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Trend toward managed currency in England and the United States,

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The Trend Toward Managed Currency in England and the United States with an Examination of the Operation of the Monetary System in Sweden

by

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INTRODUCTION

"The system of currency, known as the gold standard, is an outstanding example of deliberate and effective currency management. It had its origin in an ambitious experiment in currency manipulation more than a century before its formal adoption in 1816."[1] If, then, the gold standard and managed currency are not separate and distinct systems but coincide as Sir Morgan-Webb maintains, any discussion of the latter should be introduced by an examination into the character and working of the former.

Of all the countries in the world England has played the most significant part in monetary history. In the seventeenth century under Elizabeth, England grew to be the most important trading country in the world, a position which has she has not been forced to yield to anyone. In addition she was the world's most successful colonizer. Because of her supremacy in commerce, she became a financial center; because of her wide empire, she was able to come into possession of vast stocks of silver and gold. Finding it

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1 The Money Revolution, Sir Charles Morgan-Webb, New York 1935, p. 44.

necessary on account of the first result and possible by the second, she was the first country to experiment with monetary standards. Although she was not the first to try a gold standard, she was the first to adopt a pure monetary standard. About 1700 England went onto the sterling standard, using gold only as a subsidiary medium of exchange in the form of small coins. This sterling standard was very satisfactory and was only abandoned at the end of the century when silver tended to go out of the country at such a rate to India and the East that she had an insufficient supply of silver to satisfy her needs of it for internal trade. After attempts especially on the part of Sir Isaac Newton at keeping the silver standard intact proved to be futile she adopted the gold standard in 1816 maintaining it until she was forced to abandon it at the end of the World War. England's experience with the gold standard was of the greatest significance in subsequent monetary history. Since Great Britain was the controlling power in world trade, other countries found it to their advantage to adopt a monetary standard similar to hers or if this was not possible to tie their currencies to the pound by keeping the value of the two fairly constant. In addition the gold standard as developed

in England in the Nineteenth Century came to be the gold standard in the opinion of the rest of the world.

Characteristics of the Gold Standard

However there are many differences in opinion as to what constitutes a gold standard. Sir Charles Morgan-Webb maintains that there is no such thing as the gold standard; he claims "the term 'the gold standard' embodies a fallacy, one of the most expensive fallacies which has deluded the world. It is the fallacy that there is one particular gold standard, and one only. There are innumerable gold standards."[1] He claims he is justified in this view by reasoning that since units of account as the pound, franc and dollar may represent widely divergent weights of gold, and since the weights of each may be changed by the will of legislative bodies each unit represents a different gold standard from the other and each change in the gold content of one unit introduces a new gold standard. Professor Kemmerer says, "The gold standard is a monetary system in which prices and wages are customarily expressed and in which debts are usually contracted,

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[1] The Rise and Fall of the Gold Standard, Sir Charles Morgan-Webb, New York 1934, p. 11.

consists of the value of a fixed quantity of gold in a free gold market." [1] Most authorities agree with Kemmerer that the test as to whether a unit is or is not on the gold standard is determined solely by its fixed relationship to gold. Because experience has shown that when the gold standard is in operation certain conditions exist, these conditions have come to be thought of as inherent in the gold standard and although this is not the case, nevertheless countries find it almost impossible to have free unhampered working of the gold standard without the presence of these conditions. Mr. Gustav Cassel holds the view that when countries were obliged to alter these conditions, as during the World War, it meant they could no longer maintain the gold standard although no formal declaration was made in regard to the value of the unit of account. Convertibility of paper into gold was characteristic of the pre-war gold standard. When notes were first issued a 100% backing of the note was held; gradually as more paper money was required, notes were issued with less than 100% backing until it was a general condition that there was less than half as much gold as paper. There was no danger in this

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[1] Kemmerer on Money, Edwin W. Kemmerer, Philadelphia, 1934, p. 2.

situation, however, as the public had confidence in monetary conditions and did not demand gold. Another characteristic of the pre-war gold standard was the free export and import of gold between countries in payment for goods bought and sold in foreign trade. Shipping gold was rather inconvenient at times and bills of exchange came into wide usage; after this, gold was applied only to settlement of balances. But as long as an acceptable international medium was available trade flourished; when gold could no longer be exported and imported and when as usually occurred, tariff walls were raised, trade fell off. The difficulty of payment was at least partially responsible for this. A less important but equally common condition of the gold standard was the free coinage of bullion. Under ordinary circumstances free coinage has been abolished simultaneously with prohibitions in regard to the convertibility of paper into metal.

Advantages of the Gold Standard

In theory, if the gold standard is the monetary system in all countries in the world, it keeps prices fairly uniform, encourages trading between nations, eliminates fluctuations in the exchanges and makes

all monetary units stable in value internally as well as externally. Its effect is automatic and works as follows: If a country has an adverse trade balance, gold will flow out; the quantity of money in circulation will decrease; prices will fall; foreign buyers will be attracted and exports of commodities and imports of gold will increase. Or if purchases are paid for by foreign bills, the same automatic working of the gold standard will take place since the price of foreign bills will become so high in conditions of an excess of imports over exports that buyers will find it cheaper to buy gold and ship it than to buy exchange. It can easily be seen, then, that goods will flow from the country where they are cheap to the country where they are dear; and this condition will continue until prices in the dear country are reduced. It is also obvious that prices in the cheap country will tend to approach as nearly as possible to those of the dear country but not beyond the point at which the advantage will be lost. Hence prices will tend to be the same for a given commodity all over the world and will be close to the cost in the least expensive markets. Since gold can be shipped to pay for purchases abroad, foreign exchange will be bought only so long as it is cheaper to finance foreign

trade by this means than by gold. The gold points were established automatically as a limit to the fluctuations of foreign exchange. These limits equal the value of the gold plus the costs incidental to shipping it. Actually, of course, even under the most favorable conditions the automatic corrective powers of the gold standard are tendencies only. Nevertheless during the pre-war days when the gold standard was less interrupted in its operations than after 1914 these powers it possessed were tendencies of considerable advantage to all the countries of the world.

From the end of the Nineteenth Century to the present day tariff barriers have been increasing in magnitude and range; if the world were on the gold standard today, the gold standard would be so hampered in its working that the world would lose many of the advantages coming from the power of the gold standard to keep prices constant and uniform throughout the world. In addition the balances of payments of so many countries consist largely of invisible items. Therefore the price level of commodities would not necessarily respond to the movements of gold. Then, of course, to an ever increasing extent, central banks have manipulated bank rate and open-market opera-

tions until it seems doubtful that gold movements would be exactly those which would occur if these activities on the part of the central bank were not indulged in, and finally we no longer have the "independent variety of influences determining the value of gold."[1] For all of these reasons then the theoretical working of the gold standard would be far from that in actual practice today. Even in pre-war days the most that could be said was that the gold standard tended to correct disequilibria of the various factors constituting foreign trade and resulting from it.

Breakdown of the Gold Standard

In the past twenty years there has been considerable criticism of the gold standard and many people have claimed that it was a monetary system which could not be adapted to complex modern world finance. What is nearer the truth is to say that a country cannot support a war and enjoy the benefits of the gold standard at the same time. This was clearly demonstrated during the World War in certain central European countries, notably Germany, Austria and Russia. The purchases by these countries far exceeded in value

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[1] Monetary Reform, John Maynard Keynes, New York, 1924, p.180 .

their monetary gold stocks; to pay for services and goods internally they issued paper money in unlimited amounts; to pay for commodities bought from neutral countries they exported gold and used up their credits abroad. 1918 found the belligerents and Russia with collapsed monetary systems and the former faced with greater reparations than it would ever be possible to meet. As a result of the war and in the years following it every country in Europe, except France, was struggling to recover a stable price level, to come into possession of sufficient gold to return to the gold standard and to balance its budget. Recognizing the fact that the financial collapse of an important country such as Germany meant the loss of a vast potential market, countries with capital to invest loaned to her freely. The citizens of the United States were guilty of speculating heavily in German securities. There was considerable flow of capital between countries. Meantime, and this was true up until 1929, gold had been drawn to France and the United States in such quantities that the rest of the world lost 16% of their gold stock. A 3% increase in the total supply of gold resulting from newly-mined metal did not nearly compen-

sate them for that loss so that it is obvious that central banks throughout the world were finding it increasingly difficult to maintain their minimum reserves and had to resort to a deflationary policy as a result. A deflationary policy always means an increased pressure on commodity prices in a downward direction and resulting disequilibria of world trade and an unhealthy competition in world markets. Gustav Cassel in "The Crisis in the World's Monetary System" said that the causes for the great flow of gold to the United States and France were the reparations payments which could be made only in gold, the protectionist prices which both countries had adopted, France's unwillingness to make foreign loans and her desire to increase her gold reserves as much as possible. Thus there grew up an unprecedented accumulation of gold in two countries leaving a shortage in the rest of the world. And, to make matters worse, France and the United States refused to use their gold for monetary purposes, but instead hoarded it so that it would not affect the price level adversely. The immediate cause of the breakdown of the gold standard was an unwarranted loss of confidence in banks on the part

of individuals, and an inexcusably selfish and short-sighted eagerness on the part of central banks to recover their funds invested abroad regardless of what might happen to those who had to produce the funds which they had a right to demand. For example: England had borrowed from France on long-term and had loaned to Germany on short-term. When the Kredit Austaldt failed in Austria and it was agreed that Germany was in a very precarious position, France decided to call in her loans from England while England was in a position to pay her back the funds. Of course England's funds in Germany were frozen and although she had adequate capital to pay all her debts, given enough time, the drain on her resources was so heavy that eventually she was forced to abandon the gold standard for the second time in seven years. Whether she was justified in returning to the gold standard in 1925 is debatable and most authorities agree that she was not; but the collapse of the gold standard in England in 1932 was neither the result of a previous mistake nor the fault of the gold standard itself. At least one contributing factor to the general breakdown was the nationalistic attitude taken

by all countries in self protection; to maintain an international monetary standard of any kind or even to enjoy economic prosperity a country has to be more or less internationalistic in its viewpoint.

When countries are forced to abandon the gold standard, assuming that no other metallic standard is adopted which was the case in Europe in 1931-3, they automatically adopt some form of "managed " currency standard. John Maynard Keynes contends that:

> ".... in the modern world of paper currency and bank credit there is no escape from a "managed" currency whether we wish it or not; convertibility into gold will not alter the fact that the value of gold itself depends upon the policy of the central banks." [1]

He also says that:

> "A regulated non-metallic standard has slipped in unnoticed. "[2]

According to him there is no fundamental difference today between a gold standard and a

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[1] Monetary Reform, John Maynard Keynes, New York, 1924, p. 184.

[2] Ibid, p. 187.

managed currency system; the change is one of degree, not of kind. Even such a hard money economist as E. W. Kemmerer holds much the same view for he claims that both the gold standard and a paper standard are really managed currencies as is obvious from the fact that the discount rate and the open market operations are as carefully watched under one system as under the other. H. F. Fraser in Great Britain and the Gold Standard is of the same opinion as these other authorities, for he says that it must be recognized that the gold standard has never worked automatically; that central banks have always been obliged to raise the bank rate in order to contract the volume of credit and therefore to keep the value of the currency unit equal to that of a fixed weight of gold; and that to that extent currencies have been managed. Gustav Cassel says that:

> "In reality the gold currency has now become a paper currency managed by the central bank." [1]

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[1] The Crisis in the World's Monetary System, Guxtav Cassel, Oxford 1932, p. 4.

Results of the Breakdown of the Gold Standard

While it may be agreed that the gold standard in operation before the general breakdown in the early 1930's was managed in the same way and by the same means as any managed currency which has followed the abandonment of the gold standard, it must also be recognized that certain new problems must be solved if this new system is not to lead to financial chaos. That, under our new system, the character of management becomes more important cannot be denied; inefficient or corrupt management can easily bring ruin to the whole economic structure and dishonorable manipulation of the means of managing the value of the currency for political ends can bring injury to many people. Frank Vanderlip advocates the establishment of a '<u>Federal Monetary Authority</u>' to act as intermediary and court of last appeal for banking authorities of the Federal Reserve System and the government. He recommends that this be composed of men of wide experience in the field of finance and men without political prejudices. Under a true managed paper standard, all goods in foreign trade are paid for by debits to balances held in other countries; gold is no longer shipped to pay for debit balances. Under the present system, however, gold is used for this purpose.

But gold has no relation to the parity of the foreign exchange between two countries, and the value of the unit of one country in terms of the unit of the other is determined by the relative purchasing powers of the units in the two countries. If a country devalues its currency as most of the important countries have done in the last few years, in theory, at least, there is no limit to the drop its unit may take in the foreign exchange markets, or conversely no limit to the rise of the currencies of the other countries, who have not similarly debased their money, may reach in terms of it. No longer does gold export and import act as a check on fluctuations of the exchanges. The disadvantages of a fluctuating exchange are well known. Unless currencies can be so judiciously managed that stability of prices and exchanges can be approached, and we are not sure they can be, there will always be the danger of sudden rises or drops in the price level due to a change of policy on the part of those in charge of controlling the amounts of credit and money in circulation. The problem is at least in part psychological, because within the memory of all people living today who can think about these matters at all, the gold standard

is as much a part of orderly and prosperous conditions as the Constitution is to the people of the United States. Also because people saw how disastrous can be a managed currency if out of hand as in the case of Germany during the War, they are skeptical of any currency which is not tied to something as secure as they feel gold to be. Gustav Cassel in Monetary and Foreign Exchange After 1914 maintains that reserves of gold were and still are idolized by the general public who feel that gold behind paper gives a mysterious value to that paper regardless of its quantity. Whether or not people are justified in distrusting managed paper it is an understandable reaction and must be considered in making any appraisal of the existing system or of proposed systems. Confidence in paper is largely what gives it its value; the success of managed currency will then be determined by the amount of confidence it deserves.

Theories of Managed Currency

There are many economists who do not feel that the old gold standard was entirely satisfactory nor do they feel that the ordinary managed paper standard would

be entirely adequate to bring about stability of prices, purchasing power of units of account, and of the exchanges. Many schemes have been suggested whereby the world may experience the joys of a 'perfect' monetary system. Probably the most debated proposal is that by Professor Fisher. His plan is to have a "compensated" dollar or as it is called, a "commodity" dollar. In this scheme he would have drawn up a comprehensive and thoroughly representative index number which would reflect changes in the price level. He would have the dollar equated to the value of a certain weight of gold, but this weight would be subject to change from time to time. On the basis of changes in the price level as indicated by fluctuations in the index number he would alter the gold content of the dollar. This change would be calculated to correct the rise or fall in the price level so that stability of prices would be obtained. This proposal has occasioned considerable comment by other economists. Mr. Keynes refers to Professor Fisher's theory as follows:

> "He (Professor Fisher) may have been influenced, however, by the advantage of propounding a method which could be grafted as easily as possible on to the pre-war system of gold reserves and gold ratios. In any case I doubt the wisdom and the

> practicability of a system so cut and dried. If we wait until a price movement is actually afoot before applying remedial measures, we may be too late. Professor Fisher's method may be adapted to deal with long-period trends in the value of gold but not with the often more injurious, short period oscillations of the credit cycle." [1]

E. W. Kemmerer criticizes Fisher's plan on the basis of the following:

> "All in all, under present-day economic and political conditions in America, a price level anchored to a commodity of universal demand, such as gold -- a commodity of which there is always an enormous marketable supply, and of which the annual production is but a petty percentage of the world's stock -- is likely to be much more stable and dependable than a price level controlled by any such mechanism as that of the commodity dollar. Such a dollar may work in a model state of a distant utopian future. It would have hard sledding in the United States of 1934. "[2]

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[1] Monetary Reform, John M. Keynes, New York, 1924, p. 203.

[2] Kemmerer on Money. E. W. Kemmerer Philadelphia, 1934, p. 213

Even more dubious than Professor Kemmerer about the advisability of attempting a managed currency scheme is C. R. Noyes about the soundness of the proposal from the standpoint of economics. He argues that increases in the money in circulation do not under ordinary circumstances affect supply and demand and hence have no immediate or even necessarily long time effect on price levels; he makes this statement on the theory that the price level keeps money in circulation rather than that any new additions to money cause and maintain a higher price level. He says further that the value of gold is fixed in terms of the dollar and that this has come about by the introduction of credit money as a medium of exchange. To quote from his article, The Stabilizing of the Dollar:

> "The dollar is a legal fiction. It is a unit in which prices are stated but it does not itself control prices. " [1]

James Warburg claims that a dollar of constant purchasing power is impossible to attain, that no system of monetary reform will work satisfactorily unless it

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[1] The Stabilizing of the Dollar, C. R. Noyes. Article in Journal of Political Economy, March, 1921, p. 204.

is adopted by all countries. Furthermore, he says:

> "To raise the price level alone is, to my mind, not a proper aim of a recovery program; unless a rise in prices is accompanied by a rise in incomes, I can not see that it does anyone any good."[1]

Thus Professor Fisher's theory is attacked as to its aim and as to the method of accomplishing that aim.

But the significance of Fisher's plan is not that it has ever been adopted or ever will be adopted in full, but the fact that it enjoys the support of a person such as Professor Warren of Cornell, who has been President Roosevelt's financial adviser. Fisher and Warren agreed that there should be devaluation of the dollar in 1933 and were influential in securing the passage of the Thomas Amendment to the Farm Relief Act which provided for devaluation of the dollar up to 60%. At that time Fisher said:

> "Professor Warren, adviser to the President, said in his book on Prices that we cannot permanently leave the 1926 price level with the gold that we

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[1] Reply to Senator Elmer Thomas and Professor I. Fisher, James P. Warburg. Article in Annals of the American Academy, June, 1934, p. 148.

> then had unless we devalue the gold dollar so as to increase the number of gold dollars at the basis of our credit structure." [1]

Professor Fisher favored price rise; in 1934 he said:

> ".... deflation is as bad as inflation and .... debt deflation has caused 75% of this depression by shrinking bank deposits to such an extent that prices were forced down." [2]

Professor Warren's theory was that the price of gold was the essential factor to be considered and he did not feel that the stabilization of the dollar in foreign markets should be attempted until the dollar had been devalued sufficiently to bring about a substantial price rise in this country. Obviously he was convinced that prices respond automatically to changes in the price of gold. James Warburg also favored devaluation but felt that it should be limited to 65 to 75 percent. of the original parity.

Gustav Cassel holds the view that an international gold standard would be as hard to maintain as a national gold standard; that gold is a most unsuitable

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[1] Reflation and Stabilization, Irving Fisher. Article in Annual American Academy, 1934, p.127.

[2] Ibid, p. 130.

standard of value and that to return to gold is to subject a currency to unnecessary fluctuations.[1] He also claims that the responsibility for the stability of the price level rests with the central bank and can be affected only by an increase or decrease in the number of units of currency in circulation. Monetary stability then, according to Cassel, can be achieved only by a deliberate monetary policy which constantly changes the supply of monetary units; this he says must be in the hands of the central banks. In carrying out such a scheme as this some sort of index number would have to be invented to reflect accurately fluctuations in the price level. The success of any scheme which depends solely upon the use of a price index immediately seems doubtful because the construction of an adequate and comprehensive index number is a most difficult task; the problem of when adjustment should be made is one which few are equipped to solve, and the final decision as to exactly how much currency should be added or substracted from the amount in circulation given a change in prices would be a tremendously great responsibility. It should be noted that a distinction must be

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[1] The Crisis in the World's Monetary System, Gustav Cassel, Oxford, 1932.

drawn between money in circulation and credit money which, at least in the case of the United States and England, is by far more important than coin in figuring total medium of exchange. Probably the most obvious criticism to be made of Cassel's theory is that changes in the amount of money in circulation are not immediate in their effect on prices. Since under ordinary circumstances, prices fluctuate because of economic factors, increases and decreases in the discount rate or in the volume of bills and coin in circulation cannot hope to bring about fundamental changes in the relative amount of supply and demand. Unless these factors of demand and supply are such as to absorb more money or to allow it to be withdrawn, no policy on the part of central banking authorities to raise or lower prices will have any substantial meaning.

Dr. A. C. Miller issued the following statement pertinent to this. He said:

> "Assuming that we want price stability, in order to obtain it we have to look at things closer to the source or beginning of troubles than the price index. If you are to have competent con-

> trol of credit you cannot wait until inflationary developments register themselves in the price index. By that time the thing will have already gotten considerable momentum. Restraint on inflation really requires a degree of foresight and requires other methods of testing what is in course of development than the price index. The price index looks backward. " [1]

Keynes likewise objects to the gold standard. He says:

> "The instability of money has been compounded in most countries except the United States, of two elements: the failure of the national currencies to remain stable in terms of what was supposed to be the standard of value, namely, gold; and the failure of gold itself to remain stable in terms of purchasing power. "[2]

He would have an inconvertible paper currency; the aim of the management of this currency would be to keep internal price level stable. Secondary in importance would be the exchange rates which he would keep from fluctuating by the means of the gold which had formerly been used to support the currency issues. In order to bring about a stable price level Keynes,

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[1] Hearings on the Strong Bill, H.R.Committee on Banking and Currency, 1926-1927.

[2] Monetary Reform, John M. Keynes, New York, 1924, p. 152.

along with Cassel, would use a composite commodity index number though he recognizes that other factors as state of employment, and volume of production would have to be taken into account in deciding what changes to make. Under his plan the central banks would, as they do at present, continue to engage in open market operations and to manipulate the discount rate as they see fit. Of course, it must be admitted that these operations on the part of the central authorities become less important when the tie up with gold is severed. However much it is said that gold is so unstable in value as to be of little consequence as a stabilizer for units of account, it has to be recognized that it is so much more stable than any other commodity or group of commodities as to be preferable to them. On the other hand if a government regulates the price of gold to any extent or by any means, the advantages of having the value of gold free to reflect forces of supply and demand would be lost. All countries which professed to be on a gold standard have done this price fixing to some extent. Nevertheless, when a country is true to a gold standard and limits the amount of currency by the amount of gold it holds and regulates

the value of the unit by that gold at whatever ratio, it enjoys some protection from poor management and from excess paper issue. On whatever count Keynes' managed currency plan may be criticised, it must be noted that England's and Sweden's systems since 1932, in the case of the former and since 1931 in the case of the latter, while not fully carried to the point to which Keynes would recommend, are so nearly constructed on the lines he proposes that we must regard his plan seriously and with respect.

Some Attempts at Managing Currency

Before considering in detail Swedish monetary history and her monetary system of the present day a brief examination of the experiences of the world with managed currency may serve to indicate with what care countries must proceed if they are to prosper under this new system. It must be conceded at the outset that managed currency in the past has been adopted as a result of emergency as in the case of Germany and the United States, or internal revolution as in the case of France. Therefore, whether it is fair to conclude that under normal conditions this system of

paper money would not work well because in unusual circumstances it was so unsatisfactory, is a question which might be raised. Though it would be foolish to answer this question in the affirmative, the lesson to be learned from the experience of others justifies the investigation. Managed currency really means fiat money though the term "fiat" connotes something very undesirable in the way of money; "fiat" money immediately suggests a currency which should be viewed with suspicion and probably accepted only at a discount. This feeling is understandable..

The United States during the American Revolution

In 1775 the Congress of the United States authorized the issuance of the Continental Bills of Credit for the purpose of financing the Revolutionary War. The only security which these bills had was the uncertain credit of the Colonies. As a result the bills depreciated until they were entirely worthless. This did not result from overissuance but happened simply because the people grew suspicious of their value when they were considered to be of such little account in foreign trade. Why should England, for example, receive them at par when her

own pound notes were redeemable in gold?

France during the Revolution of 1789

During the last part of the French Revolution the National Assembly caused to be issued first 400 million francs, then 800 million francs, and still more until a total of 65 billion francs had been issued. They were secured by national property at first; later, of course, it became apparent that whereas the 400 million had been more or less satisfactorily secured, the 65 billion were not backed by anything. The total issuance of Assignats became worthless. The Mandats which were issued to take the place of the Assignats and which were secured by real estate, depreciated also until they were not worth anything.

Germany during the World War

But more pertinent in a discussion on managed currency is Germany's experience during the World War. If one reason were to be given for Germany's tremendous inflation during the War it would be that marks were issued without any regard for the needs of business,

without any backing except government obligations which may be unlimited in amount, and without any respect for internal price level or exchange value. The reason for the worthlessness of the French Assignat and the German Mark was overissuance. That is the most obvious but also the most important danger to be avoided in any managed currency system. Just as soon as an inconvertible paper gets out of hand because the government finds itself pressed for funds, chaos is imminent; it is almost impossible to check inflation once it gets started. Fortunately this is a fairly universally acknowledged fact and governments have proceeded cautiously to an admirable degree since the War in establishing their managed currency systems to take the place of the gold standard which they found themselves unable to support. Perhaps no country has managed its currency more ably than Sweden.

SWEDEN

Discussion of the Factors in Sweden Peculiarly Favorable to Managed Currency Experiment

Sweden had two initial advantages in attempting an experiment such as managed paper currency was when she first went onto it. Her population consists collectively of a homogeneous group, individually of calm, solid, stolid, fairly intelligent people; they are interested in civic affairs and ready at all times to cooperate with the government in matters of economic and political benefit. Sweden has a socialistic form of government at present under the leadership of the Social Democratic Party. The result of this Socialistic form of government is that there is the closest cooperation between business and the state and the banking authorities. Therefore any sensible scheme which the authorities want to try would be enthusiastically received and supported. Less in Sweden than in most countries is political favoritism cherished and acquired by popular though sometimes unsound action. In the United States for example one group of interests will

wish the discount rate raised, another group will strongly favor the rate as it stands; the rate is manipulated or let alone according to whichever group of interests is stronger.

History of the Bank of Sweden

But Sweden has always been progressive in monetary affairs. Her central bank was the first to issue bank paper notes; her entire banking system which was chartered in 1656 was established as a central bank. The charter granted provided for the establishment of one bank which was permitted to set up branches of itself in other parts of the country. In 1900 there were 66 commercial banks with 269 branch offices and total resources of 1370 million kronor. In 1910 there were 80 banks, the maximum number in Swedish history; in 1920 there were 41 banks with 1410 branches, and in 1936, 28 with 1032 branches. In the latter year the largest three of the banks represented 55% of all resources - which meant control of about 5400 million out of 9820 million krona. The Swedish banking system early adapted itself to finance the capital requirements of industry and thus arose the need for a high degree of

decentralization. The tendency in recent years has been, obviously, to decrease the number of banking institutions since it was felt that a fewer stronger banks secured a more satisfactorily controllable set-up than one which was composed of many small banks.

Nature of the Bank of Sweden

The Swedish people keep their savings in the form of time deposits rather than as checking accounts; as both cause and result of this fact checks are much less widely used than in other countries as England and the United States. Therefore the Bank of Sweden note plays a very important role. Hence the "changes in the note circulation are of primary interest, ... and the best indicator of the Bank of Sweden is the note reserve i. e. the difference between the maximum limit of the note issue and the amount in circulation." [1] By virtue of the fact that the Swedish banks carry mostly time deposits, underwrite few new bond issues, and carry almost no stocks in their portfolios, they very seldom have to close their doors because of "runs" on the part of the public demanding cash, because of frozen assets, or because of losses from unsound investments. Another peculiar characteristic

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[1] Managed Money, Erik T. H. Kjellstrom, New York, 1934, p. 11.

of the Swedish banks is that they are all members of the Stockholm Stock Exchange. As a result of this fact they act as brokers do in other countries in selling and purchasing stocks; their close touch with the stock market on this account puts them in a position to sense any unhealthy condition in the stock market and their position as bankers gives them the power to initiate action to rectify the factors causing it. Further the Bank of Sweden is unique among the banks of the world in the fact that it is a state institution under the direct supervision of the Parliament. The Board of Governors of the Bank, however, keep a careful watch to see that its activities are not unduly dictated by the Parliament although it is answerable to the Parliament for action taken. It may be presumed that Parliament allows those in authority over banking procedure considerable freedom under ordinary circumstances. The closeness of the link between bank and government must work to the advantage of both bodies.

In 1897 the Bank became the sole note issuing institution in the country. It was permitted to issue up to double its gold reserve and if necessary in time of war or any monetary emergency whatsoever, to issue above this amount 125 million kronor. The amount of bank notes not covered by gold had to be backed by "gilt-edged

domestic bonds, foreign government bonds, gold deposited abroad or in transit, domestic or foreign bills of exchange, credit balances with some bank or accepting house abroad maturing within six months, and loans against gilt-edged domestic bonds or/and foreign government bonds." [1] Paper backed by a combination of gold and any or all of the above named securities was very secure indeed. The Bank of Sweden is a banker's bank in the sense that aside from non-interest bearing deposits which it carries for the government its deposits consist chiefly of the deposits of banks. As is consistent with this fact the bank does not loan directly to the public although it may if it chooses; the smaller banks and the commercial banks carry on this particular activity. In this regard the Bank of Sweden resembles the Federal Reserve Banks in the United States. But it is unlike the Federal Reserve Banks in that it seldom engages in open market operations. Since the commercial banks are always indebted to the central bank and are closely connected with it though not actually branches of it, the rediscount rate is a very formidable weapon in the hands of the bank in guiding the policies of the banking system.

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[1] Managed Currency, Erik T.H. Kjellstrom, New York, 1934, p. 14.

Action Taken by the Bank during the World War

The operation of this system was very satisfactory until the advent of the World War when circumstances arose which the bank had difficulty in controlling. On August 3, 1914 the redemption in gold of bank notes was suspended although until the end of the next year the kronor along with the monetary units of Norway and Sweden was "pegged" on the exchanges. Convertibility of notes was not resumed until January of 1916. Meantime Sweden had been having trouble regulating her gold supply. Being a neutral country and a producer of raw materials, Sweden exported a tremendous amount of goods. Her purchasers paid her in gold. In common with several other countries she found too great an import of gold dangerous to the price level and to the unit of account. To protect herself, therefore, Sweden on February 8, 1916 adopted a gold exclusion policy and passed a law to that effect--whereby she refused to buy any gold presented to her for purchase. On April 28 of the same year free mintage was suspended according to an agreement she had made with Norway and Denmark. It was notable, however, that the agreement between these countries by which free coinage was to be forbidden in the three did not prohibit gold from going into Denmark and Norway. But Norwegian and Danish coins were legal tender

in Sweden according to an article passed by the last Scandinavian convention which renewed an agreement made in 1873. Therefore gold made its way into Sweden in spite of the embargo which she had placed upon it. To be noted also is the fact that although Sweden was not officially buying gold, the Riksbank, on its own initiative, made purchases of gold during 1917 so that by the end of the year it had increased its reserves by 30 million kronor.[1]

Sweden's policy of refusing access to gold proved to be very foolish; she would have done better to let gold come and go under normal conditions letting the kronor fluctuate with the value of gold. If purchases of gold had been made by the bank in the quantities which would have been made had no restrictions been placed on such action, the bank's domestic loans as well as its other interest bearing assets would have been reduced to a minimum and it is possible that the notes outstanding might have been 100% backed by gold. Although Sweden's gold stocks were 102,000,000 krona in 1913 and 285,566,000 in 1919, the notes in circulation had increased from 254,000,000 krona to 813,534,000 in 1918 so that the increases in gold could not cover the increases in note

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[1] Money and Foreign Exchange After 1914, Cassel, p. 93.

issues. Therefore when the people began to ask for redemption of notes in gold, the Riksbank was unable to meet their demands. On March 20, 1920 the bank openly admitted that it was not in a position to give out gold and "from that time onward the Swedish currency showed itself openly as a depreciated paper currency."[1] How much better off Sweden would have been had she never severed the connection between her currency and gold as she did in 1917, is shown in the experience of Norway and Denmark who let their currencies remain on gold and fluctuate proportionally with the value of gold. The fall in the value of gold could not be considered serious. The exchange rate of the krona remained fairly stable for the first two years of the War and in 1917 rose 47 cents. As is shown in the following table, its value fell off, however, in 1920 due to the action by the bank which prohibited redemption of notes in gold.

Yearly Average Exchange Rates of the Swedish Krona

Year	Av.Rate	Year	Av.Rate	Year	Av. Rate
1914	$.2655	1919	$.2554	1924	$.2652
1915	.2589	1920	.2049	1925	.2615
1916	.2876	1921	.2254	1926	.2676
1917	.3263	1922	.2617	1927	.2681
1918	.3280	1923	.2655	1928	.2680
				1929	.2678

[1] Money and Foreign Exchange After 1914, Cassel, p. 95.

Swedish exchange on the New York market was unlike those of England and France which were selling at a premium in 1914; this was true, principally because krona were accepted at a discount in London and Paris. At the same time pounds, francs, dollars and florins rose on the Swedish market during 1914 and 1915 but began to fall before the end of the latter year so that by January 1916 they were all below par. This rise of Sweden's exchange and fall of the exchanges of England, France, the United States and the Netherlands continued until 1917 after which time the trend was in the opposite direction.

Monetary History after the War

After August 1918 the exchange value of the krona fell in New York reaching par in 1919 and slumping badly after that. This was partially due to the fact that New York withdrew her support from the currencies of the Allies and partially due to the fact that the price level in Sweden was higher than in the United States. About 1919 the amount of the note circulation began to decline as the tremendous credit structure which had come into existance to finance and maintain war activity contracted to

meet the needs of peace time conditions. The policy of the Swedish bank had been to keep the discount rate low in order to make readily available the capital needed by industry. Credit expension was, therefore, unduly great. It was not until after five years of credit expansion that in 1924 the banking authorities felt that they could resume convertibility of notes. On March 29 of that year Parliament voted to resume specie payments and to lift the embargo on gold. But they did not put the banks under any legal obligation to buy gold presented to them for purchase. Nor did they reopen the mints to free coinage. This went into effect April 1 and at that time Sweden technically went back onto the gold standard. By 1929 the bank had reduced the notes outstanding and coin in circulation to 569,000,000; succeeded in maintaining a gold reserve of just a little less than its high in 1919 -- that is 285,566,000 krona as opposed to 245,000,000 krona in 1929 and had built up balances abroad equal to 266,000,000. Sweden's trade was brisker in 1929 than it had ever been. The following table shows Sweden's trade balance for the years 1927-1932.

Sweden's Foreign Trade 1927-1932[1]
(In million kronor)

Year	Imports	Exports	Trade Surplus Import-Export+	Trade Total
1927	1,584.4	1,616.6	+32.2	3,201.0
1928	1,708.0	1,574.7	-133.3	3,282.7
1929	1,782.6	1,812.3	+29.7	3,594.9
1930	1,662.2	1,550.4	-111.8	3,212.6
1931	1,427.5	1,122.4	-305.1	2,549.9
1932	1,147.2	944.8	-203.1	2,092.7

Mr. Kjellstrom makes the following interesting comment on Sweden's foreign trade balance:

> "Although Sweden's consumption of the main staple commodities sold in the world market cannot compare with her exports of raw products and semi-manufactured goods, it was, nevertheless, the relatively high value of her imports which was largely responsible for Sweden's abandonment of the gold standard."[2]

As can readily be seen, Sweden's foreign trade during this period showed a very noticeable decline in exports after 1929 and a comparatively slight decline in imports. For this Kjellstrom gives the following reasons:

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[1] Source: The Skandinavska Kreditaktiebolaget Quarterly Report, April, 1933.

[2] Managed Money, Erik T. H. Kjellstrom, New York, 1934, p. 18.

"(1) that the purchasing power of the Swedish public did not tend to decline;

(2) the Swedish price level remained higher than the price level throughout the world;

(3) There was considerable import of long-term foreign capital and short-term funds into Sweden;

(4) Swedish currency retained a relatively high purchasing power in inter-national markets." [1]

He says further that,

"Sweden's import surplus of 114 millions of kronor in 1930 was more than covered by the invisible items, leaving approximately a hundred millions for investment abroad."[2]

The short term funds which were coming into Sweden the bank used to finance commodity exports and imports of securities. By the end of 1930 Sweden had foreign claims and obligations amounting to 400 million kronor. Foreigners sent their funds to Sweden because they considered it a safe place for them. As events later proved the presence of these short-term funds in large quantities was a most unfortunate circumstance for Sweden. During 1931 the excess of imports almost trebled; the decreasing invisible item factor was

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[1]Managed Money, Erik T.H.Kjellstrom, New York, 1934, p. 20.

[2]Ibid, p. 21.

unable to make up for this difference and payment had to be made by giving up claims on capital abroad. The absence of tariff restrictions and a high wage scale aggravated the excessive import problem. In an effort to make Sweden a less attractive place to which to send foreign funds, the bank on February 6, 1931 lowered the official rate from $3\frac{1}{2}$ to 3%. That this was not sufficiently drastic is shown by the fact that in the first few months of that year, 105 million of krona of short-term capital came in. Following the failure of the Austrian Kredit Austalt in May, the German Reichbank raised its bank rate from 5% to 15%, and because of bank failures throughout the country, the government imposed severe foreign exchange restrictions. There was widespread lack of confidence and many countries called upon Sweden for their short-term funds because their money was so frozen in Germany that they were obliged to call every other available loan. As a result Sweden returned 216 million kronor in June, July and August of that year; this proved to be a great drain on the bank of Sweden's resources.

Efforts to Save the Gold Standard

In July to try to check the efflux of capital which the bank anticipated, the bank rate was raised from 3% to 4%; on September 1st it was raised to 5%, and on the 25th to 6%. This had almost the opposite effect of that intended because foreign investments in Sweden continued to be withdrawn by investors, who wanted their funds regardless of the bank rate and a high rate did not, of course, attract new funds. On the 21st of the month England suspended specie payments and because it had been the policy of the Swedish government to let the kronor follow the pound, distrust in the kronor grew and foreign investments were withdrawn more rapidly than ever. From the 21st to the 26th gold and capital holdings in Sweden decreased by 100 million krona. The stock exchange was closed to decrease the demand for foreign exchange through imports of securities. Applications for a loan were made to New York and Paris. New York refused to make funds available for Sweden's use. Meantime gold holdings had dropped to 38 million krona which was getting near the point at which convertibility of notes would be out of the question.

Sweden under a Managed Currency System

So a meeting was called of the governors of the Banks of Norway, Denmark, Sweden and Finland. All but

Sweden made it clear that they intended to remain on gold; Sweden, however, felt that it was wisest to relieve the bank from obligation of redemption of notes in gold and to prohibit the export of gold. At the time it announced that its future policy would be that of stabilizing the purchasing power of the kronor. Since Sweden's gold supply was insufficient either to maintain the gold standard or to "tie" the kronor to some gold currency, her choice of action was limited. Usually from a national point of view a managed currency is preferable to a currency system in which the unit is tied to another currency on the theory that undesirable conditions in the foreign center might influence conditions at home undesirably. The abandonment of the gold standard was accompanied by a rise in the discount rate from 6% to 8%. This was calculated to dispell any fear on the part of the Swedish people that they were to be subjected to the ravages of a depreciated currency; also it was intended to prevent a rapid drop in the value of the kronor on the exchange markets. The rise of the bank rate was successful in accomplishing the first although it was scarcely necessary as the Swedish public received the news of Sweden's abandonment of the gold standard with their usual calm; but it was not success-

ful in accomplishing the second. Because they were primarily interested in protecting the value of the kronor the authorities of the bank sold foreign exchange. Because they sold foreign exchange in large quantities, late in 1931 they had but 19 million krona, though at the end of the year it had increased to 49 millions. Meantime gold had been going out in such large quantities that the gold reserves reached 206 million krona in November of that year. The bank began to purchase gold to fatten their gold holdings. There was little change in either amount of currency in circulation or in the price level during this year. In 1932 the monetary program was revised. The Minister of Finance urged that the bank bring about stability of the kronor on the exchange by avoiding inflation and by stimulating domestic production by effecting a rise in prices, but warned that the price rise would have to be gradual so as not to be too radical a change from the existing cost of living. The bank, in accord with the plan, lowered the discount rate to 6%, then to 5½% on February 19, and to 5% on March 3 where it remained until May 17, when it fell to 4½%. In June it was reduced to 4% and in August to 3%. Because of the relative security of Sweden as a place for foreign funds, Sweden's holdings of foreign exchange

increased rapidly during 1932. The price raising policy of the banks was not immediately very successful for prices fell until 1933, though after that the absolute price level rose fairly rapidly. At the same time the demand for loans and rediscounts declined so that prices actually remained fairly stable. It was a question of one price divergence counter-balancing another.

In 1933 the money rates remained low; loans and discounts in the commercial market continued to decline; the kronor in the international market enjoyed considerable stability as compared with the pound and dollar; but prices fell again. To alleviate this situation it was decided that credit should be easy to obtain and that government short-term treasury bills would be particularly easy to rediscount at the bank. So stimulated was production and trade by this easy credit policy that conditions began to improve and during the second half of 1933 unemployment decreased noticeably. The foreign trade balance became favorable; also exports exceeded imports and with the proceeds the government bought gold. With these changes, prices - especially wholesale - tended to rise and the bank increased its foreign capital holdings from 3 to 184 millions. The most advisable course to follow seemed

to be special concentration on the internal situation along with careful attention to the value of the kronor on the exchanges. The low rates of interest continued, for in September 1936 the money in circulation totalled 853,380,124 crowns which was the highest amount on record with the exception of December 21, 1918.[1] Obviously private individuals and corporations felt that earnings on deposits was not sufficient to justify placing them at the banks and they kept them in cash. Further no large bond issues have been floated which would tend to keep interest rates low. The increasing independence of the kronor from the pound is shown in what Commercial Attache Charles E. Dickerson, Jr. wrote from Stockholm on June 6, 1936:

> "Even if the London Bank rate should be raised, as is not improbable, it would not necessarily exert any influence in Sweden. The purely psychological relation of Swedish and British interest rates should gradually disappear." [2]

He says too in issue No. 230 of the European Financial Notes, that the "treasury is in an exceptionally liquid condition."

Discussion of Sweden's Progress under the New Monetary System

The plan of managing the currency seems to be

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[1] Department of Commerce Publication, No. 230, European Financial Notes.

[2] Ibid, No. 222, p. 22.

fairly successful; prices have failed to react to treatment as it was hoped as is shown in Table I, though it can be seen that the desired stability of prices has been accomplished. And as we have seen, deflation was avoided, likewise excessive currency and credit inflation, and the internal purchasing power of the kronor has been reasonably steady. According to Kjellstrom, the bank uses the following methods to manage its currency:

1. Changes in the official bank rate.
2. Transactions in the foreign market.
3. Buying and selling of gold at home and abroad.
4. Purchases of government bonds.

One (1) is by far the most important of these measures, though the policy of the bank has always been to keep the rate low and to make changes in the rate only when absolutely becessary. Two (2) is of much less significance as a factor of managing the money than it is in this country or in England, though it was resorted to in 1931. Three (3) and Four (4) are of less importance in managing the currency and depend upon government policy in regard to the requirements of the banks as far as reserves are concerned.

Sweden's policy for making changes in the discount rate is based quite largely on an index number of wholesale and retail prices which is compiled by the statistical de-

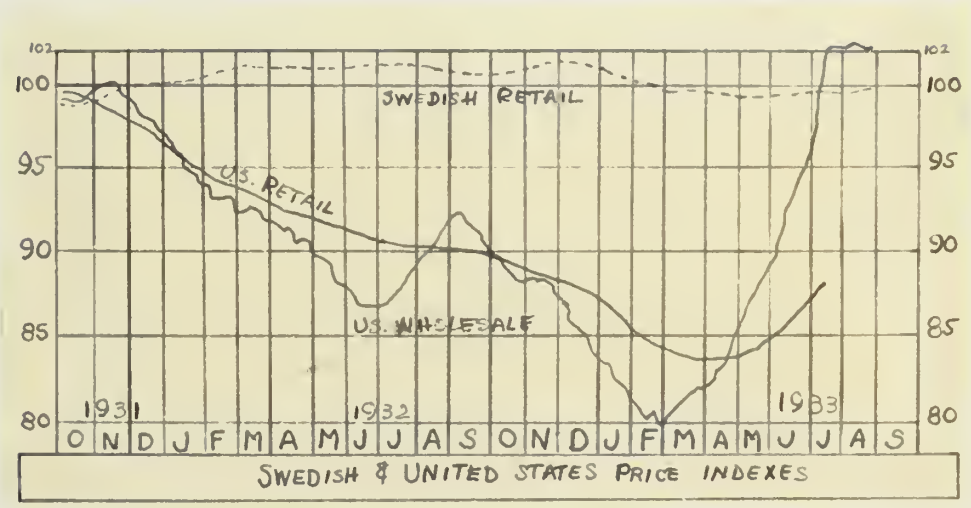

Table 1. Showing Sweden's Stable Price Level
Compared with America's Unstable Price Level (1)

(1) After Reflation, What? Irving Fisher
New York 1934 Chart 7 p.91

partment; the bank also employs index numbers computed by other agencies. This composite number is probably as accurate as an index number can ever be, since it is constantly subjected to a process of resampling and includes such varied items as foreign quotations of prices and quotations of Swedish imports and exports. It is impossible, of course, to say exactly how much credit for the stable price level is to be attributed to the price index or to the bank's manipulation of the discount rate on the basis of it. That there is a connection between the two cannot be doubted, but it must not be assumed, as Fisher assumes, that were the United States to adopt an exactly similar system that it would meet any thing like the success that it has met in Sweden. As has been indicated, the two countries are faced with different kinds of problems. And in addition, can it be taken as a fact that stable internal price level is the goal toward which all economic and banking efforts are to be directed? Sweden, as a fairly isolated country, might prosper under such a plan, but where foreign trade is an important factor as with the larger countries, a policy of this kind depends on conditions in foreign markets. Industries which must meet foreign competition do better to let prices for their products fluctuate

as natural economic factors dictate than to have them ordered and regulated because of nationalistic policy so that they no longer reflect conditions in the outside world. England's policy has been to concentrate attention on external conditions and to let internal price level, discount rates and other financial affairs take care of themselves.

GREAT BRITAIN

History of the Gold Standard in Great Britain

The Bank of England was founded in July 1694. Since that time it has grown in strength and become the bank for other banks and the financial agent of the state. But in contrast to the Bank of Sweden it has never been a government institution, though its first act was to make a loan of 1,200,000 pounds to the government. The original charter granted it the right to receive deposits, and to lend deposits out at whatever interest it could get, but it was forbidden to borrow or owe more than the amount of its capital under penalty of private liability on the part of its directors and governors. The gold guinea had been increasing in popularity with the depreciation of the silver coins, though during the latter half of the Seventeenth Century trade had been suffering through a scarcity of money. To meet this situation the money changers and goldsmiths and the Bank of England issued notes which were readily accepted. In 1717 the gold guinea was replaced by the sovereign and the former remained only as a money of account. The Bank of England's charter was renewed in 1697 and again in 1708 when it was granted the monopoly of Joint Stock Banking in England. Pressure for the right to establish joint

stock banks outside grew, however, until in 1826 the right was granted to organize joint stock banks if outside a radius of sixty-five miles from London.

Between 1783 and 1819 the Bank of England issued so much paper to meet the needs of trade because metal had flowed out in large quantities just prior to that period to finance the Napoleonic wars that there was a scarcity of coin. The difficulty of over-expansion of paper resulted from two causes: The Bank of England notes circulated only in and around London so that the rest of the country had to use bills of private bankers who had very little capital; the importance of convertibility was not yet appreciated even by the directors of the bank. Thus from 1800 to 1819 England had depreciated inconvertible paper currency; this was so unsatisfactory from every standpoint that the Act of 1816 was passed which marked the real adoption of the gold standard. This act did not bring into existence the gold standard as such but rather abolished bimetallism, though it provided for free coinage of silver and legal tender of that metal up to 40 shillings. From 1816 until the World War the gold standard so established remained practically unaltered, though in 1870 an act was passed

regarding the specifications of the various coins and defining the powers of the sovereign to deal with the coinage. In 1826 and 1829 the Bank of England opened provincial branches; in 1834 a joint stock bank was started in London though the act authorizing its establishment refused it the right of issuing notes. The Bank of England opposed the bank as bitterly as it had opposed the small provincial banking institutions. It was perfectly justified in its attitude toward the latter, as they were unsound and were obliged to close during minor panics to the great disadvantage of trade and business.

The Bank Act of 1844 provided:

(1) Notes under 5 pounds were to be prohibited.

(2) The Issue Department of the Bank of England was to be kept entirely distinct from the Banking Department.

(3) Notes to the extent of 11,015,000 might be issued against the debt owing by the government to the Bank and against other securities, but coin and bullion had to be deposited in the Issue Department against every note issued in excess of that sum.

The Bank of England by 1844 had a monopoly of note issuance in and around London. The Act of 1844, therefore, accomplished at least in part what its framers had in mind, to avert price rises by preventing an over-issuance of paper in times of great prosperity. Exper-

ience taught the bank the caution it should exercise in regard to the discount rates and the care with which it should scrutinize its investments and the security offered for loans. This knowledge gained from the experience in numerous panics which occurred in the middle Nineteenth Century has made the Bank of England foremost as a sound financial center and first as the model which the rest of the world has emulated. This was learned not only by the Bank of England but also by the joint stock banks which, though opposed by the Bank, were so well adapted to the needs of the growing country that they prospered in spite of this opposition and a most inauspicious beginning. They spread gradually all over the country, establishing branches here and there. By 1870 there were 110 banks operating in England, Scotland and Ireland as separate institutions. Since 1870 the tendency has been for banks to consolidate and to become branches of one central institution. In 1922 there were 39 banks having 9650 branches, of which 6800 belonged to 5 banks alone. In 1929 the number of banks had been reduced to 29 with a total of 10,000 branches. As in Sweden, the tendency has been to reduce the number of banking institutions. In England at the present time there are five large banks controlling over 67% of total

deposits in the country. The Bank of England acts as their bank, holding for them all currency reserves above what they need for till purposes.

From 1822 to 1914 England maintained the gold standard. But as history has shown, the Bank of England, which was the central financial power of the Empire, gradually evolved methods of controlling this system so that maximum stability would result. Sir Charles Morgan-Webb in The Money Revolution claims that this gold standard was in every sense a managed money currency. He says:

> "The financial power of the British Government, the whole weight of Britain's strong creditor position in the world, the immense volume of British international commerce, the large sums annually invested by Britain in the more backward countries, were all utilized in this elaborate scheme of currency management. Such management was concentrated on the one main objective, the stabilization of the price of gold at the sterling figure."[1]

As we shall see later, when England was obliged to leave the gold standard, the price of gold was no longer a factor of such great significance. Under the pre-War system, gold determined the value of the unit; under a pure managed currency system, the value of the unit is determined by a combination of several factors.

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[1] The Money Revolution, Sir Charles Morgan-Webb, New York, 1935, p. 49.

The MacMillan report listed five methods of control which the Bank of England had at its disposal in managing the gold standard. As we shall see, certain of these methods are the basis of England's present management. These methods are listed by the report as follows:[1]

(1) The bank rate.

(2) Open market operations (that is the purchase and sale of securities) undertaken to influence the amount of the reserves of the commercial banks, and their power of creating bankers' money.

(3) Open market operation, undertaken to influence the London Money Market.

(4) Gold exchange methods, dealing in foreign exchanges and in forward exchange, and variations in the price of gold within the narrow limits permitted.

(5) Personal influence or advice, such as the so-called embargo on foreign loans.

Of these the first was far the most important, the other four being subsidiary methods, employed usually to avoid making substantial changes in the first.

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[1] The Money Revolution, Sir Charles Morgan-Webb, New York, 1935, p. 49.

War-Time Inflation in England

With the outbreak of the World War it became evident that England would have to use the strictest economy in the matter of gold. She was making many purchases abroad which called for shipments of gold; her invisible item credits fell off on account of war conditions. The need for additional notes came into existence because wages rose as both cause of and result of the price rise which occurred immediately with the opening of hostilities. To elleviate this situation the Currency and Bank Notes Act was passed providing for the issuance of one pound and two pound notes which were to circulate freely and to be legal tender to any amount. There was no restriction placed on the number of these which could be issued and the Act did not set up any reserve for them. The framers of the Act had hoped that the amount of these notes could be limited by refusing to distribute them to the banks in quantities which exceeded 20% of their deposit liabilities. But soon a minute was added to the Act to allow any person presenting the Bank of England the face value to receive these notes in exchange. The amount of notes so given out were to be carried

in a separate account called the Currency Note Redemption Account. The difficulty of this plan was this. A man could go to the bank, borrow, and with the credit so obtained, secure notes. Thus the only limit to the quantity of notes so issued was the amount of credit the banks wanted to extend. By the end of 1914 the amount of securities and bills held by the bank reached 121 million pounds as opposed to 42 million pounds before the passage of the Act. During the same period other deposits rose from 54 million pounds to 128 million pounds with reserves falling from 50% to 8%.[1] The real danger of this situation lay in the fact that the public did not appreciate the fact that the paper unit was no longer defined in terms of gold, but that a certain weight of gold was defined as being equal to a certain amount of paper money.

In addition gold coins ceased to circulate; people hoarded them since they passed at a premium or else melted them down to get the profits to be obtained by selling them to the Bank in the form of bullion. To remedy this situation the Defence of the Realm Act was passed in December 1916 which made

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[1] Great Britain and the Gold Standard, H. F. Frayer, London, 1933.

this practice illegal and imposed penalties on those guilty of it. At the same time propaganda was spread about the country to the effect that "he who hoards gold, keeps the enemy." To further protect the gold supply the War Risk Insurance scheme was put through which made shipments of gold so costly that it amounted almost to an embargo on gold exports. In 1917 the government was forced to prohibit exports of gold altogether. Meantime the English government was buying gold from South Africa at the old rate and at the same time using up credit balances in the United States to keep the exchange rate of the pound below the export point. An examination of the following table shows the drop in sterling exchange after the passage of the Currency Act of 1914. It also reflects the efforts of the Bank to keep the exchange rates up.

Year	Pounds in Dollars[1]
1913	$4.87
1914	4.91
1915	4.75
1916	4.75
1917	4.76
1918	4.75
1919	4.43
1920	3.66

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[1]1936 Supplement to Survey on Current Business, U. S. Dept. of Commerce, Washington, 1936, p.52

That some such action must have been taken is obvious. Since England went off the gold standard in 1914 and her money depreciated in terms of gold, sterling exchange would have dropped at once in terms of a gold currency such as the dollar. That it did fall off in 1919 was due in part to the fact that prices in England fell; that it did not drop farther was due in part to the fact that prices in the United States rose as a result of a deflationary policy on the part of the government. The indices of prices in England and in the United States were as follows:

Year	England	United States[1]
1918	231	206
1919	212	197
1920	313	272

The fall of the pound in terms of the dollar in 1920 may be attributed to the greater relative price rise in England than in the United States in that year. In 1919 the United States began to pursue a gold purchase plan, buying largely and directly from South Africa. The British government at the same time began to grant licenses for the re-export of gold. The result of these two actions was to make the value of gold rise,

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[1] Money and Foreign Exchange After 1914, Gustav Cassel, New York, 1930, p. 190.

which was, of course, adverse to the movement of sterling in terms of dollars. In 1920 England was obliged to renew the prohibition on the export of gold by passing the Gold and Silver Act.

The Cunliffe Committee

In 1918 the Cunliffe Committee was appointed in England to consider what could be done to remedy the financial situation, a high price level, falling exchange, low reserve ratios. The recommendation of this committee was to return to the gold standard at once. In order to do this, the following steps were advocated:

(1) The Government was to make new loans and with the proceeds of these loans, pay off its debts.

(2) The bank discount rate was to be raised in order to prevent the export of gold and any further expansion of credit.

(3) The note issues which were not covered by metal backing were to be reduced gradually.

(4) The Bank of England was to adopt a policy of accumulating as much gold as possible.

(5) In line with (4) the branch banks were to turn over to the Bank of England all their gold reserves.

These proposals were impossible to follow. As long as high prices continued,as would be the case until

economic conditions universally were such as to allow a gradual lowering of the price level, any sudden drastic contraction was out of the question. For the government to make fresh loans in order to pay off its debts involved simply the exchange of one debt for another, though of more desirable character. In addition the deflationary program recommended by the committee was so concerned with State finances as to be a very complex and ticklish one. The proposal to increase the holdings of gold by the Bank of England was unnecessary, as the Bank was already pursuing such a policy, and it involved competition in international markets which England could scarcely meet at the time. The committee disregarded the international aspects of the problem, and so made impossible suggestions. At any rate, these suggestions were not acted upon at the time though the Committee had enough prestige to start England thinking about the possibility of returning to the gold standard, which to her sorrow she did in 1925.

In 1919 a Treasury minute announced that in 1920 notes would not be issued in excess of 320,600,000 pounds unless backed by gold or Bank of England notes. Meantime, at the suggestion of Lord D'Aberon, an International Conference was called which met in Brussels in

late 1920. Little of a constructive nature was accomplished at this meeting. It was generally agreed that a return to the gold standard was out of the question when every country was trying to deflate and suggestions were offered for any one interested in deflating. One of the results of this deflationary program was a general depression in 1920. Most authorities agree that deflation is not an advisable policy unless conducted generally. The world's experience in 1920 seems to have proved this. The first step in deflation is to restrict credit; this has a paralyzing effect on industry; unemployment increases; people cannot buy; foreign trade stands still. The only desirable effect is the reduction of prices. In the United States in 1921 prices were lower than at any other time during the years 1915 and 1930. Likewise foreign trade was lower than in any other year between 1915 and 1930. On the other hand, discount rates reached 7%, 2% higher than any other figure from 1918 to 1935. Does the aim justify the accompanying condition?

The Gold Standard Act of 1925

In England the pound fell off in 1920 and 1921, but thenceforth the exchange situation improved rapidly, as the following table shows:

1921	3.85	1926	4.86[1]
1922	4.43	1927	4.86
1923	4.57	1928	4.87
1924	4.42	1929	4.86
1925	4.83	1930	4.86

Having always in the back of their minds the hope of returning to the gold standard at the earliest possible date, the England found in this improvement in the exchange a most encouraging circumstance. In 1925 therefore a committee which had been appointed to consider the amalgamation of the Treasury and Bank notes easily persuaded themselves that the time had come to return to gold. Thus the export of gold was again permitted and in his budget speech on April 28, 1925 Mr. Churchill announced definitely that the pound would be on a gold basis, and in May the Gold Standard Act was passed. This Act provided that:

(1) Bank notes and currency notes were to remain legal tender though they were no longer convertible into gold on demand.

(2) Free and unlimited coinage was to be abolished, the Bank retaining the sole right to coin.

(3) In order to maintain the purchasing power parity of the pound at a specified rate in the exchanges of the world, the Treasury was empowered to buy any sums necessary to this end.

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[1] 1936 Supplement to Survey on Business, p. 52.

In connection with (3) the government arranged with the bank for a credit of 300 million pounds, though this was not immediately necessary as the pound rose above the gold point.

Discussion of the Advisability of the Act of 1925

Many people felt that England should not have taken this step, and prominent among the objectors were Mr. Keynes and his followers at Cambridge who wished to stabilize on a paper basis, and those out-and-out inflationists who realized that inflation was out of the question with the pound on gold. The stabilizers maintained that the pound was over-valued externally; the advocates of the Act conceded this but felt confident that price rises in gold standard countries would shortly cause the disappearance of this over-valuation. This over-valuation was the result principally of two factors:

(1) Investors and speculators had been anticipating England's return to gold for some time and so had placed funds in London so that they might enrich themselves by profits made from the sale of these funds. They bought pounds at less than $4.86, expecting a rise; they sold them at $4.86 or more when the pound rose. This

activity naturally increased the demand for pounds, and hence, helped push up their price.

(2) Prices in the United States had been rising (according to Bradstreet, the index was 87.2 in 1921 and climbed to 108 in 1925). The effect of this was to decrease the dollar value on the exchanges with a proportionate rise in the pound value.

England certainly suffered from this over-valuation internally and as far as foreign trade was concerned. But judged simply by the exchange rates, 1925 was a good time to return to gold, but judged by the prevailing price levels in England and in the rest of the world, the return to gold involved too many adjustments to justify the harm from such action. Perhaps no group had more strongly opposed this than the Federation of British Industries; a year before the Gold Standard Act they had prophesied the serious dislocation of trade and industry and the fall in prices and increase in the real burden of the National debt which this action would bring about. As events turned out, real incomes were reduced by 10%, the National debt was increased by 700 million pounds, and exports were handicapped. These disastrous effects did not prove temporary but seemed to be

of a permanent nature.

The years 1925 to 1931, which the MacMillan report called the years of "very abnormal character", Sir Morgan-Webb, in The Rise and Fall of the Gold Standard, divides into two periods: 1925-1928 when the dollar and pound, the two gold standard currencies, struggled for supremacy, and 1928-1931 when the franc entered the scene. Keynes held that since England was a debtor of the United States, the return to gold made the pound a "vassal" to the dollar. Not only did England owe the United States money, but she was forced to make purchases from the latter country which could be paid for only in gold because of a high Protectionist policy which the United States had adopted. This tended to drain England of her gold. In 1928 France adopted the gold standard, contributing a currency devalued 80%. England found her gold drifting toward France in the same manner as had been the case with the United States. During 1929-1930 England lost 150 million pounds in gold and was forced to raise her discount rate to 6½%, which was ruinous to trade and industry. The discount rate had been kept low because of internal problems, unemployment for example. Meantime, France was profiting by the fact that she

had depreciated her currency. The franc dropped from $.193 where it stood in 1913, to $.039 the following year, a value it maintained until 1933. Prices fell in France, with increase in commodity exports and gold imports; England bore the brunt of France's prosperity.

The Currency and Bank Notes Act of 1928 and the MacMillan Commission

Because conditions were serious, various attempts were made in England to introduce some plan to alleviate them. The Currency and Bank Notes Act of 1928 was passed by Parliament providing that all currency notes should be placed under the jurisdiction of the Bank of England. This amalgamation of treasury and bank notes resulted in the disappearance of treasury notes from circulation since it was the purpose of the Bank to withdraw them gradually.

The next year the MacMillan Commission was appointed in an effort to study the situation in the banking, finance and economic fields. In June 1931 the Commission issued a significant report to Parliament. It proposed a Price Index standard to currency; it recommended that:

> "The aim of the Central Banks should be to maintain the stability of international prices."[1]

The report defined "international prices" as follows:

> "We mean by the international price level in this context, the composite price level at wholesale of the principal food stuffs and raw materials entering into international trade as measured by the best-known wholesale index numbers."[2]

It offered the following general suggestions for carrying out the proposal:

> "The method by which the Central Banks must attempt to achieve their aim of maintaining stability of the international price level over long and short periods is through the control of the volume and terms of bank credit." [3]

And incidentally,the Report recommended the establishment of an Exchange Equalization Fund to regulate the exchange value of the pound. The committee suggested that 100,000,000 pounds to 175,000,000 pounds be set aside for this purpose. Acting upon this suggestion, 150,000,000 pounds were added to the 150,000,000 already held by the Bank as reserve. Later the Exchange Equalization Fund was increased to 350 million pounds making a total of 500 million pounds,

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[1] MacMillan Report cited in The Money Revolution, Sir Morgan-Webb, New York, 1935, p. 146.

[2] Ibid, p. 148.

[3] Ibid, p. 149.

of which 150 million pounds are held in gold and the rest (which constitutes the Exchange Equalization Fund) in sterling paper or foreign exchange. More will be said of the success of this step later.

Obviously the MacMillan Committee did not feel that the gold standard alone was sufficient to bring about the desired stability; this fact was attributed to maldistribution of gold, the degree to which some countries had become debtors, and others,creditors,and the disequilibriums in internal affairs brought on by the War. The MacMillan Report caused considerable comment at the time of its publication but was not acted upon at that time except in the matter of the proposed exchange Equalization Fund.

Breakdown of the Gold Standard in 1931

It was but three months later that England was obliged to go off the gold standard. The immediate cause of this breakdown in 1931 was the drastic financial condition in the continent which produced such a drain on England's gold supply that convertibility of notes became impossible and the gold standard could no longer be supported. What the European countries asked in the two months, July and August, was 200

million pounds in gold which was in excess of the entire gold reserves held by the Bank. In spite of 130 million pounds which she was able to borrow, the strain was too much. The real causes of the breakdown were of an economic nature. (1) Rigidity of an internal economic system which could not adjust itself to banking policies which the authorities were obliged to adopt. (2) Over-valuation of the pound in 1925 which resulted in decreased exports and increased imports. (3) A discount rate which was high in order to correct the adverse trade balance when it should have been low to benefit industry. (4) An unbalanced budget. (5) High wage and income scale. The break with gold caused the pound to fall from 4.86 in 1930 to 4.53 in 1931 and to 3.51 in 1932, in terms of dollars.

Shortly after this happened the Ottawa Conference met to frame a currency sustem which was to take the place of the gold standard. The decision of this group may be summarized as follows:

(1) The world wholesale price level ought to be raised (this should be the main and immediate objective of all proposals, agreed the members.)

(2) The ultimate objective should be stability of prices at a new high level.

(3) This raising of prices should be accom-

plished by lowering rates of interest and making available an abundance of short-term money. (This, of course, placed a restriction in the actions of the Bank of England and precluded any return to the gold standard.)

(4) Stabilization of international exchanges should be accomplished by price policies common to all countries.

The Ottawa Conference agreed with the MacMillan Report that the gold standard was not adequate and attacked it on the three counts, namely,

(1) as a wasteful and disturbing regulation of the international rates of exchange,

(2) as an obstacle to the low rates of interest essential for industrial prosperity,

(3) As an inefficient and fluctuating standard of value. 1

Certainly England had suffered enough in trying to maintain her gold standard to be justified in condemning it.

The World Economic Conference of 1933

The latest attempt at securing world co-operation in currency and monetary affairs was the World Economic Conference which met in London in 1933. It failed to accomplish what it set out to accomplish. Various reasons are given for this failure. President Roosevelt

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[1] The Monetary Revolution, Sir Morgan-Webb, New York, 1935, p. 175.

announced almost before the Conference got under way that the United States would not agree to any schemes for stabilization in which the dollar was involved; France refused participation unless England and the United States were prepared to return to gold, which they were not; the Ottawa policy had been a success and was contrary to what most of the delegates to the Conference were trying to put through. The world was not yet ready to come to any understanding, for every country had so many troubles of its own as to be completely nationalistic in its attitude and unwilling to co-operate for universal good. But there grew up out of the Conference what was called the British Empire Currency Declaration which said:

> "In the meantime the undersigned delegations recognize the importance of the stability of exchange rates between countries of the Empire in the interests of trade."[1]

They confirmed the Ottawa group's proposal to achieve this stability by means of a common price policy. In the light of England's ultimate goal, the Declaration went on to say:

> "The undersigned Delegations now reaffirm their view that the ultimate aim of monetary policy should be the restoration of a satisfactory international gold standard, under which international cooperation would be

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[1] Cited in The Monetary Revolution, Sir Charles Morgan-Webb, New York, 1935, p. 197.

> secured and maintained, with a view to avoiding, so far as may be found practicable, undue fluctuations in the purchasing power of gold." [1]

England under "Managed Currency" System

In summarizing England's present system of currency management we find that control of the international currency is effected by means of the Exchange Equalization Fund and that control of purchasing power of the pound is effected by increasing or decreasing the amount of credit. The theory of the Equalization Fund is that the value of the pound on the exchanges under a managed currency system can be increased or decreased by altering the relative demand and supply of the pound. Therefore, if the pound is falling, the Bank buys sterling with the credit in the Equalization account, thereby increasing the demand for sterling and increasing the price. Selling the pounds has the opposite effect. Thus the exchange value of sterling can be very neatly stabilized. The internal price level is kept steady chiefly by raising or lowering the bank rate and by the engagement on the part of the Bank in the purchase and sale of government securities in the open market. The

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[1] Cited in The Money Revolution, Sir Charles Morgan-Webb, New York, 1935, p. 198.

latter method of controlling the amount of credit is increasing in importance. This is in contrast to the Swedish system where the discount rate is the chief means of control, but similar to the United States where open market operations are used quite as much as the change in the rediscount rate. With England greater attention is probably given to the pound on the exchanges than is the case with Sweden or the United States, since trade is a greater item in her national economy than in that of the other two countries.

THE UNITED STATES

The Early Monetary History of the United States

The experience of the United States with a national currency dated from 1776 when Continentals were issued to finance the Revolutionary War. The issues of Continentals were authorized up to about $240,000,000, each dollar backed by the security of the Colonies. This security was such a questionable affair, however, that by the end of the War the dollars had depreciated to such an extent that in 1780 one Continental was equal to 2½ cents. In 1890 they were called in and redeemed at the rate of 100:1. The Act of 1792 caused the United States to adopt a double standard at a ratio of 15:1 for gold and silver. This ratio over-valued silver to such an extent that gold coins were driven from circulation. To remedy this situation the Act of 1834 was passed on June 28 of that year. This Act established a ratio of 16:1 between silver and gold, which caused gold to be over-valued and silver to disappear from circulation. In 1837 the ratio was changed to 15.988:1, where it has remained ever since. In 1857 foreign coins which had hitherto circulated at par and as legal tender, were banned and Congress provided

for the issuance of 6% Treasury Notes up to the amount of $20,000,000, and two years later these Treasury Notes were authorized to be re-issued and over $30,000,000 in addition. In 1861 Congress authorized the issuance of not more than $50,000,000 demand notes, and in 1862 $10,000,000 additional issuance. The Act of 1862 made these notes legal tender for all debts. The Act of 1863 created the National Banking System and authorized banks which were members of this system to issue notes up to 90% of the market value of the United States bonds which they had deposited with the United States Treasury. Notes so issued could not exceed $300,000,000. State banks could also issue notes upon deposit of bonds. In 1865 an attempt was made to drive out of circulation state bank notes by means of a 10% tax. In 1875 the Resumption Act was passed which provided for resumption of specie payments. The Bland Allison Act of 1878 re-monetized silver, made silver coins legal tender and provided for purchase of silver bullion by the Treasury. The Sherman Silver Purchase Act twelve years later further directed the Secretary of the Treasury to buy silver. In 1893 this Act was repealed.

Establishment of the Gold Standard

The Act of 1900 is referred to as the Gold Standard Act. This act declared gold to be the standard unit of value, set up a fund in the Treasury with which to redeem notes in gold and to buy gold bullion with notes, allowed gold certificates to be counted as reserve by National Banks, and placed a minimum of $100,000,000 upon the fund in the Treasury for the issuance of gold certificates. The Aldrich-Vreeland Act in 1908 provided for additional National Bank notes up to $500,000,000 but imposed a tax on their issuance with a view to contracting them at an early date.

Establishment of the Federal Reserve System

In 1913 the Federal Reserve System was established. The chief purpose of this Act was to provide an elastic currency which would contract or expand according to the needs of business. Under the National Banking System, when notes were issued, they continued to circulate whether required by trade or not; the result was, obviously, that price rises and falls were completely uncontrollable and that depressions and panics in the economic world were aggravated because of the inflexibility of the

monetary unit. The Federal Reserve Bank notes as issued under this 1913 Act were expected to serve business better than the National Bank notes because they were not to be limited in amount by the resources of any particular bank nor affected by local conditions but were to be available when and where needed and to be depended upon by virtue of their connection with a strong centralized banking system.

W. Randolph Burgess has said that:

> "Under the Reserve System the burden of meeting the fluctuations in the demands for funds has been shifted from the reserves of member banks to the reserve of the Reserve Banks, whose resources are adequate to meet almost any emergency." [1]

He also stated that:

> "The presence of the Reserve System gives greater elasticity to the supply of funds and stability to the money market and removes the fear of money panics."[2]

Every Federal Reserve Bank was obliged to hold in gold at least 40% of its federal reserve notes in circulation, at least 5% of which had to be held as gold Redemption Fund in the United States Treasury. The remaining 60% of the value of the Federal Reserve notes

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[1] The Reserve Banks and the Money Market, W. Randolph Burgess, New York, 1927, p. 124.

[2] Ibid, p. 125.

outstanding could consist of gold, gold certificates or eligible paper.[1] The act dictated the reserve requirements for note issues but created the Federal Reserve Board which had vast power in dictating what should be the discount rate and what should be the requirements of paper in order to be eligible as backing for currency and what should be the policy of the banking system in regard to open market operations. Plain it is, then, that the Federal Reserve Board had considerable control over all phases of our financial life; good judgment on the part of its members was of paramount importance. If the Board considered that expansion of credit, which in this instance, may be thought of as synonymous with currency, was getting out of hand, it could affect a contraction by raising the discount rate, which made it more difficult for banks to secure paper eligible as backing for Federal Reserve Notes, by raising the requirements of the paper which the Central banks could discount - thus reducing the amount of paper held by the individual banks to be used in the 60% limitation, or by buying government bonds which reduced the holdings of securities in the portfolios of the member banks which they were using as backing for their notes.

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[1] "Eligible Paper" included notes, drafts, bills of exchange in acceptances discounted or purchased in the open market by the Federal Reserve Banks.

Conversely, a low discount policy, a broadening of the specifications for the eligibility of paper, or the sale of government bonds automatically increased the member banks' ability to extend credit and issue notes at the same time remaining within the law. This, in brief, was the means by which the advocates of the Federal Reserve System hoped to manage the currency of the country.

Effect of the World War on the Monetary System of the United States

But hardly had the system been inaugurated when the World War broke out and put the new plan to a severe test. Being a producer country and neutral for the first two years of the war, the United States was called upon to make tremendous sales to Europe. Europe was willing to pay dearly for these purchases and there was competition between European countries for American goods. But this competition was necessary only for a short time, for American industry expanded almost immediately to meet the new demands made upon it. And even after the United States was equipped to produce in the necessary quantities, prices for goods remained high. These high prices meant huge profits for manufacturers and ultimately for the entire citizenry. The result was a general price rise

in all consumers' and producers' goods. Bradstreet gives the following price indices:

1914	68.9[1]
1915	77.4
1916	93.3
1917	123.8
1918	145.2
1919	145.6

Dunn's index was:

1914	64.8[2]
1915	67.6
1916	80.3
1917	110.5
1918	121.9
1919	123.2

United States exports increased greatly and imports increased only slightly during the War years. The following table shows this:

Year	Exports	Imports
1914	46	46
1915	78	46
1916	120	62
1917	137	76
1918	135	78
1919	174	101

The European countries paid for their purchases by means of shipments of gold to the United States, until they had reduced their stocks of gold to a dangerously low level. After this time they were obliged to borrow from us to pay for the goods they bought. By virtue

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[1] 1936 Supplement to Survey of Current Business, United States Department of Commerce, Washington, D. C., 1936, p. 15

[2] Ibid, p. 65.

of the fact that prices had soared due to unnatural industrial activity, the Federal Reserve Board felt it to be unwise to use the tremendous amounts of gold which were being received into this country as a basis for further extension of credit since a policy of this sort would increase prices still more. So the gold was "sterilized"- that is, allowed to remain idle in the vaults of the Federal Reserve Banks. This sterilization policy has been followed since that time and the Federal Reserve Bank and the United States government have been criticized by European countries on account of it. Foreign writers have claimed that the United States has taken out of use so much gold because of this policy that the gold standard has had to be abandoned by other countries. They obviously overlook the fact that had this gold been allowed to back further credit expansion, even greater price rises would have taken place than did take place, and while the United States would have been most immediately affected, the entire world would have suffered ultimately. The deflationary policies which all countries found it expedient to adopt after the War would have had to be the more drastic and upsetting on this account. The United States should not be criticized for its sterilization program but it can be blamed

for insisting on gold payments. This insistence on gold did not take the form of a threat to the effect "If you do not pay in gold, we will not sell goods to you," but rather took the form of protective tariffs which made it impossible for foreign countries to export to the United States, thereby building up credit balances which could be used up in payment of goods bought. When the European countries found it necessary to restrict the outflow of gold, they borrowed, as has been indicated. Thus between 1917 and 1919 there was relatively little shipment of gold. The United States had found it necessary in 1917 to give to the Federal Reserve Board authority to restrict the export of coin, bullion and currency to foreign countries and in the Trading with the Enemy Act of the same year, which amended the previous legislation, to give to the President discretionary powers over hoarding and melting of gold coins and bullion. As we have seen, both England and Sweden legislated similarly, likewise France, Germany and other powers. But most of the restrictions so passed were lifted in 1919. Lifting restrictions here resulted in a flow of gold from the United States to neutral countries from which it had bought raw materials. Lifting restrictions in other countries meant that after 1920 gold

flowed in again from Europe to the United States so that between 1920 and 1924 more than $1,500,000,000 in gold came into the United States. But because of the sterilization of gold and the use of Federal credit, this great increase in metal backing was not allowed to affect prices. The use of the new form of bank credit was employed chiefly during the export of gold in 1919.

Mr. Burgess says:

> "This may be put another way by saying that during this period, from 1917 to the end of 1921, Federal Reserve credit acted as a kind of cushion between gold movements and bank deposits."[1]

Thus the Federal Reserve system had introduced a monetary unit which was more independent of gold than any unit preceding it which was, at the same time, tied to gold. The years 1920 to 1924 showed how little the value of the dollar internally, as indicated by the price level, or externally as indicated by its exchange value, depended either upon the value of gold or the amount of gold in the possession of this country. In 1918 the United States held $2,871,000,000 in gold, in 1924, $4,152,000,000.[2] For those same years money in circulation amounted to:

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[1] The Reserve Banks and the Money Market, W. Randolph Burgess, New York, 1929, p. 249.

2. 1936 Supplement to the Survey of Current Business U.S. Department of Commerce Washington 1936 p.53

1918	4371[1]
1919	4729
1920	6191
1921	4663
1922	4248
1923	4535
1924	4592

In fact, in 1920 when the gold holdings were the lowest for the period under consideration, $2,582,000,000, the amount of money in circulation was greatest. Prices fell from 140.6 in 1920 to 87.2 in 1921, rising to 108 in 1925 (these are Bradstreets). Prices, therefore, varied more or less directly with the amount of money in circulation. Interest rates were extremely high in 1920, namely 7%, a condition probably resulting from an effort on the part of banking officials to halt expansion. In 1921 the rate was reduced to 4.5, in 1922 to 4.0, in 1923 to 3.5, and in 1924 to 3.0, which was the lowest point before 1930. The attempts at deflation here and abroad had caused a panic in 1921 and 1922 with resulting low prices and unemployment and equilibrium was hoped for by renewal of easy credit terms. These changes were taking place, then, without any regard for gold movements. Gold had become a necessary element only for maintaining the gold standard; the Federal Reserve system sought to regulate financial con-

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[1] 1936 Supplement to the Survey of Current Business, p. 53.

ditions by other means.

In 1925 gold exports exceeded gold imports by $8,510,000. The same condition existed in 1927, 1928, 1931 and 1933. The years in between showed net gold imports. There has been a gradual increase in the amount of money in circulation, the greatest increase coming after 1932. This has been accompanied by an increasingly low interest rate. The following table shows this:

Year	Money in Circulation[1]	Interest Rate[2]
1925	4582	3.5
1926	4645	4.0
1927	4605	3.5
1928	4496	5.0
1929	4476	4.5
1930	4245	2.0
1931	4672	3.5
1932	5328	2.5
1933	5576	2.0
1934	5403	1.5
1935	5584	1.5

Prices gradually rose until 1928, falling off rapidly after that time. Dollar exchange remained fairly steady up until 1930, any fluctuations in its value resulting rather from monetary disturbances abroad than in this country. Though any examina-

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[1] 1936 Supplement to the Survey on Current Business, Washington, D. C., 1936, p. 53.

[2] Ibid, p. 47.

tion of the figures for these various factors would seem to indicate that gold no longer had any usefulness beyond its function in settling international balances, it would be minimizing the importance of gold to judge solely on the basis of these figures. W. Randolph Burgess said that "Federal Reserve gold policy found expression in four ways:

(1) Resistance to secondary expansion.

(2) Putting gold into circulation.

(3) An open-market and discount policy adjusted to gold movements.

(4) Aid to restoration of the gold standard abroad.

These policies did not completely sterilize the imported gold; they tended to reduce its influence and sought to correct the chief cause, which was unstable currencies abroad."[1] But it must be acknowledged that these were of comparatively minor significance. The National Industrial Conference Board publication The New Monetary System of the United States says that "gold is relegated to a distinctly nominal role" since "the traditional right of private individuals .... to test at will the essential soundness of domestic banking and currency

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[1] The Reserve Banks and the Money Market, W. Randolph Burgess, New York, 1927, p. 253.

in any form into gold on demand ... is definitely abrogated."

The vast accumulation of gold which the United States had made during the years from the War period up until 1932 would seem to make the action taken in March of that year unjustifiable. That it is explainable from an economic standpoint shows how interdependent are nations in every phase of their economic and financial life. Not because the United States was unable to support the existing credit structure and currency issues from the standpoint of gold holdings, but because other countries had depreciated their currencies was the United States obliged to follow this course. France had depreciated her currency as we have seen; England decided to give up the fight for gold standard and depreciate the pound. The gold standard dollar then bore the burden of supporting both franc and pound. Under ordinary circumstances in this case the trade balance of the United States would have suffered because of relatively high prices. Because the country was suffering from a great industrial depression, prices fell, according to Bradstreet, from 102.4 in 1928 to 54.3 in 1932, rising slightly after that. It is entirely probable that they would have

fallen more rapidly than they did if we had been off gold. As it was the trade and industry were handicapped in recovery because of high dollar exchange. In order to overcome the disadvantages of remaining on gold and in order to try to revive prosperity in this country, the government had three possibilities open to it:

(1) To let conditions alone to work themselves out as they could.

(2) To alleviate the burdens of the people by assuming responsibility for their mortgages and deposits.

(3) To bring about a price rise by going off the gold standard and offering a depreciated currency.

The government adopted the third course in expectation that the profits which would accrue to farmer and industrialist because of this price rise would make possible expansion of industry which in turn would solve the unemployment problem. In how far these aims have been accomplished is debatable, but that price rise was the primary object of legislation in 1933 cannot be doubted.

The events preceding the Emergency Banking Act may be summarized in brief. The dollar had undergone selling pressure, following England's departure from gold in 1931, to such a high degree that foreign bal-

ances in this country were falling.[1] Citizens in this country watched this process with alarm though there was no reason for alarm and it was a situation which could be expected. In addition gold was flowing out in great quantities and this further aggravated the public distrust of the soundness of the banking system. The outflow of gold was harmless too. By 1932 the selling pressure on the dollar had ceased and we had a slight net import of gold in that year. Toward the end of that year, however, the pound fell on the exchanges to 3.51 and seemed to be a very attractive buy. As a result funds resumed their outward course from New York and gold proceeded to follow. The Federal Reconstruction Finance Corporation was established not as a political move but with the avowed intention of making loans to corporations which were temporarily insolvent. Paul Einzig in <u>The Sterling-Dollar-Franc Tangle</u> attributes to the fact that the loans made by this corporation were published,both as to amounts and recipients, the bank panic of early 1933. Whether or not this was the case, it seems entirely likely that it was a contributing factor.

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[1]Prices did not rise immediately in response to the depreciation of franc and pound. Therefore by immediate sales of gold dollars,citizens and corporations of England and France could experience additional purchasing power by receiving more francs and pounds for their dollar holdings than they had paid for them.

In any event, the runs on the banks were terrific and many were caught with insufficient funds to meet their deposit liabilities. England refused at this critical point to help matters by counter balancing even in the slightest the selling pressure against the dollar by making purchases of dollar exchange as she had done in 1931; instead she pegged the pound to the depreciated gold franc. Our net exports of gold in 1933 were $19,390,000, a greater net export than at any previous period. Directly the government was faced with the hoarding problem, gold coins had been circulating and when most banks appeared about to break, these immediately disappeared from general use.

Abandonment of the Gold Standard by the United States and its Significance

The first action taken by the Roosevelt administration was the declaration of a bank holiday during which time an effort was made to examine all banks and to allow to open at the end of the time only those which were definitely sound and solvent. The next act was the forbidding of all further exportation of gold and calling all gold into the Treasury. The President acted under authority of the Trading with the Enemy Act in

this latter move. Technically the United States went off the gold standard at this time. It was generally felt that this embargo on gold exports was a temporary affair and that the gold standard would be restored as soon as the emergency was passed. But in May 1933 the Inflation Act was passed by Congress giving the President great powers of credit and currency inflation if he chose to exercise them. It provided as follows:

(1) The Secretary of the Treasury is to issue notes up to $3,000,000,000.to meet maturing Federal obligations. The notes are to be retired at the rate of 4% per annum.

(2) The President is to fix the weights of gold and silver in such amounts as he finds necessary and to provide for unlimited coinage of gold and silver at the rates so fixed if he thinks it expedient. He may reduce the gold content of the dollar by as much as 50% if necessary.

(3) The Secretary of the Treasury is to buy silver at a price of 50 cents per ounce up to $200,000,000 from foreign governments in payments of debts due the United States.

(4) The Secretary of the Treasury and the Federal Reserve Board are to agree that the Federal Reserve Banks are to buy obligations of the United States in the market to the extent of $3,000,000,000, the Banks to be relieved of any penalty if the reserves should be deficient as a result of this action.

There were two concessions granted which made these provisions a little less difficult to accept than they are as they stand. Congress agreed that since the first three provisions of this act were so clearly inflationary, the Federal Reserve Board had the right to interfere with action resulting from this Act if it felt that credit was being expanded to an unhealthy degree. And the provisions of the act were optional rather than mandatory. This legislation took place on the eve of the World Economic Conference and was the basis for President Roosevelt's announcement to that Conference that the United States would not agree to any stabilization proposals which might be made at that Conference. The depreciation of the dollar was criticised by many Europeans as an unnecessary step taken for the purpose of securing the advantages resulting from such depreciation. These critics pointed to the bank rates which the Federal Reserve Banks had set. In 1930 the average rate was 2.00, in 1931, 3.50, in 1932, 2.50, in 1933, 2.00. These critics claimed that if the depreciation of the dollar had not been a deliberate move with a purely selfish motive, the discount rate would have been raised in an attempt to save the situation by this means. That the bank rate was low is not surprising for banks had idle

funds in enormous amounts which they were anxious to dispose of and which were attractive only if cheap. The critics also pointed to the embargo on gold charging that maldistribution of gold was one of the causes of the monetary difficulties throughout the world so that any loss of gold by the United States would be highly desirable. That the rapid efflux of gold had been partly responsible for the lack of confidence in the banking institutions would seem to justify the government's action in trying to stem the efflux in its desire to put the banking system back on its feet. The government explained its action to the World Economic Conference, in so far as it made any explanation, on the ground that with 99% of the banks of the country insolvent because of assets in the form of frozen mortgages, drastic action was necessary to "unfreeae" the mortgages by means of price rise. The price rise has been mild, reaching 77.4 in 1935 from 54.3 in 1932. The President did not use his powers at once regarding the dollar. Instead it was allowed to go where it would as a result of the combined influences of market and speculation, though in less than four months the dollar had depreciated 37%.

Inflation Act of May 12, 1933

On October 25, 1933 the Gold Purchase Plan was approved authorizing the Secretary of the Treasury to buy domestic gold at the best price obtainable in the markets. This plan was inaugerated in the hope of raising commodity prices which had failed to respond to purchases by the Federal Reserve Banks of government securities as provided in (1) of the Inflation Act of May 1933. This plan also anticipated a devaluation of the dollar which occurred on January 31, 1934. But between October and January the government paid out from $31.36 to $35.00 an ounce for domestic gold. These purchases did not raise prices and occasioned considerable protest from sound money economists and others who had viewed all these proceedings with a skeptical eye.

The Gold Reserve Act of 1934.

The Gold Reserve Act of 1934 provided that:

(1) All gold held by the Federal Reserve Banks or the Federal Reserve Board was to become the property of the United States Treasury.

(2) In exchange for this gold the Banks

were to be given credit on the Books of the Treasury, or gold certificates.

(3) The Secretary of the Treasury was to have final say as to the acquisition, melting, export and import of gold.

(4) No gold was to be minted except on account of foreign countries and the Treasury was to hold its reserves against United States notes and Treasury notes of 1890 in the form of gold bullion.

(5) Profits or losses resulting from changes in the weight of the gold dollar were to be borne by the Treasury.

(6) A stabilization fund of $2,000,000,000 was to be set up out of profits from devaluation for the purpose of stabilizing the dollar on the exchanges.

(7) The Inflation Act of 1933 was to be amended so as to authorize the President to devalue the dollar by not less than 40% and not more than 50% of its former value. The President also was to be permitted to devalue silver by the same amount and to issue, if he chose, silver certificates against the silver bullion held by the Treasury.

Discussion of Action Taken under these Acts of Congress

On January 31, 1934 the President fixed the weight of the gold dollar at 15 5/21 grains of gold 9/10 fine, which amounted to a reduction of 40.94%, and established the price of gold at $35.00 an ounce. The Federal Reserve Banks could redeem gold certificates in gold bullion

and settle international balances in gold, although a levy of .25% was made. This last concession granted the banks would seem to indicate that we had gone onto a limited bullion standard. Other results of this Act were of greater significance. One result is a greater danger of inflation than ever before since the establishment of the Federal Reserve system and this is true because the Federal Reserve system is becoming more and more a mere adjunct to the Treasury Department which is a political organization in large part. The entire banking system finds itself obliged to absorb government bonds or else to let its funds lie idle. The burden of our great national debt rests upon the banks and in many instances they must act to save themselves rather than to serve trade and industry. Another unfortunate result of this Act has been that the gold standard as it was before the War may never return; the present administration does not appear to have any such plan in mind. In general the upholding of the gold standard, or more particularly, a return to it, involves many sacrifices; thus once it is abandoned and a system instituted which operates with a fair degree of success, the probability of arousing sufficient sentiment in favor of a return to the old system is very remote indeed. Frederick A. Bradford in Monetary

Developments Since 1932 says that:

> "After restoring confidence in the currency, the most efficacious policy would have been to return to the gold standard, in order to maintain confidence in the currency, and to interfere with prices, if at all, only by helping to correct maladjustments where possible in the existing price structure."[1]

And he adds:

> "As a recovery measure the monetary policy of the Roosevelt Administration had practically nothing to recommend it....." [2]

Doubtless it would be unfair to make such a sweeping statement about what has taken place in the United States since 1933 in regard to monetary legislation. The worst of the depression seems to be a thing of the past. Whether this is due to or in spite of devaluation of the dollar is a question. At least one good feature of the Gold Reserve Act of 1934 is the Stabilization Fund. This fund operates similarly to that which England has set up and regulates the fluctuations of the dollar. It is too new a project to be appraised, though indications are that it will accomplish its objective.

The new monetary system in the United States is

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1. Monetary Developments Since 1932 Frederick A. Bradford New York 1934 p.36
2. Ibid p.40

what the National Industrial Conference Board publication calls "neither 'fish, flesh, nor fowl' in the traditional and orthodox meaning of a gold standard system ...."[1] The value of the currency rests upon public confidence in it; gold has no effect upon the active monetary supply unless the President or Secretary of the Treasury so ordains; gold may be used in settling balances of trade, services and capital payment only with the permission from the Treasury Department. The last two limitations have an unfavorable effect on trade since (1) the American price structure is more closely dependent upon the price structures of other countries than formerly where gold supplies had influence on the price level and since (2) the threat of instability of the dollar interferes with the best use of our productive resources. The management of the currency is divided between the Treasury Department which has quantitative control and the Federal Reserve authorities who have qualitative control. The avowed aim of the new system is internal monetary regulation in the interests of national good; the real aim has been and is, at the present time, control of the domestic price level.

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[1] Industrial Conference Board, Inc., New York, 1934, p. 20.

CONCLUSION

What will happen to monetary systems cannot, of course, be predicted with any degree of accuracy. However, certain general conclusions may be drawn as to the future of the gold standard.

First: Countries cannot maintain the ratios of gold to the monetary supply which they were able to do before the War; France and the United States have come into possession of more than their share. Whether or not there is any justice in this situation is beside the point; the fact remains that these two countries have the gold and will not give it up. There are certain events which might take place which would force them to yield some of their stocks - as an unsuccessful war or a national calamity such as prolonged and widespread drought, plague or epidemic as a result of which tremendous purchases of foodstuffs would have to be made abroad. Especially in the case of the United States both of these possibilities are very unlikely. Thus there seems to be no reason to think that the present distribution of gold will be materially altered for many years to come, and as long as this condition exists, the re-establishment of the pre-War gold standard is out of the question.

Second: Although most nations are inclined to believe in the desirability of a return to an international gold standard, as was so loudly proclaimed at the World Economic Conference in 1933, it may be fairly assumed that the longer nations remain off gold the less likely are they to wish to return to it. This is true for several reasons. In the first place, the severing of the tie between gold and the monetary unit has almost invariably been accomplished by devaluation. Appreciation restores normal. But appreciation is not only a difficult process to carry through but it reduces prices and wages in such a manner as to be very unpopular with the general public. When prices are rising during a period of depreciation of a currency, wages tend to lag behind the price rise; conversely, when prices are falling because of appreciation, wages fall faster than prices causing financial harm to many. In the second place the advantages to trade and industry resulting from depreciation are reversed in an appreciation program. Thus even though countries benefit once a new equilibrium is established, the intervening period is likely to produce considerable protest from many interests. And in the third place, Central Banks, by means of the trial-and-error method, learn how to handle their monetary problems with-

out the use of gold. Certainly banks have much to learn before they can so manage the various situations which arise that no injury is done to business and the general public because of monetary disturbances. But given sufficient time, it seems reasonable to assume that they will develop a system for managing these situations which will prove as satisfactory as the pre-War gold standard. As this system is perfected to an increasingly great extent, the need for gold decreases in proportion. (Of course, in this discussion it is recognized that gold will continue to have a definite use in settling international balances.)

Third: As things stand now, a return to gold is possible only if this return to gold does not mean a return to the pre-War standard. It would be possible for most nations to support a standard wherein reserve ratio requirements were lower, where the unit was defined as being equal to the value of a smaller weight of gold, and wherein every effort was made to effect a trade balance which would stimulate gold imports rather than gold exports. Of course, this is not dissimilar from the system in the United States today. But it is obvious that should all nations stabilize on a basis such as this, the chances of restabilization at the old high

level become more remote. Therefore, from the standpoint of the pre-War gold standard, a unit which is fluctuating and is completely detached from gold stands a better chance of being stabilized at its old parity than one which has been debased and stabilized temporarily at that low point. England demonstrated the possibility of making the jump from a unit completely detached from gold to a stabilized unit of the old parity when she returned to gold standard in 1925.

Even if a country were willing to endure the painful process of appreciation, it is entirely unlikely that it would ever submit to it without the assurance of co-operation of other countries. World co-operation is necessary for any monetary reform program of this sort. Judging on the basis of the experience of the last twenty years, adequate and effective co-operation seems to be a rather distant circumstance. Nations are too nationalistic in their attitude to realize that to be internationalistic in this regard is to secure the greatest national benefit. No country can be independently prosperous for long. Since, then, individual action is scarcely possible and universal action unlikely, the possibility of a return to gold by means of appreciation need not be considered.

But even more important in a consideration of future action along these lines is the fact that the trend toward greater and greater management has been so marked in every country in the past thirty-five years. Were a return to gold likely or even possible, it must be recognized that the gold standard would be managed to a high degree. Great impetus to this tendency was provided by certain forces set in motion by the World War. These have complicated and involved the whole problem so that now, as the MacMillan Report pointed out,

> "All Central Banks are faced with the necessity of a greater 'management' of their currency systems." [1]

Whether the new systems be linked with gold or not, whether the unit be defined in gold or not, whether gold can be freely exported and imported or not, does not alter the fact of management in the matter of monetary supply.

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[1] Cited in The Money Revolution, Sir Charles Morgan-Webb, p. 143.

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