stabilization which was itself fairly well adapted to the existing economic situation.[3] In summary it may be

[3] Cf. Ch. 19, The Difficulties attributable to the Return to Gold Itself, and Ch. 21, A Declining Price Trend.

said that from September 1931 to April 1933 the central foreign exchange triangle was unbalanced and not free to adjust itself, but that it contained a point of reference for a new set of exchange rates with good chances of long run survival.[4] Such a point of reference was necessary if stable exchange rates were to be reestablished *under gold standard arrangements* except under one condition, namely the establishment of a new system of gold pars by international agreement. This condition could not be met as long as every major power returned a different answer to the question, Who is Sovereign over the Foreign Exchanges? [5]

When the United States left the gold standard in April 1933 it was possible for all three rates in the central triangle to move, while at the same time preserving a system of market equilibrium in accordance with the second of the three possible modes of behavior. The resulting three-cornered adjustment was modified by an effort to keep the franc-sterling rate stable during the World Economic Conference of 1933, but a three-sided movement of the exchanges was characteristic of the year when America was 'off gold.' The triangle was free to adjust itself, and as long as one of the three countries kept the legal definition of the gold content of its standard coin unchanged, the international gold standard could be reestablished and the triangular system fixed in a new pattern, through the re-definition of the gold content of the standard coins of the other two.[6]

When the United States revalued the dollar in January 1934 and reestablished the mechanism of the international gold standard between the United States and France, then the three exchanges were once more obliged to follow the third alternative. The dollar-franc rate was again stable and the

[4] Cf. Ch. 33, The Triangle in 1932, Unbalanced but provided with a Point of Reference for Future Stabilization.

[5] Cf. Ch. 8, An Abstract Conception of Gold as an International Monetary Standard, Ch. 33, The World Economic Conference, and Ch. 34, The Price of Gold.

[6] Cf. Ch. 33, The Triangle, 1933, Bound and Free.

dollar-sterling and sterling-franc rates had to move together. The position, however, of September 1931 to April 1933 was not restored. The pressures spread throughout the system by the fact that the most important rates in the central triangle were forced to move together because the least important rate was fixed were at that time greatly increased because a wholly artificial and arbitrary level was chosen for fixing that rate. The central foreign exchange triangle was again unbalanced and not free to adjust itself, but an entirely new situation had been created because an uneconomic ratio had been substituted for a point of reference available for a new stabilization of the system.[7]

In this summary of the changing characteristics of the sterling-dollar-franc triangle these currencies have been spoken of as if they were merely single currencies and their position in the world system of exchange rates has been ignored in order to bring out the central features in their mutual relations. Each leg of the triangle, however, as stated above, was part of many other foreign exchange triangles. The dollar-sterling-sol, the sterling-dollar-South African pound, and the sterling-rupee-dollar triangles have been cited as illustrations in which the dollar-sterling rate was the dominant influence. In each individual triangle of this type, the behavior of the cross rates or of the less important rates had little effect upon the dollar-sterling rate, but it had *some* effect. The joint effect of all the foreign exchange triangles in which the dollar-sterling rate was the dominant member, upon the dollar-sterling rate, and therefore upon its position in the central foreign exchange triangle was, therefore, not negligible. Similar statements could be made concerning the foreign exchange triangles of which the sterling-franc rate was the most important member after the United States left the gold standard. The behavior of the three central rates in turn greatly influenced that of the subsidiary foreign exchange triangles, especially in

[7] Cf. Ch. 33, The Triangle in 1934, Unbalanced and without a Point of Reference for Future Stabilization.

cases in which the advantages of stability in the currency of one of the three center countries seemed to outweigh the advantages of finding some intermediate but fluctuating position with reference to them all. It was this infinitely complex interrelation of the world's exchange rates that divided the former international gold standard world into currency groups and determined the mutual relations of the groups. This division entailed many forms of attack and defense in the world's effort to shift economic burdens, allocate the real costs of past mistakes, and achieve some sort of new economic balance.

In the course of this struggle the influence of the sterling-dollar rate as the great trunk line of the world's exchanges gradually became more and more dominant, while the special importance of the dollar-sterling-franc triangle waned as the peculiar pull of the franc over the world's exchanges began to disappear. In the course of this struggle also the world passed, in very large measure, from a system of international trade carried on under general tariff regulations embodying the most favored nation principle into a system of regulated trade. The general principles of protection were replaced by restrictions primarily designed to force an adjustment in balances of payments where the traditional means of cyclical adjustment under the gold standard had clearly broken down. An internal conflict was waged in many countries between the interest of producers subject to intensified foreign competition and the interest of creditors on international account, and also between public and private creditors on international account. In the debtor countries fierce conflicts arose as to priority in the use of available foreign exchange for the maintenance of public and private credit abroad and the provision of imported goods to serve the needs of the domestic economy. These conflicts in many cases led to far reaching regulation of economic life. Since international capital movements had proved incapable of fulfilling their time-bridging functions a balance had to be achieved by altering the course of trade by any and all means that could be devised. This process may be called 'forcing a balance on the world's books.'

Forcing a Balance on the World's Books

In its *World Economic Survey, 1932/3* the League of Nations Economic Section summarized this evolution toward a regulated trade. Concerning the general course of tariff legislation it wrote (pp. 193–4):

"The period of tariff warfare which was renewed after a temporary lull at the time of the World Economic Conference in 1927 culminated in the United States tariff of 1930, and the new British tariff of 1931–32; but these events were merely the outstanding examples of a widespread tendency. It is, indeed, difficult to summarise with accuracy the many tariff increases that have recently been imposed, to say nothing of . . . emergency trade restrictions. . . . The Hawley-Smoot tariff in the United States was the signal for an outburst of tariff-making activity in other countries, partly at least by way of reprisals. Extensive increases in duties were made almost immediately by Canada, Cuba, Mexico, France, Italy, Spain. During 1931, general tariff increases were announced by India, Peru, Argentine, Brazil, China, Italy, Lithuania. In addition, there were increases of duties upon individual items or groups of commodities in most of the countries for which information is available, often on several occasions. When currency instability on a wide scale was unloosed after the United Kingdom abandoned the gold standard in September 1931, tariff increases, like other restrictions on trade, began to follow one another in the most rapid succession. During 1932, there were general tariff increases in the United Kingdom, Egypt, Norway, Japan, Portugal, Greece, Siam, South Africa, Australia, Belgium, Latvia, the Netherlands, the Dutch East Indies, Nicaragua, Persia and Venezuela. Partial increases, repeated several times in most cases, were recorded in practically every country for which information is available. There were some downward adjustments of particular items, but the general trend towards increase was very clear. There was probably never any period when trade was subject to such widespread and frequent alterations of tariff barriers. The tariff warfare naturally fed on itself and has continued to do so as duties have been de-consolidated, treaties have been denounced or allowed to expire. Currency instability has led into a maze of new protectionist regulations and private trading initiative generally has given way to administrative controls."

Supplementing this tariff war a widespread system of emergency measures of trade restriction grew up in 1931 and 1932, based upon direct limitation of imports and, less frequently, of exports. This the League of Nations Survey characterized as "the new protection" (pp. 197–9):

"The first and simplest device employed as a supplement to higher tariffs consists usually of a system by which imports are prohibited except under license and therefore become possible only after permission has previously been obtained from the administrative authorities. While in some cases such licensing has not gone far beyond the registering and surveillance of import tendencies, in the majority of countries it has been accompanied by, or has led to, measures of direct control and limitation of the quantities imported. The varieties of procedure by which this result has been achieved are many; but in essence they derive from the principle of prohibiting imports either wholly or partially in the case of certain specified products. Quota or contingent systems are a variant of the method of prohibition, under which only a stated quantity of specified imports is permitted. There are many differences, even within the same country, in the methods by which quota systems are administered. The fixing of the quota, both in time and among the exporting countries and the particular importers in each country, the surveillance of the system by Government departments, by the associated importers, by a grouping of exporters or by various combinations of these methods, and the manner in which the quotas are varied from time to time have developed according to the particular circumstances of the trades in question.

A more generalised control of imports is maintained in a great number of countries in the form of foreign-exchange control. The Central Bank is given power to impound the foreign exchange derived from export receipts. In the majority of cases, provision is made whereby payments for exports must be deposited with the Central Bank, which is also given power to mobilise as far as possible exchange derived from other sources. Payment for imports is thereafter possible, theoretically, only by obtaining the requisite foreign currencies from the Central Bank, which is, therefore, able to control the external drain upon its reserves and maintain the external parity of the country's money. In practice, the effectiveness of such foreign-exchange controls varies a good deal with the economic circumstances of the particular countries. In some, the invisible items in the balance of payments are so important, and the powers of the Central Bank so limited, that 'black' markets quickly develop in which the national currency exchanges at depreciated levels. While, however, the Central Banks are not always able to exercise a fully effective control over their exchange rates and therefore over the quantities of goods imported, the existence of such controls in so many countries has been a powerful factor in compressing the total quantities and values of imports and therefore of exports.

Such direct controls either over the quantities of goods imported or over the means of paying for them are supplemented by a variety of administrative devices which limit importation directly. Prominent among these are new types of sumptuary laws, of which the most important are milling or mixing regulations stipulating that, in the processes of manufacture, certain proportions of domestic products must be combined with the imported goods. Devised at least partly as a means to protect the secondary manufacturing processes, such as flour-milling, these regulations offer an effective check also to the use of imported raw materials and therefore to the quantities imported. The raising of consular, import and other administrative fees, the increasing severity of legislation requiring marks of origin, the indirect effect of veterinary or similar health regulations, and, in general, the considerable growth of administrative protectionism, add their influence to other forms of restriction."

This new protection led inevitably to the growth of clearing and barter agreements in which the ancient bullionist principle of the balance of bargains once more made its appearance upon the world stage. This aspect of the disintegration of world trade is described by the Survey (pp. 200–1) as follows:

"Mention should be made finally of the very rapid increase during 1932 of the various forms of clearing or compensation agreements, both public and private. The latter, which are sometimes described as truck or barter agreements, are a strange phenomenon in the modern age, symptomatic of the extent to which the normal media of exchange have broken down. The difficulty of devising means of payment for trade conducted in the normal fashion by the use of credit has led to agreements, between State organisations or private enterprises, for the bartering of goods against goods. Thus, the Turkish Ministry of Economy and an Austrian tobacco company entered into an arrangement on November 17th, 1932, by which the company agreed to buy, up to the end of June 1933, Turkish tobacco to the value of twenty million French francs, payable in Austrian merchandise. The Swedish Government made a similar arrangement with Greece to import Greek tobacco to the value of $400,000, 20 per cent of which sum was to be written off the Greek debts in Sweden, the remaining 80 per cent being paid for in Swedish goods. Other examples are the compensation agreement between Hungary and Czechoslovakia of December 22nd, 1932, by which 29,000 Hungarian pigs are to be exchanged for 20,000 wagons of Czechoslovak wood fuel, and Hungarian eggs and similar products to the value of one and a-half million crowns are to be paid for by facilities accorded to Hungarian tourists in the Czechoslovak thermal stations. Similar barter agreements might be cited between European and also between South and North American countries. For example, in August 1931, the Brazilian Government concluded an agreement with the Grain Stabilization Corporation and the Bush Terminal Company of New York for the exchange during eighteen months of 1,275,000 sacks of coffee against 25,000,000 bushels of wheat. In consequence of this agreement, Brazil prohibited the import of wheat flour for eighteen months.

Clearing agreements, designed to regulate bilateral trade with individual countries so as to decrease passive balances and bring