MODERN CURRENCY AND THE REGULATION OF ITS VALUE

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PREFACE

IN *Money : its Connexion with Rising and Falling Prices*, written in the sad summer of 1918, I gave vent to what then seemed a forlorn cry for "due limitation of currency," in face of the inordinate expansion which was then in an early stage and only really showed the world what it could do five years later, when it reduced the German mark to one billionth of its former gold value. In the later editions of the work I was able to record, with some satisfaction, the return of the nations to the principle which they had temporarily disregarded and which many experts had derided.

But now, in 1931, it seems that reaction is taking us too far, and that great inconvenience and danger of worse things are being incurred by the prevalence of a policy which involves not due, but undue, limitation of currencies. The chief purpose of the present work is to show that it is easy to abandon this policy without giving up the gold standard, which in the present age is to be treasured, not only because it is convenient for international commerce and other financial relations, but also because it prevents the perpetual interference with domestic currency values which would otherwise come from petty national politics.

I hope readers of *Money* will excuse a certain amount of repetition, which I have been unable to avoid, partly because I wished to re-state some things in a way which would be intelligible to that one-third (or more) of the population which was born too late to have personal experience of the conditions which prevailed before 1914, and partly because many of the erroneous theories which a dozen years ago were great supports of wild inflation, have now, by a curious change of fortune, become obstacles to the abandonment of undue limitation of currency.

I may add—without regret—that the work was almost through the press before the Macmillan Report was published.

Oxford,
July 23, 1931.

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MODERN CURRENCY AND THE REGULATION OF ITS VALUE

CHAPTER I

THE CURRENCY OF A MODERN COUNTRY

§ 1. *Of what the Currency Consists*

IT would be a pity if the word "currency" meant exactly the same thing as the word "money." We have not so many words that we can afford to waste any of them. In fact, however, the two words do not mean the same thing. If they did, people would be as ready to say, "I have currency in the bank," as they are to say, "I have money in the bank." A one-pound note is "money," and it is also part of "the currency of the country," but you will often be quite ready to sign a statement that you have received "one pound" or £1, when you have not actually received a pound-note or twenty shillings or anything else which you would call currency, but have been given good reason to believe that an obligation to pay you £1 has been

or will be recorded in the books of the bank in which you "have money," and in which your "money" is now or will be immediately increased by the amount of £1. Eventually, no doubt, you may find it convenient to draw out a one-pound note, but not till then can you be said to have got currency.

Etymology gives the clue to the meaning of currency—currency is something which "runs." In each civilised country at the present day there are certain coins and bank-notes or State notes for money which are said to be "current" because they "run" easily from hand to hand, in consequence of a general belief that they will be accepted by everyone as good payment of sums expressed in what are called the "units of account" at certain known rates. These "units of account" are words commonly used in purchases and sales and business transactions of other kinds, such as pounds, shillings and pence in England, dollars and cents in the United States and Canada, francs and centimes in France, marks and pfennigs in Germany. A Bank of England one-pound note is part of the currency in England because it will be accepted by everyone as good payment for a debt or price expressed in the words "one pound" or in the symbol £1. A half-crown is current because it will be accepted as good payment for a debt or price expressed in the words "two shillings and sixpence" or in the symbols 2*s*. 6*d*. It often happens that the law requires people to accept an item of currency in this way at certain rates, and then the item is said to be "legal tender" for that amount of the units of

account; but this is not essential, as it is quite common for coins and notes which are not legal tender to be generally accepted.

Owing to the historical origin of bank-notes, the words printed on them always amount to a promise to pay a certain sum of money. This was at first always taken to mean a certain amount of current coin, and it was confidence in that promise which made the notes acceptable in the first instance. But after a time people ceased to take any notice of the promise, and accepted the notes simply because they knew that they were "current"—that is, that other people would accept them at their face value. So much is this now the case that not one person in ten thousand of those who accept Bank of England notes quite cheerfully could give the correct answer to the question what the promise of the Bank to pay pounds really amounts to at the present day. Notes for money when issued, not by the banks, but by the Government of a country do not usually even go through the hollow form of promising to pay anything; the British Currency Notes of 1914–28, for example, vulgarly called "Bradburies," because they were signed by Sir John Bradbury, promised nothing, but simply bore the words "One Pound" or "Ten Shillings" across their face, accompanied by a statement that they were "legal tender for any amount," which meant that anyone to whom the appropriate number of £1 or 10s. notes were "tendered" or formally offered in payment of a debt expressed in pounds and shillings had to accept them or go without payment.

Thus notes for money may be currency without being in any real sense promises to pay something other than themselves. Further, not all notes promising to pay money are currency. Any private individual may give a note promising to pay a sum of money on demand in just the same form as a bank-note, but no private individual's promissory notes will now succeed in passing from hand to hand and thus become currency. In the past it did happen sometimes that an individual's promissory notes became currency, but such an individual who was successful in getting his notes accepted as currency, became by that very fact a " banker " and his notes became bank-notes.

In short, the essential feature of currency is to be current—that is, to " run " easily from hand to hand in consequence of having secured, no matter by what means, the quality of general acceptability at known rates.

Some writers on money have talked about " cheque currencies," but have made no serious attempt to include them in estimates of the currency of a country. It is difficult to see *what* cheques would be supposed to be rightly included in an estimate of the currency of a country at, say, the present moment. Cheques not yet signed and cheques already cancelled do not at present exist, and obviously cannot be added to the coin and notes outstanding. Cheques drafted and signed but not yet out of the possession of the persons who have signed them are no more entitled to be included than bank-notes which have been printed but not yet issued. We are left with no

cheques except those which have been handed over to somebody else by the persons who signed them but which have not yet arrived at the bank to which they are addressed. These may perhaps be intelligibly described as "outstanding," but their capacity for running from hand to hand is so small that it does not seem useful to discard common usage and call them currency and add their amount to the rest. Cheques are not generally acceptable, because they are not for round sums, but for special amounts generally including odd shillings and pence, so that they cannot easily be used in conjunction with other cheques and notes to make up any particular sum, and also because much more knowledge is required before a cheque can be accepted safely than before a coin or note can be. People accept coins and notes readily because they have confidence that the police and the Government will have prevented the issue and circulation of bad coins and notes; they have no such assurance about cheques, but must decide for themselves not only whether the cheque looks like other cheques, but also whether the bank on which it is drawn exists, and whether the signature is genuine, and is the signature of a person who will be still living and will have enough credit with the bank to secure that his cheque will be honoured when presented. Such limited readiness as is displayed in taking cheques is chiefly due to the fact that acceptance of the cheque is only provisional; you give a receipt for a sum for which you have only got a cheque, but if the cheque turns out to be bad, the law will not say you must abide by your

receipt, but will let you sue for the sum to which you were entitled.

That cheques are not current in the same sense as coin and notes is shown by the confidence we all feel that cheques are nearly immune from theft; if they would pass from hand to hand like coin and notes, thieves would be equally glad to get them, instead of neglecting or burning them, as they generally do. It is further shown by the fact that even the most solvent of us do not make any attempt to get our cheques "into circulation." If your cheque would circulate for months, and then be brought in, dilapidated and dirty, not to be paid, but to be exchanged for a clean one for the same amount, would you not be delighted? Instead of this you are so sure that it will do nothing of the kind that you would rather "get it over," and are inclined to grumble if the cheque is not promptly presented for payment.

The real position of cheques is illustrated by the fact that once or twice, in order to meet emergencies in the United States, some cheques have been made into currency by being "certified" by the banks on which they were drawn. The certification marked upon a cheque guaranteed that the bank would pay it, so that anyone taking it did not require to concern himself about anything except the genuineness of the certificate and the solvency of the bank. This made it as generally acceptable as a note issued by the same bank, since there is obviously no material difference between a written or printed promise to pay a sum on demand and a written or printed under-

taking that a sum mentioned shall be paid on demand. If an English bank made a practice of certifying cheques, and they began to compete successfully with Bank of England notes, the Bank of England would have reason to complain that its monopoly of note issue was being infringed.

A Postal Order, though couched in the rather curious form of an unsigned order to the Postmaster-General, is in substance an order issued by him requiring his officers to pay a certain sum to a person whose name is to be filled in by the purchaser or subsequent owner of the order, and so is just like a certified cheque both before the payee's name is filled in and after a named payee has signed the receipt. At the beginning of the war, in 1914, postal orders did for some time become current, and were properly regarded as an addition to the currency of that moment. But in ordinary times they are not generally acceptable, because for small sums coins are preferred, and because the restriction of the period within which they will be paid without question makes people apprehensive about taking them. Thus even when somebody, for purposes of his own, has gone to the expense and trouble of procuring an Order, it does not become current like coins and notes.

I think it is really indisputable that, in ordinary language, the currency of a modern civilised country includes only the paper notes and metallic coins issued by the banks and Government of the country, and that this is the most convenient usage to follow. But if any reader disagrees, I would entreat him

not to stand in the way disputing, but to come along with me, salving his conscience completely by the simple expedient of scratching out " currency " and substituting " notes and coin " or " stock of notes and coin " wherever I have used the disputed term.

§ 2. *Where the Currency Is*

To avoid many disastrous confusions it is necessary not to fall into the common mistake of supposing that at any point of time the whole of the currency can be divided into the part which is " actually circulating " and the part which is " idle " or " hoarded." In the words commonly attributed to Euclid, " a point has neither parts nor magnitude," so that no circulation or passing from hand to hand can take place during a point of time. Thousands of pounds may pass from one hand to another in each minute, millions in each day, milliards in each year; but these are periods of some duration, not points of time. At each point of time on any day, whether it be 2.35 a.m. or 11.55, payments have just been made and others are just going to be made, and we should not be surprised or shocked if we were told that a payment made immediately before or after one of those points of time was made " at " that time, but we should know that this was an inaccurate statement which would not prevent a division of all payments into those made before and those made after 2.35 or 11.55 a.m. on such and such a date.

In the course of each period there is much " circu-

lation" or shifting of the total quantity between the different classes of holders. At 1 p.m. on Saturday the millions of wage-earners who have just been paid cash for the past week's work hold a very large proportion of the whole; they part with some of it on Saturday afternoon, chiefly viâ their wives, to the shopkeepers, and most of the rest to the shops and other institutions which they patronise, including clubs and savings-banks, during the following days till the next Saturday morning, by which time they are cleared out except for some accumulations in mugs on the chimney-pieces or in stockings, between mattresses and in other odd places. Meantime what they have been paying out has been steadily paid into the banks by the shopkeepers and others who received it, till by Friday the banks are again full of cash ready to be paid over to the pay-clerks of the large employers who want it for their wage-payments. There is also a considerable weekly circulation which does not take the banks in its round, owing to the wage payments made by small employers and such large employers (*e.g.* bus and railway companies) as happen to collect cash payments from the public and are thus able to pay wages without recourse to their banks.

Concurrently with this weekly circulation there is a three-weekly or monthly circulation proceeding, in which currency goes out from the banks to salaried persons, substantial pensioners, rentiers and such like who receive their incomes by cheques or dividend warrants paid into their bank account, and draw out currency by cheques to "self" at rather irregular

intervals when they require it for petty cash and paying small bills.

Another and still slower circulation is involved in the accumulations of currency made by some old-fashioned persons who distrust banks and other new-fangled affairs which take charge of people's savings. These accumulations are intended to meet expenses which are not expected to occur for some considerable time, like the living expenses of old age, or which are expected to occur, if at all, at some uncertain date, like the expense of illness. They are consequently often held for many years, but in the end they do get spent or paid into banks either by the accumulators themselves or by their heirs.

If any currency has been permanently "hoarded" in the extreme sense of having been withdrawn for ever from circulation, it is in the same position as if it had been destroyed altogether or sunk two miles deep in the South Atlantic, and should fall out of the reckoning of quantity of currency in existence or "outstanding."

Consequently all the currency in existence or outstanding at any one point of time is in holdings. It is all held by some persons or institutions, and in the course of time it all circulates in the sense of passing from being held by one holder to being held by another holder. It is not to be divided into two parts, one of which is circulating and the other held.

§ 3. *Why Stocks of Currency are Held*

The question where the currency is, and the answer that it is all in holdings, suggest the question,

Why is it held? Why do people hold this species of property, which, so long as they hold it, brings in to them neither interest nor rent? What, in the economists' jargon, is the "utility" of holdings of currency? Why do we want them? Not, certainly, for consumption. Currency is one of the most inconsumable of goods, since if it is not accidentally destroyed it lasts for ever. We do not want it to eat, like bread and meat, nor even to consume in that less literal sense in which we are sometimes said to consume the clothes which we wear to adorn or conceal our persons; we wear out our trousers by sitting on them, but we cannot wear out a shilling or a pound-note, and if we succeeded in considerably dilapidating either of them, the Bank of England or the Mint would exchange it for a new one without charge.

Our need for currency is analogous to our need for houses. A house is little, if any, the worse for being lived in. As a community we do not reckon that our material welfare is partly dependent on the number of houses that are produced and consumed per annum; we do not feel the better for a large consumption of house—what we want is an adequate house to live in, because it is not always comfortable to be in the open air. Just in the same way a stock of currency is wanted to carry on the business of exchanging goods and services. To get into one short form of words all the reasons why persons and institutions find it necessary or convenient to hold a stock of currency at any moment would be difficult, perhaps impossible. The banks hold their stocks

because they know for certain that they will be asked for certain amounts at particular times by some of their customers and some of their customers' nominees, and they know that it is possible they may be asked for much more, and they want to be on the safe side, so that they always, or almost always, have a good deal more than eventually turns out to have been necessary. The wage-earners hold most of their stock because they require to spend it very soon, and have not yet had the opportunity, and they hold the rest because they are saving up for some more or less distinctly foreseen expense. Employers hold their stock because they are just going to pay wages; shopkeepers theirs because the bank is shut and has not yet put in a "night safe," or because they have not yet got enough to make it worth while to go or send a messenger to the bank. Salaried workers, rentiers and others hold theirs because they find it less trouble to draw ten or fifteen pounds at a time from their bank than to draw five and make twice or three times as many journeys and pay two or three times as many twopences to the Exchequer in stamps on cheques.

Necessity and convenience in various forms thus account for holders of currency holding it instead of other goods which seem more directly productive, and give the holdings that "utility" which is at the foundation of all demand. The holders will not increase these holdings without reason, because they are not directly productive. They will not diminish them without reason, because it would, they believe, be inconvenient to have less in hand.

§ 4. *Why the Different Constituents of each Currency Retain Stable Relative Value*

Things with which we have been familiar from childhood are generally accepted without question. We have always been so accustomed to see a bronze penny treated as equal to one-twelfth of a silver (really half silver) shilling, and this shilling treated as one-twentieth of a pound, that it never occurs to us to wonder why, in all modern well-ordered currencies, coins made of different metals, and also paper notes, manage to keep perfectly stable in value in relation to each other. Ordinary objects, such as wheat, wool, pig iron and hats, for example, are continually changing in relative value, wheat being worth more wool or pig iron at one time and less at another. But in England a penny is always worth two half-pennies, a shilling is always worth twelve pence, and a pound-note is always worth twenty shillings; in America two five-cent pieces are always worth the same as one ten-cent piece, and ten of the ten-cent pieces the same as a dollar bill, and similarly, in every currency, except the most atrociously disordered, we find this stability of relationship. Why is it that shillings never fall in value so as to be twenty-one instead of twenty to the pound and ten-cent pieces never rise so as to pass at nine instead of ten to the dollar?

It is no use to say that such changes would be very inconvenient; so are earthquakes and common colds, and yet they occur. It does not help to say that two sixpenny pieces are worth a shilling because

they weigh as much as one shilling, since not only does a shilling weigh much more than a ten-shilling note and much less than twelve bronze pence, but five bronze half-pence weigh as much as three bronze pence, and yet are only twopence half-penny.

It is sometimes said that the stability of relative value is due to the State having explicitly or implicitly commanded its subjects to circulate the different items of currency at prescribed rates. The bronze penny, for example, has " one penny " in letters put on its reverse by authority of the State, and one penny has always been understood to be the twelfth of a shilling and the 240th part of a pound. Now it is quite true that the command of the State has a good deal to do with the first acceptance and the continued acceptance of objects as currency and with the rates at which they are accepted. In quite modern times—in the eighteen-eighties, if my memory serves me—a good many French ten-centime bronze coins were circulating freely in England as pence; the Treasury issued a royal proclamation saying that they should not, and they immediately ceased to circulate. If the proclamation had said that they should be accepted not as pence, but as halfpence, they would probably have remained in circulation at that lower rate. The Currency Notes issued by the Treasury got into circulation and were accepted as equal to twenty and ten shillings respectively because the State so inscribed them and declared them legal tender at those rates. The State can introduce new currency, provided it is tolerably convenient, and destroy old

currency if there is anything to take its place, without much difficulty. But it always found it impossible to make different forms of currency circulate peaceably side by side at prescribed values without variation until it began to act, at first quite unconsciously, and then with gradually increasing consciousness, on two principles: first, that it must not expect any piece of currency to remain in circulation if the amount (in the unit of account) at which it is rated is less than the amount (in the unit of account) for which it can be sold for non-currency purposes, and secondly, that all pieces of currency (whether coin or notes) which are rated at amounts greater than that for which they can be sold for non-currency purposes must be sufficiently restricted in number if they are to keep up to their rated value and stay in their proper place in the currency.

The first of these principles, when stated, is fairly obvious. If a half-crown, rated at one-eighth of £1, contained silver and alloy worth one-sixth of a pound, we may be pretty sure that quite violent threats of fine and imprisonment issued by the State would not long prevent the coin quietly dropping out of circulation into the melting-pot.

The obvious inference from this is that the State should rate no piece of currency below the value of the materials of which it is composed. A little further reflection suggests that, as values fluctuate from time to time, it cannot be very safe to rate a piece of currency exactly at or even nearly as low as the value of its materials; if, for example, the half-crown when first introduced, contains silver

and alloy worth exactly as much as or only a little less than one-eighth of a pound, or, in other words, 2*s.* 6*d.*, it may easily happen that in a few years the silver and alloy may be worth more than that, and then the coin will be melted. The question then occurs, Why not arrange a safe margin between the rating of the coin and the value of the materials, so as to make it quite unlikely that any actual alteration in the value of the materials will be big enough to make melting pay? The answer is that this is an excellent plan, provided that the second principle, due restriction of amount, is observed.

The necessity of observing the second principle will be obvious if we consider what would happen if the manufacture of one of the kinds of currency which are not legal tender for large amounts were thrown open to all who liked to undertake it for whatever profits could be got out of it. Imagine that anyone is allowed to manufacture shillings provided that he makes them exactly like those now in circulation. These are only half silver, and silver is now so cheap that the coins would probably cost the manufacturer not much more than twopence each. He would manufacture merrily; people would soon begin to find there were "too many shillings about," and ask banks not to give them so many, and perhaps even invoke the law of legal tender, which says that no one is obliged to accept more than two pounds in silver coin. Gas companies, which have shilling-in-the-slot meters, bus companies and other persons and institutions which take large numbers of shillings in the course of their trade,

would begin to find it difficult to "get rid of them," *i.e.* to get them exchanged into something more convenient, without submitting to a discount or other charge. The coin manufacturer, too, would find it less and less easy to sell his product at the full rate of twenty to £1, and would sell a little cheaper. Thus the shilling, when dealt with in large quantities, would soon become depreciated against the rest of the currency, and if the process were allowed to continue, the depreciation would be great enough to cause each individual shilling to circulate "below par," *i.e.* at a rate of more than twenty to the pound. But long before that happened, the banks would have had the sympathy of the public in regarding the unlimited manufacture as a nuisance to be stopped.

Disorders like this never get beyond an embryo condition in any modern well-managed country, because the State calls the unauthorised manufacture of currency "false coining" and "forgery of notes," and punishes it much more severely than many crimes which seem much more repulsive to the ordinary person: instead of allowing indiscriminate manufacture, it maintains a careful system of limiting each class of currency to the amount which can circulate at the proper rate relatively to the unit of account. The requisite limitation is usually arrived at by the institution by law or custom of the device known as "convertibility." Acting through the Mint and some bank or banks, the State arranges to exchange one kind of currency for another on demand. The British Mint is not bound by law to

take back unwanted silver coin at par, but in fact it has done so, and will do so again if necessary; the demand for pence and halfpence has increased so steadily that there never has been any need to reduce the amount of the bronze coinage, but the Mint would doubtless do as much for it as for the silver. The Bank of England is bound by law to give one-pound and ten-shilling notes in exchange for the larger denominations, and doubtless makes no difficulty about giving the larger for the smaller denominations when required.

§ 5. *How the System Evolved*

Now that the thing is done, it looks very simple. Anyone, we might suppose, could have thought of the plan of keeping the whole of the currency together by such an obvious expedient as limiting the quantity of each sort to the amount which will circulate at the prescribed value. But in fact many centuries of currency troubles were struggled through before the principle was applied all round, and even after it was applied in practice, many years elapsed before the theory of the subject was thoroughly understood.

To the relation between bank-notes and coin the principle was, of course, applied from the first invention of bank-notes. These notes were bits of paper on which was a written—in later times, a printed—promise of the banker to pay on demand a certain amount of coin, and were thus convertible into coin unless the issuer went bankrupt. This necessarily limited their amount to that which could circulate at par. On the other hand, as bankers

were always ready to issue them in exchange for coin, there was no chance of their greater convenience compared with coin giving rise to a premium on them.

The next application of the principle was to the coins made of metal other than gold or silver, and intended for the payment of sums smaller than the denomination of the smallest silver coin which it was convenient to coin and circulate. Apparently in the Middle Ages the kings were too busy, or thought it beneath their dignity, to make coins of "base metal"—that is, of any metal except gold and silver—and the smallest silver coin which could be made by the Mint and afterwards conveniently handled by the public was much too valuable for use in small purchases and for covering fractional amounts on larger purchases. But the need was great, and efforts to meet it were made in several ways. People would use for their smaller commercial transactions the same jetons or counters which they used in their games; tradesmen would give metal or sometimes leather "tokens" for the halfpence and farthings which they owed their customers in change; and municipalities issued similar tokens which were nothing but a local coinage, sometimes authorised by the national Government.

These expedients were better than nothing, but it is always undesirable to have a multiplicity of independent issuers of tokens of this kind. To enforce convertibility is impossible when the tokens are for such small amounts, and consequently the competing issuers as a whole are certain in the long run to issue too much. The tokens became a nuisance, and the

State was obliged to take over the business and make it a monopoly. In England copper pence, halfpence and farthings were then coined with the King's head on them, as on the gold and silver coins, and these " coppers " kept up their value, at the rate of 240 pence to the pound sterling, because nobody could get them at any cheaper rate, and there was sufficient demand for them at that rate. As the population was increasing, and has continued to increase down to the present time, there has never been any recession of demand; in recent times the introduction of automatic machines for selling small articles has greatly increased the demand, as the coins are longer locked up in these receptacles than they would have been in the tills of shopkeepers. Consequently it has never been necessary for the State to " convert " or redeem any of these tokens; occasional complaints of surpluses in particular quarters have been met by directing complainants to persons who were complaining of shortage and would be glad to take over what the complainants desired to get rid of. The very heavy and bulky copper coins, which had some appreciable value as mere metal, were replaced after 1860 by a much smaller and lighter bronze coinage in which (as noticed above, p. 14) the penny does not weigh quite as much as two halfpennies, so that the departure from the principle that the coin should have what used to be called " intrinsic value " was made rather more obvious than it was before.

For the introduction of the " token " principle in connection with the silver coinage the State can

claim even less credit than for the introduction of base-metal tokens. The English silver coins became tokens more by accident than by design of the State or of monetary theorists. The fact that the values of the silver bullion and the gold bullion of which silver and gold coins were made are liable to constant variation in relation to each other was ignored by kings who introduced gold coins intended to circulate among the silver coins (twenty shillings of which embodied the unit of account known as the pound sterling and one shilling the unit known as a shilling), and expected them to circulate as equivalents of certain prescribed amounts of the silver coins. The rate at first prescribed for a new gold coin would be just high enough to make it profitable for the king to buy gold bullion for the coin and coin it.

This would work well for a time, the gold coin circulating alongside the silver coins at the prescribed rate. But soon one of two things would happen: either the price of gold bullion would rise, in which case no more gold bullion would be offered to the king for coinage at the price he was willing to pay, and it would become profitable to melt down the existing gold coins (unless they were much reduced in weight by wear or clipping) and sell the resulting bullion; or the price of gold bullion would fall, in which case large quantities of the gold coin would be coined and no silver, while such of the silver coins as were not much reduced in weight by wear or clipping would come to be worth more as bullion than as coins, and therefore would be melted down and disappear from circulation. For a long time these

inconvenient results were fought against by frequent and troublesome changes in the prescribed rates, but at last, after 1717, gold coin was allowed to oust the full-weight silver coins. For about a hundred years from that date the English people were given no new silver coins, and made the old ones, all much reduced in weight, serve their purpose. These were stabilised in relation to the gold coins, guineas and half-guineas, at the prescribed rate of twenty-one shillings to the guinea, by the fact that they were useful as currency, which made them in demand, coupled with the fact that they were limited in quantity to their original amount. It may seem a little surprising that this quantity could serve for the whole of that period of increasing population without actually rising in value owing to increase of demand. The explanation is that gold coins and bank-notes were all the time gradually taking over much work formerly done by silver coins.

By 1816, when a restoration of the silver coinage from its worn-out condition to moderate respectability was undertaken, people had become used to the silver coins having a lower value as bullion than as coins, and dimly perceived that an appreciable difference between the two values would prevent a small increase in the value of silver bullion (measured in pounds sterling) from stopping the coinage of silver and causing full-weight silver coins to be melted down. But they did not even then realise the danger of a diminution of the value of silver bullion causing a cessation of the coinage of gold and a melting down of the existing full-weight gold coin.

So, instead of adopting the principle already adopted in respect of the coppers—that the State should coin just so much silver as would circulate at the prescribed rate—Parliament proposed that everyone should have the right to receive £3 2*s.* from the Mint in exchange for 1 lb. troy of silver, which the Mint would coin into sixty-six shillings. If this provision had come into force, the old troubles would have recurred. As soon as the market price of silver bullion tended to go below £3 2*s.* more silver would be brought to be coined, and if the process had gone on, the gold coins would have become worth more as bullion than as coins, and would have disappeared into the melting-pot. But, owing to a very happy accident, the provision never came into force. The Mint was to be "open to"—that is, bound to take—silver at sixty-two shillings after the issue of a proclamation to that effect, and there was some delay about the issue of this proclamation. Meantime, as a temporary arrangement, the Mint bought silver at the market price, like any other buyer. It found this much more convenient than the statutory plan, and in consequence the Government refrained from issuing the proclamation.

When the law about the coinage was codified in the Coinage Act of 1870, the possibility of the proclamation being issued disappeared in consequence of an amendment to the Bill proposed in the House of Lords and carried without raising objection from anyone, though a few years later, when the fall of silver relatively to gold had begun, much might have been said about the matter.

At that period, and for some time afterwards, there was a curious belief that the silver and bronze coins obtained their value from the fact that they were not legal tender for sums exceeding forty shillings and twelve pence respectively. Of course, if it had any effect at all, the fact that their legal tenderability did not go higher than it did would have tended to diminish rather than to maintain their value. It cannot be any advantage to a coin not to be legal tender for more than a certain sum. The truth is that neither the legal tenderability of the silver and bronze coins nor its limitation is important in connection with their value. The coins possess their rated value in units of account because the State issues and keeps outstanding just that amount of them which is compatible with that value. They would continue to be generally accepted at that value even if they ceased to be legal tender to-morrow. The law which makes them legal tender only up to two pounds and one shilling does not prevent anyone from accepting them, if he chooses, for larger sums, and in fact they often are so accepted, while, on the other hand, they are seldom tendered for amounts even half as large as those which form the limits of their legal tenderability. Who would not apologise profusely before offering thirty-nine shillings in silver coin or elevenpence in coppers? The real practical limit to transactions in silver coins is set not by the law of legal tender, but by the existence of the ten-shilling note, and the practical limit to transactions in the bronze coins is set by the existence of the silver sixpence. It is sometimes said

that the law of legal tender hinders false coiners, but none but a very simple soul would suppose that false coiners would care to pay out even as many as sixteen bad half-crowns at once!

Great improvements are still possible. There is no reason for maintaining as between the different silver coins the tradition that the weights of the coins must be proportionate to their value. The threepenny piece is too small to be popular, and should be made bigger. The five-shilling piece should be reduced to the weight of three shillings, which would make it a useful and popular coin. Room could be made for it by reducing the weight of the half-crown to that of two shillings, and stopping the coinage of the florin, which, after all, was merely a stupid concession to the stupider section of decimalists, who have never been able to grasp that while decimal units of account (such as dollars and cents) are convenient, decimal coins would be extraordinarily inconvenient, and have never been used anywhere. Further, it is probable that silver should now be superseded by some metal offering more resistance to the forger, who can scarcely have the command of heavy machinery, and that differences in shape should be introduced, so that the coins could be more easily distinguished by the sense of touch; and also that the ten-shilling notes (and more certainly the American one-dollar bills and the still smaller bank-notes current on the Continent and elsewhere) could well be replaced by base-metal tokens which would be cleaner and more easily counted.

CHAPTER II

CURRENCY STANDARDS

§ 1. *Necessity of Some Standard*

So far we have only dealt with the orderly relations which prevail between the different members of a modern currency, showing how they are made to keep fixed values when reckoned in each other and in the units of account. But it is not enough to understand the internal relations of a currency: we want to understand also its external relations—to know how its value, or purchasing power over other things, is regulated. Sad experiences suffered by many countries have convinced the world in general that a currency cannot be a law unto itself in this matter, but must be made to conform with some outside standard.

§ 2. *The Gold Bullion Standard*

Perhaps the simplest of all methods of making the value of a currency conform with that of some outside standard is the system of the bullion standard. Here the coins in ordinary circulation are all token coins, kept, by the management of issue and withdrawal entrusted to the Mint, in stable value relations with the bank-notes, while the bank-notes are kept

in stable relations with prescribed amounts of bullion by a law which requires the note-issuing bank or banks to give bullion for notes and notes for bullion whenever asked to do either of these things at specified rates, the selling rate being slightly higher than the buying rate.[1]

Under this system no one asks for bullion in exchange for notes at the prescribed rate if he does not expect to get more (either inside or outside the country) for the bullion than he could get for the notes; similarly, no one asks for notes in exchange for bullion at the prescribed rate if he does not think he will be able to buy more with the notes than he could buy with the bullion inside or outside the country. But, as soon as the value of notes and gold diverges appreciably, a profit will be visible either on taking gold for notes or on taking notes for gold, and there are always plenty of merchants ready to grasp at this profit, so that it is perfectly impossible for the divergence of value to go very far without being corrected. If the currency is getting higher in value than its prescribed equivalent in gold, the bank is obliged to issue additional notes till it becomes no longer profitable for merchants to demand notes for gold; if the currency is getting lower in value than its prescribed equivalent in gold,

[1] The system was adopted in England by the Gold Standard Act of 1925, under which the Bank of England is bound to sell gold bullion in the form of bars containing approximately 400 oz. troy of fine gold to anyone offering to buy such bars at the rate of £3 17*s.* 10½*d.* the ounce troy of eleven-twelfths fine gold (which is equivalent to almost exactly £1700 for a 400-oz. bar of pure gold). It is bound to give notes for bullion at the rate of £3 17*s.* 9*d.* under the Bank Charter Act, 1844, § 4.

the bank is obliged to give out gold and take in notes for cancellation till it becomes no longer profitable for merchants to demand gold for notes. In the one case gold is taken off the market and currency put on it; in the other currency is taken off the market and gold put on it. Both the value of gold and the value of the currency are affected by each process, but as the market for no national currency is as big as the world-market for gold, both processes when confined to a single country may be safely supposed to have more effect on the general purchasing power of the national currency than on that of gold.

The principle of the arrangement which we have been describing could, of course, be adopted between currency and silver bullion just as well as between currency and gold bullion, but in fact it seems to have been actually applied only to gold bullion, and therefore is usually spoken of as the Gold Bullion Standard.

§ 3. *Standard Coins*

Under the bullion standard the value of the currency is linked with that of bullion because the notes are interchangeable both ways with bullion and the coins are interchangeable with the notes. It is also possible to link the two things by making one or more of the coins (called "standard coins" to distinguish them from the token coins) interchangeable both ways with bullion and making the notes convertible into these coins. This plan was followed in England from 1821 to 1914, and is still

followed in the United States and some other countries. The standard coins, which were in England the sovereign and half-sovereign, are unlimited legal tender for the units of account; free coinage must exist, which means that everyone who brings bullion to the Mint or State bank must be entitled to receive in exchange the same weight of bullion in standard coin; anyone who has standard coins must be free to export them and to melt them down for whatever purpose he likes; and notes must be convertible into standard coin.[1]

If these conditions are present, the value of notes is kept up to that of the standard coin because they are convertible into it, so that any tendency to depreciation is corrected by reduction in their total amount; and the value of the standard coin is kept equal to that of the bullion contained in it because any tendency of the coin to go above the value of the bullion is corrected by more coinage, and any tendency to go below the value of the bullion is corrected by some of the standard coin being put in the melting-pot or exported. Thus the value of the currency is linked just as effectually with the value of gold as it is under the gold bullion standard.

If, however, the standard coin is not in actual circulation among the people, but is only used in

[1] The ghost of the old system still walks in England, since the sovereign is still legal tender for one pound, and a few examples continue to emerge from old hoards and trickle in with travellers from South Africa, where it is still coined. But these soon get into the banks, and are paid by them to the Bank of England, which does not reissue them inside the country. The right to have gold bullion exchanged into sovereigns by the Mint, which had long been unexercised by the public, and also the now unimportant right to melt coin into bullion have been taken away.

the manner in which bullion in bars may be used under the bullion standard system, it is clearly useless to go to the expense of coining the standard coins at all; and if, on the other hand, the standard coins do circulate from hand to hand, the system will be expensive, not only because of the cost of first coinage, but also on account of the loss by wear, which somebody, whether it is the last holder—very unfairly treated—or the State, or the State bank, will have to meet.

If it is really necessary that this expense should be incurred, it seems at first sight only reasonable that a charge should be made whenever bullion is presented for coinage, and that the charge should be sufficient to cover both the cost of coinage and the cost of keeping the coin in good repair, so to speak, by replacing worn coins with new ones when necessary. The coin is a manufactured article, and it seems difficult to believe that any less burdensome way of paying for the cost of manufacture and wear and tear could be found than by charging it on the manufacture by giving those who want to have bullion coined into the standard coin not quite as much weight in coin as they offer in bars—giving them, say, 99 per cent., which would be described as charging a seignorage of 1 per cent., because the old seigneurs or lords who had the right of coinage often made such a percentage charge, and the people saw no reason for it except that those who made it were their lords.

But the existence of a seignorage prevents the value of the standard coin from being so tightly

linked with that of bullion as it is when coinage is gratuitous. The value of the coin, it is true, cannot go above that of the bullion contained in it *plus* the charge for coining. If, for example, the Mint or the State bank gives only ninety-nine dollars for bullion sufficient to coin into 100 dollars, taking the other dollar as seignorage, bullion will be offered for coinage whenever the ninety-nine dollars are high enough in value to be worth taking in exchange for bullion equal to the bullion contents of 100 dollars, and the additional coinage will prevent the dollars from being worth appreciably more than that. But there is nothing to secure that the value of the coin may not sometimes go below the value of the bullion in it plus the charge for coining, and descend to the value of the bullion only. If we suppose that ninety-nine dollars are offered for bullion sufficient to make 100 as before, and that the demand for the coin has for some reason diminished, no corrective in the shape of a diminution of the quantity of the coin by melting or exportation will come into play until the value of the coin has got down to that of the bullion contents of ninety-nine dollars. If the seignorage is small, this may be immaterial, but if it were 10 or even 5 per cent., the departures from the gold standard might be considerable in periods in which changes were taking place.

Seignorage should not be confused with the profit obtained by the Mint buying metal at market price and making it into coins which are not themselves standard coins. English Mint Reports do (or till recently did) this by speaking correctly of the gain

made on the bronze coinage as "profit," and then incorrectly of the gain made in exactly the same way on the silver coinage as "seignorage." It is essential to seignorage that there should be "free coinage," *i.e.* that anyone should have the right to receive a fixed amount of coin in exchange for a fixed amount of bullion.

A still worse error is to confuse seignorage with "debasement." "Debasing" the coin or the currency has always been understood to mean reducing its bullion content either by diminishing its weight or its fineness while maintaining its position in regard to the units of account. It is possible for the first imposition of a seignorage to be coincident with a debasement. For example, if the coinage of dollars has been hitherto free and gratuitous, and it is resolved to take a seignorage in future by reducing the bullion in the dollar by 1 per cent., the dollar would be said to be "debased" by 1 per cent. But there is no reason for assuming that seignorage must be applied in this way. It may be applied to existing currency without any alteration of the bullion content of the coin, or it may be applied from the first to a newly established currency; in neither of these cases could it possibly be contended that there was any debasement.

§ 4. *Foreign Exchange Standards*

Countries desirous of adopting the gold standard have sometimes thought it impossible or inconvenient to arrange for the free convertibility of their currency and gold because of the expense

involved in keeping enough gold in hand to be sure of always being able to give gold for their existing note or silver-coin currency when required—probably they always exaggerated the amount required, but that is unimportant for our present purpose. To avoid the difficulty they resolved to make the value of their currency conform not directly with that of gold, but indirectly by making it conform with the value of the currency of some gold standard country. The Government or the State bank would undertake to give good claims on the currency of the gold-standard country in exchange for the domestic currency at a fixed rate. For example, the Government of India undertakes at present to keep the Indian rupee approximately equal to 1*s.* 6*d.* of English currency by the device of being always prepared to sell good claims on English pounds sterling at a rate slightly above $13\frac{1}{3}$ rupees for one pound, and to buy them at a rate slightly below $13\frac{1}{3}$ rupees to one pound. As one pound is kept by the English currency system approximately equal in value to 113 grains of pure gold, this undertaking by the Indian Government, so long as it is effective, secures that the value of rupees shall vary closely with that of gold, since in order that it may be able to carry out its undertaking the Indian Government is obliged to regulate the amount, and consequently the value of the Indian currency, so as to keep its value close to the rate of $13\frac{1}{3}$ rupees to the pound.

The arrangement is, like many other frugal expedients, disliked because it suggests that those

who adopt it are poorer than those who do not. It obviously could not be adopted by all countries.

§ 5. *" Reserves " or " Cover " held against Notes*

Conformity with an outside standard of value does not in itself imply the necessity of a quantity of the material or commodity which forms that standard being held " against " notes issued. The currency might be kept in conformity with the standard by conscious regulation of its quantity, the Government issuing more of it when its value rose above the prescribed ratio and withdrawing by taxation and cancellation some of it when its value fell below the prescribed ratio to the standard. If, for example, the standard was a basketful of certain specified quantities of certain commodities, such as 1 lb. of pig iron, 1 oz. of butter, 1 peck of wheat and so on, to the value of which one unit of account was to conform, conformity could be secured by increasing the currency when the prices of these various quantities added together fell below one unit of account and diminishing the currency when they rose above that level. In such a case of conscious direct regulation no one would think it would be necessary or desirable to keep millions of basketfuls of the commodities in hand as " cover " for the notes. Nor if the standard were gold would it be any more necessary or desirable; the substitution in the example of gold for the basketful of commodities makes no difference.

But if the automatic device of interconvertibility of the currency with the object which constitutes the

standard is adopted, some amount of reserve or cover is required. Nothing appreciable, indeed, is required in the way of a reserve of paper currency against the gold which may be presented with a demand for notes in exchange. The bank or Government issuing the notes will, no doubt, find it safer to keep a stock of unissued notes on hand ready for issue in case of demand, but as these have not yet been issued, they do not count as reserve, and anyway their importance is small, as the real reliance of the issuer is on the printing press, which can soon be got to work in turning out additional notes. But to secure the convertibility of notes into gold, some gold must be held, or the bank or Government will fail to meet a demand for gold in exchange for currency, the almost exact equivalence of gold and currency will be lost, and if it is a bank and not a Government which is entrusted with the duty of converting on demand, that bank will be bankrupt in the absence of special protection by the legislature.

A natural but unfortunate result of this has been that the managers of State or Central banks have in fact usually done their best to keep the value of the currency up to that of the gold taken as the standard for it not because they have that end distinctly in their minds, but rather because they are desirous of running no risks with regard to the adequacy of their reserves of gold. They have taken steps which in fact kept up the value of the currency not because they thought they ought to do this, but because they thought they must take care that their reserves were not "drained away,"

leaving them without the power to fulfil their obligations.

Public opinion has backed them, and has become so far confused that not the maintenance of convertibility, but the maintenance of a large reserve, has been regarded as the great aim of sound policy. Eventually the object of keeping a reserve has been so far lost sight of that it has been quite common for legislatures to prescribe that a minimum of 25, 30, or even 40 per cent. of notes should be covered by a reserve of gold held against them. The absurd consequence of such legislation is that a bank subject to it must keep more than the minimum, as may be seen at once if an example be taken. Say that the minimum is 40 per cent., and that, at a moment when the total issue outstanding is 100 millions, 5 millions are presented for conversion into gold. If the bank holds only the minimum of 40 per cent., paying out 5 millions of gold in redemption of 5 millions of notes will reduce the reserve to 35 gold against 95 notes, that is, the reserve will be not quite 37 per cent. instead of the legal 40 per cent. Consequently, if the bank fears a demand for 5 millions when the total issue is 100, it must have a reserve of 43 millions, or three over the minimum. If it thinks a demand for 25 millions is possible, it must keep 15 millions more than the legal minimum, for when the notes outstanding are reduced to 75 millions it will still have to keep 30 millions of gold to satisfy the law.

The more advanced of the countries adopting this system of a minimum percentage reserve have to

some extent weakened the objection to it by permitting the banks to draw the gold reserve below the statutory minimum on paying a kind of fine proportionate to the amount of the deficiency. The law in England does not lay down any minimum percentage for the reserve, but prescribes that only a certain fixed amount—at present (1931) 260 millions—of notes may be "uncovered" by gold, but that every pound over that sum must be "covered" by equivalent gold. But all legislation limiting the banks' freedom to keep whatever reserve seems reasonable to them encourages the public to imagine that the purpose and end of a reserve is not to meet all demands on it, but to be big and to be for ever reserved.

We shall see in the next chapter that this has an important and unfortunate effect on the value of gold and of the gold standard currencies.

§ 6. *Departures from the Standard*

The silver standard has been abandoned in several instances deliberately, and that by Governments which desired to maintain the value of the currency of their country by the abandonment. The gold standard, on the other hand, seems never to have been abandoned intentionally, and certainly never in consequence of any desire to maintain the value of a currency. Its abandonment might always be called a lapse, but fear that some responsible party might feel hurt by the term has caused me to use the perfectly neutral word "departure" in the title of this section.

It would not be true to say that a country once on the gold standard could never depart from it without either violation or alteration of the laws relating to the currency. When both gold and silver coin were legal tender for any amount, and it happened that gold had become the actual standard, as in England in the middle of the eighteenth century, a fall in the market value of silver relatively to gold (which is, of course, the same thing as a rise in the market value of gold relatively to silver) might have led, in the absence of any change in the law, to silver being coined in large quantities, the disappearance of the gold coin, and the establishment of the silver standard. It required, in point of fact, alteration in the laws relating to currency to prevent this actually happening in England, France and other countries when the value of silver relatively to gold fell later on.

But in quite modern times there has never been any chance in Western countries of the establishment or re-establishment of a silver standard. Departures from the gold standard have always meant the identification of the unit of account not with a weight of silver, but with a paper bank or State note of money, and this identification has come about in consequence of Government either breaking or securing the alteration of the law.

The cause of action has almost, if not quite, always been the financial difficulties of the Government, which generally involve danger of bankruptcy to the State bank. It may seem strange that Governments, which have the right to demand the uttermost penny

of their subjects' means, should ever be in financial difficulty, but in fact, even at its best, taxation is a very slow-moving machine, ill adapted to meet a sudden demand for more expenditure. Moreover, Governments shrink from the unpopularity of heavy taxation and also from the discredit which they think would attach to borrowing at an unusually high rate of interest—in modern times anything over 7 per cent. for a loan to a Government seems almost unknown. On the other hand, printing additional notes is a thing which can be done in a few hours, and for some time creates no unpopularity for the Government resorting to the expedient, but rather the contrary. Instead of having to part with money, people find they are getting more, and they do not at first realise that the additional purchases of goods and services which the Government is making from them with the additional currency are going to involve a diminution in the goods and services which they themselves will be able to buy though their currency means are increased.

So when the Government departments report urgent need of more money and the Finance Minister declares that he cannot raise what is required by taxation in time, and that, even if he is given more time, the necessary taxation will be so unpopular that the Government will lose the next election, while the representatives of the State bank say that it will be impossible to borrow under 10 per cent., a harassed Cabinet decides either to print new currency notes itself or to insist on the State bank lending more money to the Exchequer, even if the law

requiring convertibility of the note-issue has to be broken, suspended, or repealed.

It would, of course, always be possible for a Government or a State bank under the control of Government to issue additional notes up to an amount equal to the gold hoard or " reserve " of the State bank without going off the gold standard in any sense. An issue of convertible notes exceeding the normal, but exceeding it only by an amount not greater than the bank's bullion reserve, would have the effect of making it profitable to present notes for gold and export most of the gold and use the small remainder at home for non-monetary purposes, so that the reserve would be depleted, but this would not be a departure from the gold standard, nor even a suspension of it. The departure would only come when the additional issue began to exceed this amount and the bank ceased to be able to give any more gold for notes. Now even if a Government knew that it was going to issue more than enough notes to exhaust the reserve in this way, it would do well to allow the reserve to go. For though it is the fashion to talk of " losing gold " and of gold " being drained away," gold taken from a reserve is not lost, and has not run down a sink. It is not stolen by the foreigner nor given away to him for nothing. It is sent out like an export of coal or iron or anything else to pay debts to the outside world or to pay the outside world for goods or services received.

But centuries of muddled thinking about national interests have left all countries except one or two with a traditional belief that it is extraordinarily

harmful to pay in the metal which happens to be the standard for the currency.[1] Consequently it is most unusual—if not absolutely unknown—for a Government to wait till the surfeit of currency has cleared out the gold reserve. The usual practice is, in the words it would use, "to take the necessary measures for preventing a disastrous drain of gold" at the same time as it begins to issue abnormal amounts of currency, or even earlier. The outbreak of war has often served as an excuse.

The "necessary measures" are always either the simple straightforward method of suspending the convertibility of notes into gold, or the more insidious method of putting an embargo on the export of gold. If gold cannot be exported, convertibility loses much of its power, because the market in which the gold taken out of the bank can be exchanged for other things is so small that no great quantity can be disposed of without a great reduction of value, so that it falls as rapidly as the currency, if the additions to currency are only on a moderate scale. Moreover, the embargo is usually backed up by restrictions on the use of the gold; melting coin will be prohibited, and the bank will pay out coin rather than bullion. But at last, even

[1] I have to speak of "metal" instead of "gold" because the delusion comes down to us from times when European countries believed silver payments to be as deleterious as gold payments. If the intelligent reader asks, "But what about the countries in which the precious metals are won from mines and other natural sources?" I can only say that when the dominions of Spain and Portugal included the great sources of gold and silver, those countries had the strongest objection to paying in either of those metals. South Africa is modern enough to see the truth.

in the most favourable circumstances, embargoes unaccompanied by suspension of convertibility are found insufficient, and the direct method of suspending convertibility is resorted to.

Convertibility once gone, all is for a time plain sailing for the Government. If the Government issues the currency itself, it simply prints as much as it wants. Prices and wages keep rising; but what matter? If people begin to say, "This money will soon not be worth the paper it's printed on," that objection is easily met by printing notes of higher denomination—it costs no more to print a note for a hundred pounds than for one pound, no more for a million than for a hundred. If the printers complain that there is no room for the noughts, it is easy to print "1 m. for a million," or "B 1" for a billion.

When the issue is made nominally by the State bank, the situation is in reality exactly the same; the State borrows from the bank at some moderate rate of interest, and makes some arrangement by which the bank has to give up its profit, so that the State might just as well be issuing the notes itself.

But all is vanity. The rise of prices is unpopular, and the efforts of the Government to put the blame on "profiteers" recoil on itself, because the public then begins to complain of its inaction against the profiteers. Restrictions are next imposed on prices, with the natural effect of causing difficulty in buying. The "queue system" begins, and it too becomes so unpopular that rationing is resorted to, and this is

the most unpopular of all. Inflation turns out to be a very uneasy bed to lie on.

After a time the people grasp the idea that, as money is depreciating so rapidly, the best thing to do with it is to exchange it for something else as soon as possible. Their anxiety to collect at once every penny due to them and spend it before its value has descended further is succeeded by a desire to hold some other currency which is more stable, and this is the last blow. If no reform were effected, the inflated currency would become absolutely worthless, because it would no longer be accepted.

CHAPTER III

THE VALUE OF GOLD-STANDARD CURRENCIES

§ 1. *Interdependence of the Value of Gold and the Value of Gold-Standard Currencies*

SOMETIMES it is rashly said that the value of the gold-standard currencies depends on the value of gold, and then this is hotly met with an assertion that the value of gold depends on that of the gold-standard currencies. If each of these propositions is understood in a sense which is incompatible with the truth of the other—as they must be if " depends on " is taken as meaning " depends only on "—they are both wrong. The linking together of the value of gold and the value of the currencies effected by the adoption of the gold standard does not make the value of the currencies depend entirely on the causes which affect the value of gold, nor does it make the value of gold depend entirely on the causes which affect the value of the currencies. In fact, the value of the currencies comes to depend partly on events which primarily affect the currencies themselves, and partly on events which primarily affect gold, and the value of gold comes to depend partly on causes which primarily affect gold itself and partly on causes which primarily affect the currencies.

Thus we have to do with four classes of events, which may be arranged under the heads of demand for currency, supply of currency, demand for gold, and supply of gold.

§ 2. *The Demand for Currency*

Under this heading we have to examine the causes which raise or lower the amount of goods offered in exchange for any given amount of currency when the currency is of some fixed total amount. In other words, we have to examine the causes other than variation in its total amount which vary the purchasing power of a currency.

According to the principle which governs all value, that increase in the plentifulness of anything reduces its value reckoned in other things of which the plentifulness has not increased, we should expect the value of a fixed-amount currency to be higher when reckoned in things which have become available in larger amounts, and *vice versâ*, to be lower when reckoned in things which have been reduced in quantity. And as the things in which we reckon the value of currency are mostly, if not altogether, the products of industry, we should naturally expect the value of a fixed-amount currency to vary with the magnitude of the aggregate produce of industry.

That it must do so is, I think, generally admitted even by those who are inclined to kick, as we shall see in the next section, against what is really the same proposition put in other words. Scarcely anyone will be found to deny, or even to doubt that, given a fixed-amount currency, and other conditions

as little changed as is possible, each product will become cheaper if it is produced in larger quantities, and that products generally will become cheaper if produced in larger quantities. No one doubts that if there were an isolated community with a currency of a hundred million dollars, and its aggregate production were doubled, the various products would on the whole be cheaper—be sold, that is, for less money per unit. It may be a little difficult to explain why this would be so, as it is a little difficult on all occasions to explain the dependence of value upon relative plentifulness, but no doubt will be felt about the fact.

Change in aggregate production may be due either to increase of produce *per capita*, or to increase of working population, or to both of these causes.

The effect of an increase of produce *per capita* requires little elaboration. On the average each worker will be producing more output and must have more produce in consequence. He will get it if he receives only the same money earnings as before, since the things he buys will be cheaper. Owners of property getting a share of the output must also get more produce, and they will get it if they receive the same money-income as before, since the things they buy will be cheaper. Unaltered stocks of currency kept by individuals and institutions will, each of them, command more products, but this is as it should be, since the community is now better provided with products. These stocks will not, however, command more *labour* in the sense of time and exertion than before; labour is not a product, and

has not become more plentiful—what has happened is that products have become more plentiful in relation to labour. People are sometimes puzzled by the fact that the workers in industries which have been exceptions when a general advance in productivity has taken place receive undiminished money-wages, and consequently increased real wages, after the advance, but this is the natural result of an increase in the relative value of the things which are produced by the kind of labour which has not become more productive. The increase is caused by their becoming less relatively plentiful.

The effect of increase of aggregate production occasioned not by rise of productivity but merely by increase of population is rather different. Here each average worker is not producing any greater output than before, and therefore cannot expect any greater amount of produce as remuneration. Products being cheaper, he will get that same amount of produce if he receives somewhat reduced money earnings to buy it with. Similarly, owners of property will get the same produce if they receive a smaller money-rent than before. Unaltered stocks of currency will command more products than before, and will also command more labour in the sense of time and exertion than before, since this, as well as products, is now more plentiful in relation to currency. The fact that an unaltered stock will command both more products and more labour than before, joined with the fact that money-earnings will be smaller, will allow a reduction of the average individual stock, so that the number of individual

stocks can be increased, although the total of currency remains fixed.

Thus when a fall of prices due to greater production of things other than currency has occurred, it makes a great difference whether the greater production comes from increased productivity of labour or merely from increased number of workers. Much more difficult readjustment of money incomes will be required in the second case than in the first.

To find convincing historical examples of rise in the value of currencies due to greater productivity is difficult, owing to our having no trustworthy statistics of productivity. For an example of a rise due to increase of population we may perhaps safely take the generally accepted one of the rise of the American currency to its old par in the period following the Civil War. Probably the great rise of prices after the Black Death was an example of the opposite case—a fall in the value of currency caused by decrease of population. The survivors must have found themselves enriched by the stocks of currency left by those who died, and proceeded to spend them till prices rose enough to make it seem desirable to hold bigger stocks of currency than before.

The value of anything reckoned in some other thing or things depends not only on its comparative plenty, but also on its comparative utility. The comparative plenty of kidneys and livers is just what it always was, but the value of liver reckoned in kidneys has risen enormously in consequence of a medical discovery about the dietetic merits of liver.

Currency is no exception to the rule, and so its value is altered by events which make it more or less effective for its purpose, or, in more usual language, cause or prevent " economies " of currency.

Events which divide existing single stocks into two or more, such as the cutting up of families under one management into several, which happened in 1914–18, when husbands were separated from their wives, sons from their mothers, and brothers and sisters from each other by military service and munition-making, involve a less economical use of currency, since to give equally satisfactory service the sum of the several stocks must be bigger than the previous single stock. Such events consequently tend to increase the demand for currency, and therefore, if not satisfied by an increase of currency (as they certainly were in the example just quoted), they will raise its value.

We are more accustomed to think of events of the opposite character, which tend to diminish the demand for currency—to " economise " it, as we commonly say. Here we have the great example of the partial pooling of stocks of currency introduced by the practice of banking. When a number of persons resolved to " put their money in " a bank, they still kept some currency in their own possession, but they and their bank together seldom kept as much as they had been in the habit of keeping. Each of them was satisfied if he could draw out all he had put in if he happened to want it, while the bank found it could be quite sure of giving this satisfaction without keeping in its coffers nearly the

whole of what had been entrusted to it; the surplus could be lent out to form the currency-stocks of other persons. By this method a given amount of currency was made more useful—the currency was economised to a very considerable extent. We are not, however, entitled to say that it is now economised to exactly the extent which might be supposed to be indicated by the difference between the amount of currency kept by the banks and the amounts of money due from the banks to their customers. There is no reason to suppose that the present total owed by banks to their customers gives us any information about the question how much more currency there would have to be to maintain the existing price-level if banks had never been established or if they were now to be abolished. If either of those hypotheses were realised, the whole economic condition would be so different that it is little use to try to conjecture anything about it except that other means than banks would have been resorted to for economising currency.

However much banks may have reduced the demand for currency in the past, it does not seem likely that they will be able to reduce it very much more in the Western countries. Further popularisation of banking accounts might almost everywhere bring in a new set of customers, who then, having bank accounts, would no longer require to keep such large stocks of currency in their houses as they do at present. In many of the less commercially-advanced countries an extension of branch banking would make a good deal of difference in the same way. In

Great Britain the removal or reduction of the tax on cheques might induce the present holders of bank accounts to reduce their average holdings of currency by a pound or two. Other possibilities may be suggested, but the whole which is left to be done would be little compared with what has already been done, and that little could not be done quickly.

§ 3. *The "Supply" or "Quantity" of Currency*

Given a certain demand, the value of currency will depend on the quantity of it available to satisfy that demand.

The expression "the quantity theory of money" has always been somewhat of a stumbling-block for students of monetary theory. It seems to put currency in a class by itself, with a special theory to account for its value. But there is really no special theory involved. We are more used to say that value depends on supply and demand than that it depends on quantity and demand, but that is only because economists have had the habit of thinking mostly of things which are supplied year by year in quantities so large and important compared with the stocks in hand at any time that they have naturally thought of the quantity available as being the quantity produced, or, as was said, "supplied" in a period of time. But when they had to do with land, houses, factories and such like things, which last a long time and consequently have an annual output which is quite small in proportion to the stock existing at any time, economists and everyone else have always treated the quantity available for

use as the correlative of demand. Currency being one of the commodities of which in ordinary times the annual production and consumption are small compared with the stock, it is not surprising that its "quantity" rather than its "supply" has been usually discussed.

I shall understand by the quantity of currency the whole amount outstanding at any moment of time, an amount which is all held by persons and institutions, and which is diminished by loss and destruction of items and increased by additional issue of coin and notes.

It seems almost incredible that anyone can doubt that net increases of the quantity of currency, thus understood, must tend to diminish the value of the units of account embodied in the currency, but in fact want of recognition of the truth is widespread. I remember that at the time when a million a week was being added to the English Currency Note issue of 1914–28 and prices were rising rapidly, my late colleague, Professor Lilian Knowles, told me that she had made some remark implying that the two things were cause and effect to a bank clerk who was handing her a small portion of the week's output, and he replied with amazement, "What! More money raise prices?" Even the great bank Chairmen, though generally ready to admit that in theory increase of currency tends to raise prices and decrease of currency to lower them, never seem able in the course of their long lives to come across any change of prices which they are willing to admit to have been the result of "monetary causes"—they

always prefer some other explanation. To see things well we must not be too close to them, but the ordinary public is not much better than the bank chairmen and the clerk above mentioned. When dealing with anything except currency, it is willing to admit that in order to have any value at all a thing must not be available to everyone in unlimited quantities. The vulgar phrase "dirt cheap" even suggests some popular appreciation of the idea that the quantity of a thing available may be great enough to make it as objectionable as dirt, which is much the same as the idea that it may be great enough to give it the "negative value" which economists speak of when, instead of being prepared to give something for an article, we are ready to pay somebody to take all or some of it away. In its brighter moments, too, the public is willing to admit of everything except currency that, a long way short of the point where it will become worth nothing, the value of a thing which is being increased in quantity without any corresponding increase of demand for it will decline with the increase, falling sometimes faster and sometimes slower than the quantity increases, but always falling. But people are so much more used to considering the causes of the price-movements of each article separately, assuming all other things to remain unaltered, than to considering the prices of all taken together, that they cannot well grasp the idea of the unit of account embodied in the currency having a value subject to change like the value of other things, and therefore they are always prone to jib when asked to think of

its value as falling in consequence of an increase in its amount and rising in consequence of a decrease.

Yet no one has ever been able to produce even a plausible argument in favour of currency being treated as exempt from the ordinary laws of value. The nearest approach to such an argument has been the rather silly suggestion that currency differs from other things in that the demand for it is infinite, whereas that for other things is finite. Anyone, it is said, can be soon surfeited with quantities of any single commodity other than money, but nobody can have too much money. But any school-child who has had a first lesson in elementary economics ought to be able to see where the " catch " is in this attempt at reasoning. It assumes that the money is exchangeable for other things, but that the other commodity is not. Put money and the other thing on the same footing, and the alleged difference between the two immediately disappears. You would soon be surfeited with houses if you could not sell or let any of them, but if allowed to sell and let them, you would not object to being made the owner of all the houses in existence. You " cannot have too much money " because " having " in that context means not keeping it, but being able to spend it in buying other things, so that money gives command not over one commodity or service, but over all of them in whatever proportions you choose. The same command will be conferred by possession of any other valuable commodity provided you are allowed to exchange it freely.

It seems likely that some of the difficulty of seeing

why a change in the quantity of the currency affects its value arises from imperfect realisation of the manner in which additions to and subtractions from it are made, so that it may be desirable to attempt to make this clear.

Additions to the currency outstanding necessarily involve additional spending of currency which would not have taken place in their absence. In the first instance the addition may be given away, lent, or paid out for goods and services. If given away, it will necessarily be spent by the recipients, because they will have no desire to "sterilise" the gift by holding it as an addition to the stock of currency which they have hitherto found sufficient. If it is lent, it will be to persons who wish to borrow so that they may be able to buy goods or services with it. So in all three cases, either at once or at the second move, the persons who come into possession of it spend it in addition to what they would have otherwise spent. They pass it on to others, who, in the absence of a rise of prices, have, no more than they, any desire to hold larger stocks of currency, so that these, too, in their turn, pass the extra currency on to others, and so it goes on till at last the all-round increase of money-demand causes a sufficient rise of prices, *alias* depreciation of the currency) to make it necessary for everyone, or at any rate a sufficient number of persons, to hold rather larger stocks of currency than they held before. This is the manner in which the additional currency gets absorbed—reluctance to accept it as a mere addition to holdings depreciates it, so that in the end holdings somewhat

larger than before will only command the same collection of goods and services; as there are only the same number and amount of goods and services as before, this is the result required.

Subtractions from currency naturally act conversely. A subtraction might be made by way firstly, of simple destruction (as, for example, the Confederate notes were destroyed by the victory of the North) or of confiscation followed by destruction, or secondly, by way of borrowing, and then cancelling notes or melting coin borrowed, or thirdly, by accepting the currency in payment of taxes and then cancelling or melting it. In all three cases the subtraction causes less currency to be spent on goods and services. No one before prices fall sees any reason for diminishing the holding of currency to which he has been accustomed, but eventually the all-round diminution of money-demand for goods and services causes a sufficient fall of prices (*alias* appreciation of the currency) to make it convenient to hold rather smaller stocks of currency than before.

We considered in the second section of this chapter on what the demand for currency depends, and in this section we have considered, and I hope overcome, the objections which have been made to the proposition that, given a certain demand, the value of currency depends on the quantity available.

Now we have to take account of the fact that the enforcement of the gold standard secures that the quantity of currency shall be neither more nor less than what will keep the currency units equal in value to the prescribed amounts of gold. The

factors which determine the value of gold are first the production of gold, which in the long run, coupled with the small amount of loss and destruction, determines the stock in existence and, secondly, the demand for gold, which, being largely a demand for monetary purposes, is to a great extent dependent on currency policy.

§ 4. *The Production of Gold*

The production of gold is sometimes treated in a very odd manner, as if it were governed by laws quite different from those which govern the production of all other minerals. It is recognised that coal and iron are produced because their producers can get the goods and services which they want by producing these minerals and selling them in the market and buying what they want with the proceeds. But gold producers are often conceived as a sort of genii to whom gold arrives without trouble or expense being incurred by them, and who have no necessity or inclination to do anything with it except to deposit it in the Bank of England and forget it. The best corrective of this view is to visit the Crown Mine in Johannesburg and see the ton of hard quartz which is exhibited in conjunction with the little one-third-of-an-ounce lump of gold obtained by extracting the quartz from the mine and then pounding it to dust.

There is in reality nothing mysterious about the way in which gold comes from the sources of supply. Just like coal and iron, it is produced because

certain persons see their way to exchanging it for money, and then, through this money, for goods and services. The independent "diggers" who worked on their own account in Australia in the eighteen-fifties or on the Yukon half a century later gave their nuggets and dust in exchange for money with which they bought goods and services at what seemed to people living nearer the centres of civilisation very high rates, but which only meant that, owing to the fact that as Australia and the Yukon were very remote, it was costly to transport workers and supplies to those places, and consequently gold there was of low general purchasing power compared with that which it possessed in London or Paris. The gold itself was easily carried back in the ships which brought the men and supplies, and was mostly turned into coin by the European mints; some proportion of the additional coin went back to give the gold diggings a sufficient stock of gold currency, while the rest served to pay for the goods sent out and for any acquisitions of property made in Europe or America by the more fortunate of the diggers. Not a single ounce of it failed to come into the market in which gold bullion is exchanged for other goods.

Later on the production of gold has for the most part fallen into the hands of great companies working the mines of the Witwatersrand, where the depth of the deposits and the hardness of the quartz in which they are embedded defy the old-fashioned individualist prospector and digger. These companies do not get the gold for nothing, and do not give it away for nothing; nor do they leave it on

deposit or current account at their banks. They sell at least three-quarters of it, and probably more, to defray their expenses in opening and working the mines, and the remainder, which is their profit, they sell to defray their living expenses and to pay for any additional property they acquire. Again, then, every ounce has gone into the market in which gold bullion is exchanged for other goods.

The universally recognised rule with regard to ordinary commodities is that their production is governed by the relation between their value and the difficulty of producing them, a rise of value in comparison with the difficulty of production encouraging, and a fall discouraging production. It used often to be said that gold and silver were exceptions to this rule, and that the amount of those metals produced was determined by the fertility of the sources known at the time, and was not affected by changes in their value. But this was probably never true, and certainly is not so now. It was only plausible when "striking" a source of supply could be regarded as almost as fortuitous as a discovery of buried treasure in one's back garden usually is. No more gold and silver would be found in back gardens merely because the value of gold and silver had risen. But the discovery of gold and silver sources of supply was never quite so fortuitous as that, and though it could be contended that laborious searching for them was not as well paid on the average as work in common trades, the value of the precious metals undoubtedly did encourage the search even in those days. And now, when the

laborious search is carried on not so much by prospectors relying on luck as by great companies employing experts and labourers at salaries and wages, the doctrine is not plausible at all. Gold-mining is distinctly encouraged by a high value and discouraged by a low value of the precious metals, just as it is of the base metals. The American production of gold, for example, was certainly reduced enormously by the fall in the value or purchasing power of gold which took place during the war of 1914–18.

But when all is said that can be said on the other side, the supply of gold is decidedly inelastic in the sense that increases and decreases in the demand for it will not exercise a very great effect in enlarging or diminishing its production. We cannot hope, therefore, that any tendency towards a rise in the value of gold will be much checked by consequent greater production.

§ 5. *The Demand for Gold*

The non-monetary demand for gold is, like the demand for anything else, dependent (1) on the views which people hold of its utility for various purposes compared with the utility of possible substitutes for it, and (2) on the ability of possible purchasers to pay for it. Anyone can see that gold is a metal which is prized highly for purposes of ornament and ostentation, which is still found convenient as a store of easily convertible treasure in the Eastern world, which is useful for many industrial purposes, such as dentures, even at its present value, and which would

be used for many more such purposes if its value were lower—we can even imagine it superseding lead for water pipes and roofing.

Writers on currency have often treated the non-monetary demand as if it were of no importance compared to the monetary demand or as if the monetary demand were a demand for some definite amount, and the balance were left to satisfy as best it could the non-monetary demand. But over a long period the non-monetary demand has been somewhere in the neighbourhood of 50 per cent. of the whole amount produced, so that it is far from unimportant, and there is almost obviously no reason for supposing that it does not exercise an influence of its own, like any other demand. Famine conditions in India, for example, must greatly reduce, and prosperity in India must greatly increase the non-monetary demand. If the Indian demand for gold bangles or necklaces is worse or better than usual, less or more gold will be shipped from South Africa to India in comparison with what goes to London, New York or Paris to satisfy the monetary demand of the gold-standard countries.

The only justification of giving more attention to the monetary than to the non-monetary demand lies in the fact that it is more susceptible to control by corporate action by the Western world.

The amount of gold which at any one moment is held for monetary purposes is the sum of the various amounts in coin held by banks and individuals and of bullion held by banks at that moment. It cannot grow without an increase either in the number of

holdings or in the magnitude of the average holding. The amounts held by individuals are not now of much importance; such as they are, they are diminishing in number and aggregate magnitude. The important holdings are those of the central banks, which held gold equal to £1,865,000,000 at the end of 1925 and increased that enormous amount by no less than £411,000,000 to £2,276,000,000 before the end of 1930.[1]

This accumulation is unreasonable. In the earlier days of paper currency it was necessary to hold a considerable amount of coin in reserve against the possibility of the public which held the bank-notes being seized with a sudden mistrust in them and consequently joining in a "run" upon the bank to demand payment of the notes in coin. But in modern times, in the Western countries at any rate, such a run is no longer possible. The people have become so used to the paper that they never question its goodness. They no more think of demanding coin in exchange than they think of questioning the goodness of shillings and demanding something with more "intrinsic value" than the silver coins, which, if melted down, are not worth a ninth of their value as coin. Moreover, to make assurance doubly sure, the State in England and in some other countries has taken away the old right of the holder of a bank-note to demand coin in exchange for his note. If the public were demented enough to run to the Bank of England and demand that the Chief Cashier should perform the promise

[1] See the Appendix.

he makes on the face of the notes to pay on demand, they would receive a rude check when he referred to the Act of Parliament, 15 & 16 Geo. V, c. 29, § 1 (1) (*a*), which absolves him from paying in legal coin, and offered to oblige them in terms of § 1 (2) of the same Act by giving them a bar of gold weighing about 27 lb. avoirdupois for each £1700 in notes which they liked to hand over.

The only purpose of a reserve of bullion under modern conditions is to meet the demand of those persons who, having a right to a certain amount of the currency of the country, desire to exchange it into the rated amount of gold in order to use that gold for non-monetary purposes within the country or to export it to some place outside the country where it will be sold for the currency of another country. Experience shows that, even with such imperfect management as now exists, the amount of reserve really required for this purpose is small compared with the amounts held in the central banks of the more important countries.

If these banks only held the minimum really necessary, or even that amount plus a moderate allowance for unreasonable nervousness, they could claim to be institutions which economised gold to the utmost of their ability. As things are, it is they who provide by far the greater part of the demand for gold for monetary purposes and most of this demand is unnecessary.

§ 6. *The Control over the value of their Currencies which can be Exercised by the Gold-Standard Countries*

It is conceivable that, as Professor Lehfeldt proposed,[1] the production of gold might be taken under international control, and the output of gold regulated so as to be greater when prices showed signs of falling and smaller when they showed signs of rising. But to increase the production by subsidies would be expensive, and to diminish it by regulation or taxation would require an amount of international goodwill not at all likely to be forthcoming within a moderate future. Moreover, the regulation of output, even if attained, would be a slow way of regulating prices.

The non-monetary demand for gold might perhaps be considerably reduced by taxation of such industrial art as produces gold and silver articles for use or ornament, but not much could be effected by the Western countries, and the East would have little inducement to join in adopting the policy.

It is unlikely, therefore, that much could be done to prevent a rise in the value of gold, and a consequent restriction and rise in the value of gold-standard currencies, by attempts to manipulate either the production of gold or the non-monetary demand for it. But it is quite otherwise with the monetary demand for gold. Here we have an enormous and apparently increasing demand which

[1] In *Gold, Prices, and the Witwatersrand*, 1919, pp. 102–6.

is absolutely under the control of the gold-standard countries.

'By their present policy of rapidly accumulating gold in their central banks the gold-standard countries are raising the value of gold. By reducing their purchases of gold, and still more by abandoning further accumulation altogether, and even more still by selling some of the quantity already accumulated, they would reduce the value of gold.' If they took the middle of these three lines of action, the whole of the annual supply of the newly produced gold would have to be disposed of on the non-monetary and Eastern market, and nobody can doubt that in a very few years this would make a great difference to the value of gold measured in commodities, including silver. Our information about the elasticity of demand for gold elsewhere than in the Western bank parlours is certainly not very great, but it is sufficient to tell us that much. If the gold-standard countries went further than this, and, without at all diminishing the existing volume or restricting the increase of their currencies, proceeded to make purchases and pay debts with three-quarters, or even only half of their existing holdings of gold, we cannot doubt that the drop in the value of gold would be enormous, even probably catastrophic.

The bankers make the first objection: "But we can't get rid of any of our gold without reducing the currency in our country; we are bound by the law regarding the relation between our reserves and our issues."

Certainly, but cannot the law be, in a famous phrase, "a hass"? This book is not written, as some treatises on money appear to be, to represent all humanity as putty in the hands of the bankers. But though silly laws exist and must be obeyed, they should be repealed, and bankers need not meantime kiss their chains.

The next objection comes from both the bankers and many professed monetary experts: "What is the good of supporters of the gold standard saying that the central banks should be allowed and encouraged to do this or that with regard to their purchases and sales of gold? The essence of the gold standard is that they should be obliged to buy and sell at fixed prices which they have no power to alter."

This is perfectly true so far as the mere words go, but it completely ignores the fact that the attractiveness of the fixed prices depends on the general purchasing power of the currencies in which they are expressed, and that this purchasing power can be varied. Increase the purchasing power of the currencies, and the fixing buying price will be a greater inducement to anyone to bring gold for exchange into currency, and the fixed selling price will be a smaller inducement to ask for gold in exchange for currency. Diminish the purchasing power of the currencies, and the buying prices will be less favourable to bringing gold in and more favourable to taking it out.

"No doubt that is so," answer the obstructives;

"but we cannot alter the purchasing power of the currencies so long as they are tied to gold."

Thus it is made to appear that the kitten is chasing its tail—the value of gold cannot be reduced till the value of the currencies is reduced, but the value of the currencies cannot be reduced till the value of gold is reduced. But the case is not really so hopeless. It is true that if a country has the smallest possible reserve of gold compatible with being able under existing conditions to give gold for notes when demanded, it cannot by solitary action reduce the purchasing power of its currency without departing from the gold standard; if it tries to reduce the value of its currency by issuing more of it, the only effect will be that currency will be brought for exchange into gold at the fixed price in such quantities that it will be unable to meet the demand, and the gold standard will be "suspended." But by no means all the gold-standard countries are in this position. Many of them have much more gold than is necessary, and some of these are still increasing their accumulations. If these, or some of them, increase their fiduciary currencies, thereby reducing the value of their currencies and making the fixed prices of gold less favourable to bringing it in and more favourable to taking it out, and if other countries do not neutralise their action by adopting the opposite policy, gold and the gold-standard currencies must inevitably fall in value together and simultaneously.

There is no reason why the immense power of control over prices which is thus exercisable by the

gold-standard countries should not be exercised just enough to keep prices approximately stable or gently moving in whichever direction may be considered desirable, provided that both stability and gentle movement are understood to apply to periods of more than three or four years duration.

CHAPTER IV

OBSTACLES TO IMPROVEMENT

§ 1. *The Worship of Gold as Such*

WHAT is perhaps the greatest obstacle to the adoption by the nations of sound policy in the regulation of the gold-standard currency is the exaggerated belief in gold as a sign of national wealth and prosperity which has come down as a legacy from the mercantilist period. The mercantilists treated gold and silver with equal respect as the "precious metals" or "treasure." Silver has lost caste, and is now little more than a base metal, but gold retains its hold upon the imaginations of Western men, and the cult of it is spreading eastwards. In spite of all that economists have said, gold is still worshipped. The Union of South Africa is the only considerable country in which the export of gold is regarded with favour by the majority of people who think anything at all about such subjects. Elsewhere it is almost universally true that the overwhelming majority of such people rejoice when they hear of an import of gold into their own country and deplore any export of it.

This is not because they recognise that gold is a metal with many useful properties, and expect that

it will, when imported, serve purposes which will delight the eyes of themselves and their fellow-citizens or improve their mastication. So much of it as goes to such purposes they regard as little better than wasted. What they like is to hear that gold has been "secured," as the financial editors call it, by the central bank, and is about to be immured in that bank's deepest dungeon, to be kept there for ever and ever, amen.'

§ 2. *Superstition and Muddle-headedness about Reserves*

Next to the worship of gold as such, we may place the superstition and muddle-headedness which cause belief that to have a reserve of gold large in proportion to the notes outstanding is desirable for two different reasons, both bad.

Pure superstition causes the multitude to believe that the mere presence of "cover," as they call it, for the notes, in the shape of a hoard of gold, maintains, or ought to maintain, the value of the notes even when there is not the slightest indication that any of the hoard will ever, under any circumstances whatever, be paid out in exchange for notes. Thus at the beginning of June, 1931, the Spanish Government professed itself seriously annoyed because the aggregate of the outstanding peseta notes was valued in the exchange market at a sum in gold-standard currencies which was actually less than the amount which the gold "cover" held professedly "against" these notes would have fetched in gold-standard currencies. Nothing, the Government thought,

could explain this except the machinations of evil-disposed persons, who must be restrained by rigorous measures. It did not attempt to show that the peseta notes were any more connected with the hoard in Madrid than they were with the hoard in Washington or the ore in the bottom of the deepest mine in the Transvaal. The belief that a hoard of gold can influence the value of notes merely because it is *called* "cover held against" them is gross superstition. Whether it can be exorcised by reasoning seems doubtful, and it has so far successfully resisted ridicule. We can only hope that abandonment of the superstition may at last come from further repetition of the universal experience that "cover" which is not to be touched by the profane hand of man is absolutely useless for the purpose which it is supposed to fulfil.

While superstition makes the multitude favour the most useless reserves of gold under the impression that they maintain the value of the notes, muddle-headedness makes many reputed experts favour them under the opposite impression, that they keep down the value of the notes and the unit of account. Financial editors, even of respectable newspapers, have often alleged that complaints that prices were falling owing to deficient supply of currency must be unfounded because there was plenty of gold in the banks. The same muddle is exhibited in the defence made by the monetary experts of the countries which are accused by their neighbours of cornering gold; if a country which maintains a minimum reserve of gold of 40 per cent. against its

notes is accused by envious neighbours of "taking too much gold," and thereby reducing the gold-standard price-level, its experts retort, "How can that be, when our country is increasing its notes about two and a half times as quickly as it imports gold? Is not that helping to keep the price-level up? You, on the other hand, are not increasing your currency at all. What right have you to complain? It is mere jealousy because we are more prosperous than you, and therefore want more currency and can afford to pay for it. Bah!"

The effective answer to this, which would expose the muddle at once, would be, "Why not increase your currency as fast as you are doing, but without getting in all that gold?"

But no country can afford to make that retort, because all of them have tied themselves up with some such legislation. England can afford to make it least of all, because her legislation (copied by a few other countries) requires an increase of £1 in her gold reserve for every £1 added to her notes, which is much more than the 1 for 2½ which is the highest requirement under the proportional minimum system adopted by most other countries.

§ 3. *The Red Herring of Reparation Payments*

At a time when international payments of a non-commercial character which are resented by all who have to make them and deplored by many of those who receive them figure largely in mundane economy, it is not surprising that evils really due to other causes should be attributed widely to these pay-

ments. Thus the falling price-level following the post-war settlements arrived at early in the third decade of this century has often been attributed to an undue concentration of gold in certain countries, caused by these countries being the recipients and other countries the payers of reparations. The receiving countries, it is said, being entitled to certain payments in gold, actually take payment in gold, either because the countries which have to pay have no other sufficient "exportable surplus," or because they themselves insist on being paid in gold rather than in anything else.

Now it is quite true that if a country is bound to pay gold and can find nothing else to export, it will export what gold it has. But this will not usually be much if it is not a gold-producing country; when the little it has is gone, it must find something else to export, or else stop paying. Apart from the limited resource of borrowing, it cannot get new gold to send to its creditor from other countries without exporting goods to them. It is also true that if a country has an enforceable claim on others for gold, and will take nothing else instead, that country will receive gold. But this does not in the least invalidate the argument that the gold-standard countries as a whole can greatly control the value of gold and their currencies by their policies in regard to the issue of currency.

That is true because the country that insists on being paid in gold and retains the gold so received can only do so by keeping up the value of its currency by restriction of its amount. This was well illus-

trated by the fact that when the United States accumulated an enormous mass of gold after the war of 1914–18, the monetary authority deliberately tried to avoid what it called a " gold-inflation " by decreasing the proportion of currency issued against reserve of gold. If the currency had been larger, the United States would have been a less good market for gold, and would not have attracted so much. If it had been very much larger, it would not have attracted any gold at all.

As against this, it is argued that a country entitled to payment in gold may " insist " on having gold by imposing customs duties on everything else so high that nothing but gold can be imported. If this happened, the exports of the country would have to cease, it would be a mere beetle-trap for gold, and gold would have a much smaller purchasing power there than outside. But the case does not occur, and if it did, it would not throw the least discredit on the argument that the gold-standard countries as a whole have great power of controlling the value of gold and of their currencies. It would only show that one country was foolish enough to refuse to take anything from outside except gold, and it would very probably show that all the other countries were foolish enough to try to preserve large unnecessary stocks of that metal, instead of seeing that the best thing they could do was to reduce them so as to counteract as far as possible without abandonment of the gold standard the effect of the miser country's demand. The debtor countries would, of course, have a special interest in reducing the value of gold as far

as they could, since they would have to procure gold in order to make the required payments to their miserly creditor. But such is the stupidity of mankind that it is highly probable that they would be found among the most active accumulators of gold—raising the burden of the payments against themselves.

§ 4. *The Confusion between the Value of Currency and the Rate of Interest*

We can scarcely expect sound policy in regard to currencies so long as two entirely different senses of "the value of money" are commonly confounded. In the mouth of the economist "the value of money" means the purchasing power of money, the value of the pound, dollar or franc being higher the more it will buy; but in the financial world which arranges lending and borrowing it means the rate of interest obtainable on loans of money, and is said to be high when the rate of interest is high and low when the rate of interest is low. The economist says money is dear when commodities are cheap, and cheap when commodities are dear; the financier says money is dear when much money is annually paid for a loan, and cheap when little money is so paid. Logic seems to be with the economist rather than with the financier. To call money cheap when little of other things can be got in exchange for it, and dear when much of other things can be got, is merely treating it in the same way that all other things are treated. To call money cheap when little money can be got for a loan of it involves measuring the value of a

capital sum of money against a periodical payment of money, and there seems no reason why, if that is to be regarded as legitimate, we should not reverse the procedure, and call money cheap when only a small capital sum can be got in exchange for a given periodical payment; if it is right to say that money is cheap because only £2 per annum will be given for the loan of £100, why not say that money is dear because as much as £100 will be given for £2 per annum? Interest could be contracted for in any commodity, but if we undertook to pay interest on a loan of coal in coal, we should not think of saying that coal was dear if we paid 10 tons per annum for a loan of 100, and cheap if we paid only 3 tons.

The fact that the "value of money," or, as it was sometimes expressed, the "price of money," can mean the rate of interest as well as the purchasing power of money has in its time given rise to two different and diametrically opposite misapprehensions.

The seventeenth-century economists generally, and even some of the economists of the eighteenth century, thought it obvious that the power of money to purchase commodities moves along with the power of a capital sum of money to command annual income or interest, so that high prices go along with low interest. Montesquieu, writing as late as 1748, expressed their opinion when he said that the discovery of the American sources of gold and silver had brought so much money into Europe that the prices of commodities were greatly raised, while the rate of interest was reduced; money came to buy

less of commodities and also of interest. The fact that plenty of money should make it as easy to pay plenty of interest as it was to lend plenty of capital was entirely overlooked.

Cantillon, Hume, Turgot and Adam Smith rejected the current explanation of the historical fall of interest, but neither they nor the later economists have prevented modern business men from being for the most part inclined, at any rate, to drop into the opposite mistake of supposing that the power of money to purchase commodities and the power of a capital sum of money to command annual income vary inversely, so that high prices and high interest go together. Less logical than Montesquieu and his predecessors, they think it natural that interest, being a price, should vary with other prices, forgetting that as the " prices " of commodities in money are the amounts of money given for them, the " price " of money in commodities must be the amount of commodities given for it, and be not high, but low, when the prices of commodities are high. Montesquieu had no doubt that he was right, because prices had risen, while the rate of interest had fallen; the modern business man thinks the opposite theory is right, because statistics show great correspondence between high and low prices on the one side and high and low interest in the London money-market on the other, and it is notorious that booms and depressions in prices are also booms and depressions in interest rates.

In fact both theories are completely erroneous. When prices are high, interest may be either high or

low, according to circumstances, and the same is true when prices are low. The most that can be urged in favour of a connection between interest and the purchasing power of money is that depreciation of money will tend to make the rate of interest look higher and appreciation will tend to make it look lower, so long as the depreciation and appreciation are going on. This happens because potential lenders may either lend for a return fixed in money or invest in something which will yield a return primarily in some commodity which will be sold for money at the price of the day. If money is losing one-fifth of its purchasing power per annum, anyone who lends money for less than 25 per cent. per annum will be worse off at the end of the first year than if he had used the money to buy something which brought in no return, but merely retained its value compared with commodities in general. If he gets 25 per cent. he will have £125, but the purchasing power of that sum will have fallen to what was at the beginning of the year the purchasing power of £100. More or less conscious recognition of the fact will make owners of capital less willing to lend instead of investing. Borrowers, on their side, will be more ready to offer high rates of interest, because they more or less consciously realise that owing to rising prices output in commodities will be worth more money. Thus the rate of interest on loans will be higher as ordinarily reckoned, but it would not be higher if it were bargained for in a commodity of stable value. The real return on capital is no higher.

The coincidence between variation of prices and

variation of the money-market rate of interest is quite easily explained without being attributed in any way to a connection between prices and the return to capital. The explanation lies in the fact that the rates of interest on short-term and gilt-edged securities are not really representative of the rate of return actually obtainable on new capital as a whole, but only of what is obtainable in a particular field, which at one time is over-supplied and at another under-supplied in comparison with the rest of the whole area. Booms coincide with periods of elation and readiness to take risks in the hope of profit; slumps coincide with depression and playing for safety. Rightly or wrongly, most people regard money as the kind of property least liable to unpleasant happenings, and consequently when depressed, and therefore inclined to play for safety, they favour plans which keep their property in money, and therefore turn more lovingly to securities which they think may be trusted to give a sure though low return or yield in money without imperilling the capital. It naturally follows that the short-term market, in which the capital remains "liquid" (*i.e.* will soon be again intact in money in the possession of the owner), and the gilt-edged market, in which money invested can be trusted to bring in a fixed money return per annum and often an exact repayment of the capital at some future date, are better supplied during slumps than during booms. The influence of supply is not counteracted by that of demand, for there is nothing to make a smaller demand on these markets during a boom and nothing

to increase the demand on them during the slump, since borrowers are more anxious to borrow in the boom and less anxious in the slump.

That the money-market and gilt-edged rates of interest are high when commodities are high and low when they are low is no evidence at all that the general rate of interest in the sense of the average return which will be actually obtained on savings and on the capital-sums at which properties are bought and sold during the slump is high when commodities are high and low when they are low. For stocks and shares with fluctuating dividends the " yields " shown in the stockbrokers' lists are nothing to go by, as they are merely calculations of what percentage of the price the yield would be *if the stock paid the same dividend as it did in the year immediately preceding the issue of the list*, whereas, if that dividend was earned during the boom or the slump, it may be seriously misleading as a guide to future income. It is notorious that the prices of ordinary stocks and shares—" common stocks," in the American phrase —run up in booms and flop down in slumps. The wise man buys them at or near the bottom of the slump and sells them at or near the top of the boom. The crowd tend to do the opposite, and it is certain that a very much better return is obtained by those who buy at the bottom of the slump than by those who buy at the top of the boom, which shows that the rate actually obtained is higher when commodity prices are low than when they are high. Thus the movement of money-market and gilt-edged security interest in correspondence with commodity prices is

neutralised by an opposite movement of other interest, leaving interest as a whole unmoved by commodity prices, just as theory would lead us to expect.

§ 5. *The Bank-rate Theory of Prices*

Probably no monetary expert would admit that he believed that the purchasing power of gold-standard currencies depended in the long run upon bank-rate policy, but many experts have written in a way which has suggested as much to their readers, and, by leading them to attach a most exaggerated importance to bank rates, have put another obstacle in the way of sound policy. Rather naturally the correspondence of money-market and gilt-edged rates of interest with commodity-prices has been widely accepted in recent theory as a proof that heavy borrowing is the immediate cause of high prices, so that if people could be checked from borrowing so much, the boom would be checked, and conversely, that if they could be encouraged to borrow more, the slump would be checked. And as high interest is the most obvious check to borrowing, and low interest the most obvious encouragement, it has been inferred that the way to moderate booms and slumps is to raise interest against a boom, and lower it against a slump. Then it has been noticed that bank rates seem to influence the rate of interest charged to borrowers, so that, it is concluded, oscillations of prices can be moderated, if not abolished, by judicious use of bank rates.

The doctrine seems to be borne out by the fact that

a rise of prices resting on unfounded anticipations has often been brought to an end by a spectacular rise of the bank rate. The expectation of a continuance of rising prices has been causing pressure to borrow and reluctance to lend, which has been raising the short-term rate of interest. So long as the bank rate moved up gradually along with this rise, it has excited little remark, and has been taken as quite in accordance with the nature of things. But when after this has gone on for some time it is moved violently upward, this is taken to be a sign of violent reluctance to lend given by the highest authority, which frightens people who have been borrowing and buying, and trying to borrow and buy still more. Prices then fall, and the fall is ascribed to the "high" bank rate, while the fact that the short-term rate of interest and the bank rate itself fall almost immediately in consequence of the diminution of pressure to borrow is ignored, though the fall is really just as much due to the sharp jump in the bank rate as the decline of prices.

It is, however, a highly suspicious circumstance that there is no converse to the killing of a boom by a sharp rise of the bank rate. If there were, we should find a slump being ended by a sharp fall in the bank rate. The attempt to end a slump in this way has probably never been made, and for the very good reason that the violent fall of bank rate would not, in fact, be regarded as indicating that the highest authorities considered the slump was at an end, and were now very cheerful about the future. It would be much more likely to be regarded as a symptom of

extreme distress. "What? Bank rate gone down to one-quarter per cent.! Why, the bottom must have dropped out!"

There are other difficulties which are far from having been surmounted.

Firstly, it is by no means proved that abnormal lending and borrowing are the immediate cause of booms. It is "good inquiry"—orders and the expectation of further orders, that start the rise of prices, while the borrowing comes a little later, from the producers as they get to work on the increased production and from the dealers as they begin to have to pay for their increased supplies. The boom thus gets started without borrowing; borrowing only has to be resorted to later in order to keep it going. And when it is then resorted to, it must not be supposed to have the same powerful effect on prices in general as borrowing has when enlisted in support of speculation for the rise in a single commodity. When a single commodity is being raised in price by persons buying it for the sake of an expected further rise, the height to which it may go can be greatly raised if the speculators can borrow easily, because they are likely to embark more in the venture by way of mortgaging their holdings of stocks and shares, lands and houses, than they would if they had to sell their property to raise the money for purchases; and, so long as they can give good security, they can borrow easily, because the lenders can favour them by diminishing what they would otherwise have lent to other borrowers for other purposes. But when an all-round rise of prices is

concerned, there is not the same possibility of drawing in funds which would otherwise have gone in other directions. There is nothing either in the theory of the subject or in historical statistics to bear out the prevalent belief that there is much more borrowing in time of boom than in time of slump. What really happens is that the *pressure* to borrow is much greater in the boom, but it is balanced by equal reluctance to lend, so that the rate of interest is much higher. Conversely, in the slump the absence of desire to borrow is coincident with equal readiness to lend, so that the money-market rate of interest is much lower.

Secondly, whatever the precise importance of borrowing in the matter may be, it seems to be almost admitted that variations in the rate of interest will exercise only a very weak control over its amount, as compared with the influence exercised by expectation of change of prices. Nine per cent. per annum is 15*s*. on the £100 for a month; 3 per cent. per annum is 5*s*.—difference 10*s*. on the month. But one-half per cent. in a month would be a small change in the price of an article—persons who are basing their action on a belief that the price is rising or falling are likely to make far bigger estimates of the rise or fall than that. So it is admitted by the apologists of the theory that business men are not really much deterred from borrowing by the higher rate of interest charged in the boom, and that they are scarcely at all encouraged to borrow by the lower rate charged during the slump.

Thirdly, even if borrowing were much more

important than it is, and were much more effectively controlled by variations in the rate of interest, acceptance of the plan of control of prices by bank rates would be precluded by recognition of the very small power of affecting the interest rate which is possessed by the persons who declare the bank rate.

Till quite modern times—far into the nineteenth century—" the bank rate," if it meant anything at all, only meant the rate at which the principal bank of the country of the speaker was prepared to lend money or discount bills. Nobody imagined that by putting it higher or lower the bank in question could control prices, interest, or anything else. But in the last hundred years some bank rates, and especially that of the Bank of England, have acquired so much prestige that other banks make their rates vary along with it. In England, for example, they frequently lend at a rate which it is agreed shall vary automatically with the bank rate. The rates they pay on deposits do not vary automatically with the bank rate, but they are, in fact, varied by advertisement in the newspapers in accordance with its changes. In this way the bank rate carries with it a great deal more than the business done by the central bank itself, and those who talk of controlling prices by bank rates are thinking of a rate with as much influence as this.

But even so, even if this be taken as the type to which all bank rates must conform as time goes on and civilisation progresses, we should be wrong to attribute much real power to the persons who declare the rates. Such a rate is very much the

creature of circumstances, and cannot be much altered merely by the sweet will of the central banking authority. The institution which declares the official rate may be the bell-wether of the financial flock in the sense of keeping the flock together, but it cannot lead where it will, but must bow to the conditions of the moment.

That the bank rate of no one country can be declared without consideration of the rates in other countries is admitted on all hands. In time of peace, when communications are open, there is necessarily a considerable degree of uniformity between the rates of interest in the different countries. Certain permanent differences persist in consequence of the greater security or convenience which some centres offer compared with others, but any considerable divergence from the customary scale tends to be wiped out by transferences of funds from one centre to another. If, for example, the rate in London is unusually high compared with that ruling in foreign centres, some foreigners who have claims on London will not hurry to get those claims for English money exchanged into foreign money; they will prefer to go without immediate payment so long as they can get such good interest for funds left in London. Other foreigners might even go so far as to buy gold abroad with foreign money and send it to England to be exchanged for English money to be lent on the London short-term market. Still more obviously, if the rate in London is set much lower than the rate in foreign centres, it will soon have to be raised. Funds will stay in the foreign centres rather than be

brought to England, and if the low rate is persisted in, people who have command of money in London will begin to transfer their command of money to the foreign centres by buying gold from the Bank of England for export to the foreign centres where it will give command over foreign money.

If we suppose this difficulty surmounted by general action by all the central banking authorities, we still have to reckon with the fact that the short-term rate of interest is so to speak chained—loosely, no doubt, but still chained—to the general or long-term rate. Though generally either below or above the long-term rate, it cannot shake itself altogether free of it in consequence of the equalising effect produced by the ability of owners of property to exchange one kind of property for another. The close connection between the money-market rate and the yield of gilt-edged securities is universally admitted, and, after all, the distinction between gilt-edged securities and other securities is only one of degree. A small difference in the rates obtainable will incline many persons and institutions to go into or stay in the short-term market instead of holding or buying gilt-edged securities; a big difference will extend its influence further to the other investments. The galaxy of banks worshipping the bank rate cannot prevent other institutions and private persons from buying and selling investments and using their own property as they will. So long as this freedom exists, the bankers' usual belief that they are compelled by circumstances to submit to certain rates of interest seems much more true than the "monetary experts'"

theory that the rates are imposed by fiats of the central banks' parlours.

We need not regret it. After all, bankers are not, even in the opinion of the monetary experts, supermen who can be trusted to exercise despotic powers over rates of interest wisely. There is no reason to suppose that if the rate of interest did regulate the prices of commodities, and bankers could regulate the rate of interest, prices would be any less subject to pernicious fluctuations than they are. Indeed, the effect of Chapter III is rather to suggest that the infirmities of bankers may have something to do with the slump of 1929–31, which might never have appeared if it had not been for their predilection for accumulating unnecessary gold.

§ 6. *The Bank-Deposit Theory of Prices*

Within, I think, the last forty years a practice has grown up among the people who talk and write on such subjects, of regarding the amount which bankers are bound to pay to their customers on demand or at short notice as a mass of "bank-money" or of "credit" which must be added to the total of the currency (of notes and coin) whenever variations in the quantity of money are being thought of as influencing prices. This is one of the most obstructive of all modern monetary delusions.

As everyone who has a balance to his credit at his bank considers that he "has money in the bank" to that amount, it is inevitable that most people should think of the banks as holding an amount of money equal to the aggregate of all the credit

balances, especially as the amount happens to be usually called the "deposits" in the banks, that word being a term which we use of things which we have carefully put somewhere with the full expectation of finding them there when we want them, such as umbrellas and bags in cloakrooms and stores under a cairn in Arctic regions. Hence the popular talk, countenanced, I regret to say, by some pseudo-economists, of "millions of money lying idle in banks."

A moment's examination of any bank's balance-sheet is sufficient to show that this conception of money lying in the banks is palpably absurd. It appears evident at once that the banks no more have all the money which they have received from their credit-balance customers and not yet repaid than the British Government has all the seven thousand millions of money which it has received from those who have lent money to it, and who (or whose successors in title) have not yet been repaid. The British Government has paid away the money as it received it, putting it into various undertakings, such as the telephone service and various works and operations necessary, or wrongly supposed to be necessary, for the defence of the people from their enemies; with the exception of a small amount of currency which they keep ready to meet any likely demands on the part of their customers, the banks have likewise paid away money as they received it, buying land and buildings for the conduct of their business with some of it and investing or lending all the rest.

Banks are thus not full of money as cloakrooms are of bags and umbrellas, but institutions which facilitate lending and investment. They—that is, their owners and the large and important personnel employed—render services to both classes of customers of the banks—the credit-balance customers and the debit-balance customers—who pay for these services to a small extent by various charges for particular services and chiefly by means of the difference between the interest received and the interest paid by the banks. This difference of interest arises chiefly because the credit-balance customers get little or no interest in consideration of the services rendered to them, a very numerous body with for the most part small and violently fluctuating balances continually subject to payments in and payments out, to record which occupies much of the time of the staff.

The more intelligent of the bank-deposit theorists, as we may for short call those who add bank deposits to currency in considering the effect of quantity of money on prices, cannot be supposed to believe with the populace that the banks are full of bank-notes and coin, but they rely on the rather misleading idea that a credit balance at a bank is "purchasing power," and therefore if the total of such balances increases, aggregate purchasing power in the sense of power to spend money on goods and services is increased. They assume that the additional power, having been once created, will be used, and thus raise prices just as additional currency does.

A few moments' consideration of some of the

actual and possible variations in the amount of the aggregate of "current, deposit and other accounts" should be sufficient to ensure rejection of this doctrine. Great additions to and subtractions from the aggregate can and do take place which cannot be imagined to affect the value of currency or general level of prices.

Firstly, a simple change in methods of book-keeping in the direction of multiplying or eliminating double reckonings will alter the aggregate of "deposits." If loans to customers are made by way of fixed amounts, the deposits will be greater than if they are made by way of fluctuating overdrafts. If Jones gets a fixed loan of £1000 at 4 per cent. and keeps on the average £800 of it drawn out, he and the bank and everyone else will be in just the same situation as if he has a fluctuating overdraft averaging £800 at 5 per cent., but the aggregate of deposits and loans will each be given as £200 larger in the first case than in the second. Owing to the same person or institution, such as a company, often having more than one account for different purposes, there must be many very similar possibilities of double reckoning and also of its elimination or increase causing quite meaningless changes in the aggregate of deposits.

Secondly, the magnitude of the aggregate of deposits is evidently largely affected by the degree in which the banks occupy the position of intermediaries between the persons who provide capital and the persons or institutions which want to be entrusted with it. Both gradual and sudden

changes are likely owing to this. In bygone years well-to-do spinsters entrusted their "fortunes" to their favourite banker, and he paid them interest on their "deposit" of twenty or thirty thousand pounds, and made what he could by lending or investing it. Gradually they and the practice died out;[1] the money was taken off deposit and invested direct—sometimes, no doubt, in the very investments which the banker had to sell, and always so as to reduce the aggregate of deposits by introducing direct in place of indirect investment through the intermediation of the banker and his deposits and loans or investments. Of more sudden change we have many examples in the elimination of the banks which takes place when, after periods of disturbance, Governments raise long-term loans to pay off short-term indebtedness to the banks. During the disturbed period credit-balances at the banks have grown, owing to the hesitation of savers in making investments; the money will have been lent to the Government by the banks, and now the Government appeals to the public direct, and they reduce their bank-balances by handing them to the Government, which simultaneously pays off its debts to the banks, so that the banks' deposits and their loans (including holdings of Government securities of all kinds) are reduced.

Even regular seasonal variations take place, or tend to take place, owing to the introduction or elimination of the banks as intermediaries. Most of the saving in the Western countries is effected

[1] In Mr. Keynes' *Treatise on Money* they are "*old* ladies."

through the accumulation of money on current account at the banks. Each individual saver who has a bank account allows his credit balance to grow till it reaches a size which makes it worth while to invest part of it, and it is altogether improbable that there are not particular seasons of the year when the aggregate of such savers is more active in investment than at other seasons. When the savers, taken as a whole, are accumulating more than they invest, the banks tend to have larger "deposits," and consequently more to lend and invest; when the savers take up the slack and invest their accumulations, the banks' deposits on the one side and their loans and investments on the other fall simultaneously. Irregular variations, misnamed "cyclical," take place when, for more or less obscure reasons, the savers hang back for months or years from taking the plunge of investment or, on the other hand, rush forward impulsively to take it, thus making the banks' intermediation greater for a period and then less.

If we go beyond what is, and think of what might be, we can conceive enormous increases and diminutions of banking business. By offering to take deposits on slightly more advantageous terms (in respect of convenience and interest) together with greater readiness to advance money on mortgage, the banks could increase their deposits and loans by most of the money now lent through solicitors by mortgagees to mortgagors. They could take over the Building Societies, adding the deposits and loans of those institutions to their own. On the other

hand, growth of the Building Societies might deprive them of some of their present deposits and correspondingly of some of their loans to builders.

Faced by the fact that these actual and possible variations in the amount of bankers' debts to their customers cannot possibly be supposed to have the same kind of influence on the value of currency as variations in the amount of currency, the bank-deposit theorists would probably have wilted away some time ago, if the war of 1914–18 had not come to their aid. The belligerent Governments, unable to bear in an unaltered currency the enormous expenditure to which they had committed themselves, proceeded to abandon the gold standard and rapidly increased their currencies. Patriotism made it a point of honour with nearly everyone to contend and try to believe that the currency of his own country was not depreciating, whatever might be the case with that of the enemy countries, and this gave rise to a strong bias in favour of attributing the undeniable rise of prices to some other cause than the issues of additional currency, and the cause was supposed to be found in the great increase of the banks' loans and deposits. Any suggestion that the increase of bankers' debts and loans might be not the cause, but, like the general increase of other persons' debts and loans, the obvious consequence of the depreciation of the currency, was either ignored or decried as the maundering of dotards who had failed to acquire the new knowledge of the twentieth century.

But the luck of the bank-deposit theory ran out soon after the end of the war. Few if any pseudo-

economic theories have fared worse than this one did in the third decade of the century. Prices continued to wax and wane with currencies, and to exhibit towards the variation of bank deposits that complete indifference which would have been expected by the nineteenth-century innocent who could see no more money in the world when he let his bank have £100 which it lent to somebody else than he saw when he lent that £100 to the other person direct. One by one States returned to the gold standard by regulating the amount of their currencies, generally without taking any notice of bank deposits at all. Those which did take any notice of bank deposits seem to have differed from the others chiefly by having more bank failures.

So it is not surprising that modification of the theory is being thought of. In its heyday most of its exponents seem to have felt no difficulty in identifying the quantity of what they called "bank-money" with the whole of the sums which appear as "current, deposit and other accounts" in the balance-sheets of such institutions as are commonly treated as "banks" in the Banking Supplements of newspapers.

They never explained why they stopped at that line. Beyond it there are four hundred millions of deposits in the Post Office and Trustee Savings Banks—"bank money" withdrawable on demand or at very short notice. I have seen a woman undergraduate in a post office withdrawing money from her account to pay for her journey home, and the statistics tell us that about a hundred millions a year

are withdrawn. Cheques, it is true, are not used by the customers, but neither are they used (ordinarily) in connection with deposit accounts in other banks. The little books in which the accounts are recorded are much the same as the deposit books of the other banks. But if the bank-deposit theorists had included the Savings Banks deposits for which little books are given, they could scarcely have rejected the claim of those millions deposited with the Government for which pieces of paper called Savings Certificates, not at all unlike the ordinary banks' deposit receipts, are given. This money too is withdrawable at short notice. But if this, why not also all the withdrawable money in co-operative and building societies?

Must we not only look at the fact that all this money, more than a thousand millions, lies at the disposal of the depositors as much as the two thousand millions in the ordinary banks, but also consider the purposes to which it is applied by the institutions to whom it has been entrusted? But these purposes are exactly the same as those to which the money entrusted to the ordinary banks is applied; much of the thousand millions has been lent to and spent by the Government for the various purposes for which Governments do spend borrowed money, and the rest has gone in building houses and providing stocks-in-trade.

No, the real reason why this thousand millions was excluded from " the quantity of bank-money " is to be looked for neither in the position of the depositors with regard to it, nor in its treatment by the institu-

tions to which they entrusted it, but in the fact that its inclusion would have made the doctrine taught about banks too ridiculous for acceptance. There was some hope of making young students without bank accounts and other impecunious persons believe that the ordinary banks' credit customers somehow owed their credit balances to the generous action of the banks, which "created" them in a very mysterious way, but there was no hope of persuading anyone that the money in the Savings Banks had not been put there by the depositors (although the total might be greater than the aggregate of bank-notes and coin in the country at any one time), but must have been "created" by the Postmaster-General and the Savings Bank Trustees who lent it all to the Government, and that it was accordingly a part of the total quantity of money which would tend to raise prices when it increased and to lower them when it decreased.

Evidently the bank-deposit theorists could not advance and occupy more territory. Doubts about the tenability of their position were bound to suggest not advance but retreat on an interior line. From an early period in the development of the theory its American advocates were inclined to abandon what are called in America "time deposits"—that is, amounts which the bank does not undertake to pay on demand, but only after some prescribed period of notice, and to confine the bank-deposit theory to the amounts payable on demand, which they sometimes called "checkable deposits," because they are withdrawable by check (*anglice*, cheque). Somewhat

later, I think, the English adherents of the theory began to show signs of entrenching themselves on the same line, behind what in England are called deposit accounts and in front of current accounts, money on deposit being money which the banks do not undertake to pay without notice, and money on current account being payable on demand, the demand being nowadays always made on a cheque.

But this second line is no better than the first.

There is clearly nothing in the criterion of "check-ability." Whether money is extracted from the bank by a written order called a check (or cheque) or by word of mouth is an unimportant detail except from the point of view of the practical administrator. Dr. C. L. Shadwell, Provost of Oriel from 1905 to 1914, used, it was said, to enforce his legal right to demand his money by word of mouth; whether his bank required him to give a receipt or initial his pass-book is not known, but it paid. Cheques have not been hitherto very suitable for use in Savings Bank business, chiefly because the customers of such banks have hitherto possessed small literary facility, and also, in England, because the use of a cheque involves the payment of 2*d.* to the Exchequer. They are not commonly used in connection with deposit accounts,[1] because it is usually more convenient for the banks that the money for which cheques are drawn should be on current account, and it is easy

[1] It is not an absolute rule that cheques cannot be drawn on deposit accounts. I myself have had a deposit account on which I drew cheques at regular intervals.

to transfer from deposit to current account. But it is impossible to see how the " non-checkability " of a sum on deposit can make the smallest substantial difference to anyone. If you want to pay Jones & Co. £100 out of your deposit account, you know that all you have to do is to send them a cheque and take care that you get the bank to transfer £100 from your deposit account to your current account before the cheque arrives at your bank. If you want £10 cash for yourself out of your deposit account, you will ask for it, have it entered as withdrawn in your deposit book and save 2*d*. Are prices affected?

Next take the requirement of notice. Time is a matter of degree; the American legal definition of time deposits (deposits for the withdrawal of which at least thirty days' notice is required) would throw the whole of the British Savings Bank money into demand deposits. Thus time would be a poor criterion even if notice could be and always was insisted on. But in England at any rate the notice nominally required is not, in fact, generally insisted on, and it is difficult to see how it could be.

What would be thought of an English bank if its cashier replied to a customer who asked to have a thousand transferred from deposit to current account, " Sorry, Sir, but you can't have it till to-day week "? In fact, if the customer had proffered a week's notice, the cashier would rather have pressed him to have the money at once. Supposing notice was insisted on, would not a customer in a hurry always be able to retort, " Oh, well, take a week's notice now, and give me an advance of a thousand for a

week. You can't say the deposit isn't good security ! "

" But," some reader may say, " granted that money on deposit account is in reality just as readily and immediately available for payments as money on current account, is there nothing in the idea of the bank-deposit theorists that money on deposit account is mostly savings, and ' scarcely money at all ' because it is lent to the bank by the customer as a sort of investment, and might nearly as well have been put into a Treasury Bill, whereas money on current account is there in order to make payments ?"

Nothing whatever. The idea is descended from the tradition that the deposit accounts belonged to " old ladies " who preferred to trust their bank to give them a steady 5 per cent. rather than run the peril of investing in Consols or East India stock. These " old ladies " are long since dead, and what our grandparents called their " fortunes," if not dissipated, are held in rubber shares and other things by their great-nephews and nieces. In our day money is put and kept " on deposit " not by way of permanent investment, but in order to meet certain or uncertain future payments every bit as much as money on current account is put and kept on current account. When individuals or firms see that owing to some want of correspondence between their receipts and payments, their credit balance on current account is getting larger than will yield their bank what they think reasonable remuneration for keeping their account, they say, " We had better put some on deposit," and this is the great source of

deposit accounts. Money is taken off current account and put on deposit because the owners wish to have it ready for some certain or uncertain contingency, but do not see any necessity for being content with the small or zero interest allowed on current accounts. Sometimes, no doubt, it is waiting to be invested in something which is not ready; more often, it is waiting to pay rents or dividends when they become due. It is unlikely that it is more largely composed of savings awaiting investment than money on current account is. Few of the customers of banks are in positions which enable them to save and invest without accumulating to some extent on current account. Indeed, many quite respectable persons only know whether they are saving or not by looking at their current account balances, and no one doubts that on the whole the savers have larger balances than the non-savers and the de-savers. At every moment quite a considerable proportion of money on current account is there because people accumulate a little till they have got enough to make it worth their while to go through the operations which they call "investing some money."

The real explanation of the maintenance of the deposit-account system in English banking is not that the deposit-account money is any less money than the current-account money, nor that it is any more savings than the current-account money, but that it serves as a device—clumsy, no doubt, but better than none—for making the want of close correspondence between the cost of banking service

and its remuneration a little less acute than it would be if all deposits had to be on current account. Even as it is, some customers get services from their bank at a much dearer rate than others; the disparity would be much greater if the resource of putting abnormal balances on deposit were not open to those who happen to have them. If the banks could re-arrange their charges (if any) and the interest (if any) allowed on current accounts so as to make them cease penalising those current accounts which have credit balances large in proportion to services, there would be no further need for deposit accounts. Greater meticulousness on the side of the banks will therefore tend to diminish the proportion of deposit accounts; but where and when the banks are more meticulous, the customers are likely to be more meticulous also, and their effort to get more advantage out of their banks will tend in the opposite direction—they will be more careful to take some money off current account and put it on deposit whenever opportunity occurs.[1]

The more versatile of the bank-deposit theorists already realise that the trench between deposit and

[1] Before 1931 one of the differences between current and deposit accounts lay in the fact that the current account pass-books given to the customers were in a different form from the deposit books and did not, like the deposit books, show the balance at the end of each day, but only at the end of the quarter or half-year. But the loose-leaf statements furnished by the banks under the mechanisation scheme assimilate the current accounts to the deposit accounts in this respect. The banks have probably neglected their own interests in making this change, as it is highly probable that the conspectus of daily balances thus furnished will cause many customers to take more pains to keep down their credit balances without inducing many others to increase theirs.

current accounts is as shallow and dangerous as that between the whole of the ordinary banks' accounts and those of the Savings Banks. They seem to have started digging themselves a new trench in a position which involves abandoning a considerable part of current accounts to the enemy. Where exactly the new line will be drawn to divide "bank-money" proper on current account from the rest of the money on current account and deposit account seems at present a little obscure, and as, wherever it is drawn, no statistics do, or possibly can, exist of its amount, it will be impossible to test it by experience. We can only welcome the retreat as a further step towards the entire abandonment of the theory that bankers' debts to their customers, or some part of those debts, are money in some other sense than that in which all debts of money are money, and that they ought to rank along with currency in the theory of prices.

§ 7. *The Assumption that the Market for Currency cannot Err*

Last, but by no means least, among obstacles to improvement in monetary policy we have the fact that it is frequently assumed—often quite unconsciously, but none the less confidently, that movements of prices are never, either in direction or degree, the result of a general mistake. It is constantly argued that the fact that this or that change in currency was not at once followed by the change in prices required according to some currency theory shows that theory to be wrong. Almost equally

often it is argued that a change in prices was much too sudden or not nearly sudden enough to have been caused by a particular change in currency. Both arguments assume that the market cannot fail to appreciate at once the effect of what is happening; so that currency can never be, even for the shortest period, over-valued or under-valued. This assumption is quite untenable.

Correct valuation depends on correct anticipation of future events, and human anticipation, though tolerably good in the long run, is often woefully at fault in the short run. If the mistakes of one set of people were counterbalanced by the opposite mistakes of another set, future events would be anticipated correctly on the whole, and the movement of prices would always be in slow steady sweeps, each extending over perhaps half a century. But in fact there is a great deal of coincidence in error, and consequently we find that every known commodity shows changes of value so violent that they could not possibly have occurred if the persons who deal in it had been able (not necessarily individually, but as a whole) to foresee correctly what was going to happen. On the Stock Exchange a share or an obligation may rise or fall 10 or 20 per cent. in a day; on the produce exchanges a commodity may be half the price this year that it was last year. Such big changes obviously could not occur if it were not that masses of persons, largely experts in the matter in hand, agree in making erroneous estimates—all erroneous in the same direction—of the future course of prices. After each sharp rise and after each sharp

fall in the price of a security or a commodity, 90 per cent. of the business men in the market are found lamenting, "If we'd only known, what a lot of money we might have made!" Each of them means, of course, "If *I alone* had known, what a lot *I* might have made," since if they had all known, anticipatory buying and selling would have prevented the jump of price out of which the profit could have been made.

It is impossible to find any reason for expecting gold-standard currencies to be unaffected by erroneous anticipation. We have seen in Chapter III what factors ultimately determine their value. None of these factors is exempt from considerable changes of a nature which cannot always be foreseen by persons not gifted with supernatural powers. It is not at all unnatural, therefore, that errors should be made about them, nor that the errors made by different people should not counteract each other, but be sufficiently one-sided to cause the value of the currencies to swing considerably, sometimes above and sometimes below, what they would have been if people had been able to foresee the future correctly.

Of course in ordinary times nobody except perhaps half a dozen experts in each of the more enlightened countries is conscious of deliberately speculating in currency in the same way that persons are conscious of speculating in rubber shares or in cotton futures. But unconsciously almost all owners of property are constantly doing it. In questions of what is the best investment and how particular property ought to be

managed, the future course of prices simply must be forecasted, consciously or unconsciously, before a decision can be arrived at. If you prefer securities yielding a fixed money return to those dependent on some product being sold at a remunerative price, you are backing the view that the value of money will be high : if you decide to keep your land and houses in hand rather than let them on long leases, you are backing the view that the value of money will be low in the future.

Propaganda, whether inspired by self-interest or by philanthropy, and many other things, can be rightly suggested as causes of general error in anticipation. Probably the most powerful of all influences is the common tendency to take it for granted that something moving in a particular direction will go on doing so at much the same rate, and to ignore the reasons for believing that it will not. In another sphere we see this exemplified at present in the firm popular belief in the growth of the population of this country continuing in the future as rapid as it has been in the last century, though all that is known about natality and mortality suggests the contrary. On the Stock Exchange it is exemplified very frequently in the ill-informed " speculation " which runs a security up to some giddy height simply in consequence of a widespread impression that it " is going up." The rise does not go on *ad infinitum* because, the higher the price gets, the more difficult it is to find substantial reason for it, and the likelihood of the rise stopping becomes more present to the minds of potential purchasers and the likelihood

of " reaction " more present to the minds of potential sellers. Consequently, if prices generally are rising, recognition of the fact is very apt to induce most people to hurry up with their purchases, so that they may secure what they want, either for consumption and use or for purposes of their business, before they have to pay more for it. This causes orders to come crowding in on the producers at a rate more rapid than usual, which of course tends to increase the rise of prices due to the original cause, whatever that may have been. General elation or " boom " sets in. Conversely, if prices are falling, recognition of the fact causes people to delay purchasing, whether they are buying for their own consumption and use or for business purposes. Then orders come in to the producers more slowly than usual, production is not at once correspondingly reduced, so that unsold goods accumulate, which inclines sellers to lower their prices. General depression ensues.

Periods of elation and depression come to an end in time. Eventually, after a boom has been in progress for some time, the business world, like a too-elated child, sits down and cries; after a depression has gone on till people are tired of talking about it and devising futile remedies, the business world suddenly dries its tears and smiles again.

The end of the period of elation comes when the results get so extravagant that those who doubt the further continuance of the boom become predominant. The starting of new enterprises and the extension of old ones slacken; purchases for personal or family use and consumption slacken too, because

the people have become less confident of their ability to afford to buy things at the high prices at which they are offered, and also are somewhat satiated with extravagant purchases which they have already made. Then depression begins to take the place of elation. In like manner the end of the period of depression comes when the results get so extravagant that those who doubt the further continuance of the depression become predominant. Then the starting of new enterprises revives, and the extension of old ones is quickened; purchases for personal and family use increase because the people have become more confident of being able to afford things at the low price at which they are offered, and are also getting severely pinched by want of the things which they have refrained from buying.

After the event it is easy to be wise. When the period of elation is past, millions of people are sorry that they spent so much money during it; they realise that they would have done much better to have kept it till the depression, when things are cheaper. Conversely, after the depression is past, millions regret that they were not bolder in spending before prices had risen again. Of course if these millions had done what they now feel they ought to have done, the prices in the period occupied by the boom would have been lower, and the prices in the period occupied by the depression would have been higher. In other words, currency is under-valued in booms and over-valued in depressions.

The experience of 1926–31 suggests that elation in the business world need not always arise from

expectation of high prices. The American elation, which by its breakdown towards the end of 1929 introduced a world-wide depression, was not founded on over-estimation of the probability of high prices, but on an over-estimation of the demand to be expected at equal or lower prices. Large-scale production was to produce an enormously increased output of the things to which it could be applied, and high money-wages were to " take care of " the demand for such things, making it elastic enough to carry off the greatly increased output without any reduction of price, so that profits would be higher than ever. The immediate result was a gigantic and quite unjustifiable (in the sense of unreasonable) rise in the price of stocks and shares yielding to the investor income dependent for its amount on the profitable working of the enterprises concerned.

When the rosy vision of an industrial paradise faded away in face of the bold intrusion of the hard facts that the sphere of large-scale production is not a very large proportion of the whole of industry, and that the demand for its products is exceedingly inelastic after a certain point has been reached, a violent reaction set in, which made both America and the world outside think themselves poorer than they really were. Depression succeeded elation as usual. Buying both for investment and for consumption was violently checked and prices accordingly fell precipitately.

But the most complete conviction that slumps may be introduced or intensified by non-monetary causes need not in the least induce us to doubt either the

well-established proposition that failure to increase the quantity of currency sufficiently to meet the needs of an increasing population is a cause of depression, or the main thesis of this book—that the present failure so to increase the currencies of the gold-standard countries can quite easily be overcome by the general will without any abandonment of the gold standard and without complete unanimity or definite agreements on the part of the countries concerned.

APPENDIX ON GOLD RESERVES

BELOW are the more important of the statistics embodied in Table I of " Statistics of Gold Movements " on pp. 65–7 of *Selected Documents on the Distribution of Gold submitted to the Gold Delegation of the Financial Committee of the League of Nations*, Geneva, 1931.

GOLD HELD BY BANKS OF ISSUE

(In millions of American dollars.)

	Held at end of 1930.	Increase 1925–30.	Decrease 1925–30.
U.S.A.	4,225	240	—
France	2,099	1,388	—
United Kingdom	722	18	—
Germany	544	241	—
Spain	471	—	19
Japan	412	—	164
Argentina	411	—	25
Italy	279	58	—
Russia	249	155	—
Canada	194	—	32
Belgium	191	138	—
Netherlands	171	—	7
Switzerland	138	48	—
India	126	17	—
	10,232	2,303	247

The above table includes all holdings over $75,000,000 at the end of 1930. The total for the smaller holdings was $842,000,000, making the grand total for all countries

$11,074,000,000. The smaller holdings show increases amounting in all to $132,000,000, chiefly contributed by Poland, Austria, Hungary, and Czechoslovakia, and decreases amounting to $188,000,000, chiefly contributed by Australia, Brazil, Chile, the Dutch East Indies and Denmark. Thus the net increase for all the countries was two thousand million dollars, an amount about equal to the whole production of gold during the period. (In the Gold Delegation's Table, the Czechoslovakian increase for 1925–30 and the total for Asia in 1930 are misprinted, and the amounts held by South Africa and Egypt in 1930 have been transposed, but corrections can be made from the other columns.)