# PART THREE

# METAL OR PAPER MONEY?

## Money as it is

### INTRODUCTION

Metal money is today identical in all essentials with the money that exchanged the products of antiquity. Gold money unearthed from the ruins of Athens, Rome or Carthage is universally acceptable and circulates freely with the money of modern Europe or America.[1] Apart from possible differences in the fineness of the gold, a kilogram of coins with the stamp of a Roman emperor equals a kilogram of coins with the stamp of the German mint. Our money has all the characteristics of the money that Lycurgus banished from Sparta. Money is perhaps the only State institution still unchanged from grey antiquity.[2]

But our knowledge of the nature of money is by no means proportionate to its great antiquity. Lycurgus recognized that money made of a precious metal disrupts the State by splitting the people into rich and poor. We shall not discuss here whether he did well in banishing money, casting out the good with the bad. But even today we are further away from understanding the acknowledged evils of money than Lycurgus was. Should we applaud Pythagoras for saying "Hail Lycurgus, who banished gold and silver, the root of all evil" or sigh with Goethe "Gold drives everything, and everything depends on gold. Alas, poor us!" - but we can go no further. The question, “what is wrong with money? Why is money a curse to mankind?” meets with silence. Even our economists are so perplexed by this problem that instead of investigating it they prefer simply to contradict Lycurgus and Pythagoras, accusing them of defective observation in regard of the alleged shortcomings of money. The Spartan Moses is thus branded as a counterfeiter, and the great mathematician as a dreamer.

This failure of science is less due to a defect of human understanding than to certain external circumstances hindering the scientific treatment of monetary theory.

To begin with, the subject itself repels investigators. Lofty idealists can easily find more attractive subjects of investigation than money. Investigating religion, the natural sciences, astronomy, etc., for example, is infinitely more uplifting than investigating the nature of money. Only the one who likes figures feels the attraction of this stepchild of science. It is understandable, therefore, and does honor to human nature, that the investigators who have penetrated into the dark recesses of monetary science can still be counted on the fingers of one hand.

Also, the unhappy methods so far employed, and the linking up of the investigation to the now happily moribund doctrine of value, have increased the natural aversion towards this branch of science. The pedantic obscurity with which scientists have treated monetary theory has caused the public to despise a subject otherwise of vast importance to human development. (The forgotten literature of bimetallism is a praiseworthy exception). For the German public, the Mark is defined as the fraction 1/1375 of a pound of fine gold, but gold as a raw material matters little to most people. Since monetary theory is held in low esteem, nobody buys monetary

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[1] [The draft is dated 1911, three years before the Great War suppressed so many liberties taken for granted at the time and today forgotten by the general public.]

[2] [It took another 20 years before the gold standard disappeared from Europe (21st September 1931) and 60 before it disappeared from America and the rest of the world (15th August 1971). Despite that, large amounts of gold ingots are still produced and buried in bank vaults to nurture the illusion that the money manipulated there has “value.”]

literature, and the risk of publishing such works is too great for most publishers. Much good writing about money exists, but the authors have not found publishers. This is another reason why investigators keep clear from this field of inquiry. Those who cannot afford to publish at their own expense cannot afford to tackle the money question.

The exceptions are our university professors, whose works are at least bought by students and by university libraries. They do find publishers, provided what they write do not oppose conventional wisdom. Criticism must be banned from the lecture room. And so our duty-bound authors dare not penetrate much into the topic. The probe of official science ricochets from the hard surface of the core of the question. And what is true of money, is also true of the theory of rent, interest and wages. The university professor that dared reach the nucleus of such questions would convert his lecture-hall into a battlefield, each side beating the daylights out of the other. No: controversy, politics, theories of wages, rent, interest and money, are out of place in the universities. That's why economics, as science, must languish in the hands of our professors. A professor would scarcely go a spade's depth into his subject before the threat, "Thus far but no farther!"[3] rang in his ears.

On top of these external difficulties is the fact that the theory of this thorny subject requires knowledge that can only be obtained in practical commerce, and commerce usually attracts and fascinates natures incapable of theoretical investigation. Commerce requires men of action, not theorists and ideologists. Commercial pursuits were also, until quite lately, considered dishonorable; Mercury, the God of Merchants, was also the God of Thieves. Commerce was a profession for school failures. The talented were sent "to study," the rest to the counting house.

Such is the explanation of the startling fact that although in every other sphere science goes from triumph to triumph, we have as yet no sound definition, or theory, of metal money. Metal money has been in existence for 4000 years, passing through thousands of millions of hands for hundreds of generations; yet in the management of money every country in the world is guided not by science but by simple routine.[4]

The lack of a sound theory of money is the reason why the phenomenon of interest has never been satisfactorily explained. For 4000 years we have paid and received countless thousands of millions in interest, yet science is at the present day incapable of answering the question "Whence and why does the capitalist receive interest?"[5]

Attempts at solving the problem of interest have not, surely, been lacking. As an obvious disturber of the peace, interest has received a far larger share of public and scientific attention than money has. All economists of note have dealt with this problem, especially the socialists, whose whole effort is[6] fundamentally directed against interest.

Despite all these attempts, the problem of the nature of interest stays unsolved.

The failure is due not to the difficulty of the subject, but to the fact that interest (on loans as well as on physical capital) is the child, or by-product, of our

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[3] [Anyone intending to corroborate Gesell's rather daring statement need only read *The Corruption of Economics* by Mason Gaffney, Fred Harrison and Kris Feder, Shepheard Walwyn 1994.]

[4] [More than 90 years later it is still true. Without Internet we would know very little about Gesell.]

[5] Boehm - Bawerk, *Geschichte und Kritik der Kapitalzins-Theorien.*

[6] [Used to be. Socialists seem to have forgotten the issue of interest for a long time now, as they have forgotten the land question. The definition of economics has fraudulently been changed from Henry George's "science of the production and distribution of wealth" to "science of the allocation of scarce resources." One can read entire treatises of economics where the term "wealth" does not even appear. Economists like Kirzner actually deny the existence of the processes of production and distribution. Capitalism, Marxism and the Austrian School debate exclusively on how much should the State intervene in obscure or irrelevant economic questions, or worse in question that are not its business.]

traditional form of money, and can therefore be scientifically explained only if there is a theory of money. Money and interest, inseparable friends even to a superficial observer, are closely interconnected also in theory. A theory of interest can only be deduced from a theory of money.

But theorists of interest have always, for the foregoing reasons, neglected to study money. Marx, for example, did not give the theory of money even five minutes as one can verify by reading his three large volumes on interest (capital). Proudhon underrated money less, and came nearest to solving the problem of interest.

In the following investigation, begun by chance and helped by favorable external circumstances, I offer science, commerce and politics the long sought-for theory of money and interest.

What I investigated was controversial. Could I know, or avoid, that what I was to find out would be like a revolutionary fire?

Summer 1911

Silvio Gesell

## Chapter 1.

## HOW THE NATURE OF MONEY IS REVEALED

If the inscriptions on coins are meant to furnish information about the nature of money, it must be admitted that the information is scanty. The inscriptions run "10 Marks", "10 Francs" or "10 Rubles", and if we fail to deduce the nature of money from these words, marginal comments like "Mit Gott" or "Liberté, Egalité, Fraternité" hardly enlighten us.

Let us compare the present German coins with the old Prussian Thalers. The new inscription no longer states the quantity of fine metal contained in a coin. As the indication of weight was often a convenience,[7] its omission must have been intentional. Why? Perhaps to indicate that such information was not, after all, useful.

It is also true that the indication of weight inscribed on the Prussian Thalers could have stimulated questions impossible to answer by means of the monetary theories of the time, which are still prevailing today. By suppressing such information the monetary authorities perhaps wanted to avoid the danger of abetting a contradiction.

If "30 Thalers are a pound of fine silver,"[8] as the old Prussian Thaler used to say, then a pound of fine silver should be 30 Thalers. “Thaler” becomes, by this inscription, simply a unit of weight reserved to silver, just as in England special units of weight are used for certain commodities.[9]

But if a pound of fine silver is 30 Thalers, and if, as the inscription and the theory of the Thalers assert, the coin should weigh so much in silver, how could silver be demonetized? How could the thirtieth part of a pound of fine silver be separated from the Thaler? Is it possible from one conception to make two, namely "silver" and "Thaler"? Before the year 1872, 30 Thalers were worth one pound of fine silver; after that date, they were not. If the latter statement is true (and it is a fact), the first statement could have never been true. The inscription on the coins united into one what had always been two conceptions - the Thaler, and the material of which the Thaler was made. Only the weight of the Thaler was equal to the thirtieth part of a pound of fine silver. One pound of silver was necessary to make thirty Thalers, much as one pound of iron is necessary to make a horseshoe. A Thaler was no more a certain quantity of silver than a house is a heap of bricks, or a pair of shoes a yard of leather. The Thaler was a product manufactured by the German mint and quite distinct from silver. And, in spite of its inscription, a Thaler was as much a Thaler before the demonetisation of silver as after it.

The inscription bound the Thaler and its material into one and the same conception; the demonetization of silver proved the existence of two conceptions of the Thaler. The withdrawal of the right of free coinage of silver made the Thaler transparent, so that without the silver we saw its inner nature. We had believed that a Thaler was merely silver, but now we were forced to recognize that it was also money. We had denied the Thaler a soul until, at its death, the soul left its body before

[7] Coins used to be legally certified weights with which anyone could check a shopkeeper's weights. The number of coins in a sum of money could be determined by weighing, and conversely the weight of a given number of coins in a sum of money could be determined by counting.

[8] "XXX ein Pfund Fein" was the inscription on the old Prussian Thaler.

[9] Diamonds, for instance, are weighed in carats (200mg). In Neuchâtel a "mesure" of apples or potatoes is 20 litres and a "mesure " of grain 16 litres.

our very eyes. Up to the withdrawal of the right of free coinage, the subjects of Prussia had seen only silver; now for the first time it was revealed to them, in the matching of silver to a law of the State, the existence of a peculiar manufactured product: money.

Before the withdrawal of silver from the mints, the explanation of money given by theorists, both mono- and bimetallists, passed unchallenged; but the demonetization of silver showed that although coins are struck from metal bars, metal bars are not for that reason coins.

Coins are bars of metal the weight and fineness of which are certified by the stamp."[10]

Our German mark is simply the name for 1/1395 of a pound of fine gold."[11]

No one saw that the free coinage of silver, which in practice converted coins into bars of metal and bars of metal into coins, was a law made by the State and dependent upon the will of legislators. No one saw that the Thaler was a manufactured article, a product of legislation, silver being but the arbitrarily chosen raw material for it. The law made the Thaler; the law unmade it; and what is here stated of the Thaler also applies, of course, to its successor the German mark. The right of free coinage of gold, which today in practice identifies coins with gold, is the work of our legislators. This right may be called into existence or withdrawn. It may be challenged at any time should the opinion prevail that much that was taken for granted at the adoption of the gold standard fails to stand the test of criticism. But if this happens, if the mints are closed to gold - and the acknowledgement of the notes of the Reichsbank as legal tender is a first step in this direction-, what is then the relation of gold to our money? Merely that, like copper, silver, nickel and paper, it is used as a material in the manufacture of money; that is to say, the same relation that obtains between stones and house, leather and boots, iron and plowshare. All trace of identity between money and the material of which money is made would disappear, and the distinction between gold and the German mark would be as clear as the distinction between silver and the Thaler, or between hats and the straw of which they are made.[12]

We must therefore sharply distinguish money from its raw material, between the German mark and gold. Money and the material it is made of can never be

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[10] Chevalier, La Monnaie, p.39.

[11] Otto Arendt.

[12] The theory of the gold standard is at present in such confusion that it would be difficult to formulate it in words. During the discussions preceding the adoption of the gold standard in Germany, the bullion theory in its crudest form still held the field. "The value of money is the value it gives itself" said Bamberger; "and gold forces itself forward as money by virtue of its properties as metal." How can we reconcile with this assertion the fact that a few years later there appeared in Germany "A Society for the Protection of the German Gold Standard"? Did gold no longer give itself value as money by virtue of its properties as metal? And how did they come to speak of a "German" gold standard? If, as the theory proclaims, the German mark is simply a certain weight of gold, it is no more German than French, Russian or Japanese. Or does the mine or melting pot produce German gold, and how is this gold distinguished chemically from other gold? The title of this society, like the leaflets it publishes, contains almost as many contradictions as words.

As an example of the state of monetary theory in Germany as recently as ten years ago, it may be mentioned that the appeal for membership of this society was signed by persons utterly devoid of professional experience in monetary matters.

Mommsen and Virchow signed their names as indifferently as they would have signed them for the foundation of a society of goat-keepers. To them the monetary standard was a trifle, a minor controversy to be decided offhand.

considered one, for between them lies the law, which today unites but tomorrow may separate.

The distinction between money and its raw material has always existed. It existed in concealed form during the free coinage of silver, and it exists in concealed form with the gold standard. But the distinction was revealed to everyone by the withdrawal, legal and arbitrary, of the right of free coinage for silver. The distinction is equally apparent today to those who have learnt from the history of silver that the privileges of money are not inherent in any metal, but can be transferred by law from one material to another.

But what do our legislators now think about the currency question? Let them take up a German mark and ask themselves, "What is this?" Are they conscious that

- the German mark has never been legally defined;
- none of the current monetary theories is compatible with the German monetary standard;
- the promotion of the German banknote to legal tender deprives the orthodox theory of the gold standard of its last support;
- and that the inscription upon our banknotes is utter nonsense?

The Reichsbank promises to pay the bearer on sight 100 Marks German Standard without proof of identity.

Thus runs the inscription. Monetary theory declares that the banknotes can circulate only because of this promise to pay. But this contradicts the fact that the notes themselves are legal tender and circulate as such. How is this possible? The German peasant, for example, formerly consented to sell his cow for 1000 silver marks which, if melted, yielded only 400 marks worth of silver; he is now willing to give his best horse in exchange for a banknote which, both from a practical and a theoretical point of view he must regard as a scrap of paper!

The inscription on the notes should be brought into harmony with the facts. Upon the notes as upon the gold and silver coins there should be written simply 10-20-100 marks. The rest of the inscription, especially the word "pay", should be deleted. This word is used in promises to pay (promissory notes, bills of exchange and so forth); and banknotes are not promises to pay. With promises to pay, especially those of the State, the holder receives interest; but with banknotes the opposite is true. The issuing authority, i.e. the State, receives interest.[13]

Instead of writing: The Reichsbank pays to the bearer" just write "This is 100 Marks." It makes no sense to print a banknote with a declaration of credit. Credit paper at no interest is, under present conditions, inconceivable. A declaration of debt for which the creditor, not the debtor, pays interest, is not found in the whole world except written on banknotes. The German Imperial Loan, which brings the holders 3% interest annually, stand to-day (1911) at 84.5; the German banknote, which costs the holder annually 4, 5, 6, 8.5 % interest, stands at par.[14] The law and present-day monetary theory treat both kinds of paper alike, regarding both as promises to pay, and promises by the same debtor!

Let us do away with legislation and pseudo-scientific theory shot through with contradictions.

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[13] With the present note-issue of 10 billion marks, the State draws 500 million marks interest annually. [What Gesell calls here "interest" is in reality seigniorage, i.e. the difference between the nominal and the real value of the money unit. This is maximum with paper and minimum with gold.]

[14] The Reichsbank discounts commercial paper indifferently with its notes as with gold. It receives the same interest for both. Yet it counts the gold as an asset and the notes as a liability!

The cellulose of the banknotes, like copper, nickel, silver or gold, is the raw material for the manufacture of money. All these different forms of money equally claim the privilege of being made into money, and are perfectly interchangeable. They are all under the same effective State supervision. Nobody buys paper money with metal money of the same State; one is simply exchanged for the other. The promise of payment on banknotes should therefore be deleted and the new inscription should run: "This is 10, 100, 1000 German marks."

A banknote circulates at par with its metal money equivalent not because of, but despite, its inscription.[15]

What forces, we now ask, transform the issuer of a banknote into an interest-receiving creditor, and the holder into an interest-paying debtor? Undoubtedly the miracle is due to the fact that the note has the privilege of being money. Let us take a closer look at the nature of this privilege.

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[15] When paper falls below par, metal money, in accordance with Gresham's law, flows out of the country. Only paper money then circulates. [This was true with gold coins. Today it no longer happens.]

## Chapter 2.

## THE INDISPENSABILITY OF MONEY AND THE PUBLIC INDIFFERENCE TOWARDS THE MATERIAL IT IS MADE OF

Thanks to the division of labor, we produce more than we consume. Liberated from the most pressing needs, we can devote time, means and work to perfect and increase our means of production. Without division of labor we could have never accumulated our present welter of means of production, and without these means of production our labor could not have attained the one tenth, one hundredth or even one thousandth of today's production. The bulk of population owes its existence directly to the division of labor. 60 out of 65 millions Germans exist thanks to the division of labor.

The products of labor so divided are not articles of consumption, things for their producers to consume immediately. They are wares, useful to the producer exclusively as a medium of exchange. A cobbler, a carpenter, a general, a teacher or a day-laborer cannot consume the immediate products of their labor. Only a farmer can, but to a very limited extent. They must all sell what they produce. The cobbler and carpenter sell their products to their customers; the teacher and general sell their services to the State, and the day-laborer to his employer.

For most products the compulsion to sell is absolute; for industrial products this rule has no exceptions. For this reason work is at once interrupted if there are hitches in the sale of the products. What tailor would continue to stitch clothes in the absence of customers?

But sales, the mutual exchanges of products, are mediated by money. Without such mediation no goods can reach the consumer.

It is actually not altogether impossible to dispose of the products of the division of labor by barter, but barter is so cumbersome and requires so many complicated preparatory arrangements, that producers generally speaking rather cease working than make use of barter.

Proudhon's banks for the products of labor attempted to re-introduce barter. Modern department stores would serve the same purpose as these banks, for to carry out barter I need only find someone who will buy what I produce, paying me with what I need. A department store providing everything must of course buy everything. The necessary and sufficient preliminary conditions for barter are here fulfilled, so that within the walls of a department store price-tickets can easily replace money, on condition that all customers of the store were also its purveyors.[16]

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[16] Much confusion has been caused in economic literature by the old fallacy that since price-tickets can be substituted for money within the walls of a department-store, money is therefore equivalent to these tickets. Money is an independent commodity and its price must be determined afresh by the sale itself, every time it changes hands. When selling his products, the receiver of money never knows what he will receive in turn for it. That will only be determined by another sale, generally at another time, in another place and with other persons. When price-tickets are used instead of money, the amount and quality of the return service must be exactly determined beforehand. This is true barter, and the price-ticket has the function of a unit for calculation, not of a medium of exchange.

To the cabinet-maker, for example, who offers his chairs for sale in the department-store, it is a matter of indifference whether the hat he intends to buy is marked 5 or 10 on the price-ticket, for he will of course calculate the price of his chairs in accordance with these figures. He reduces all the prices in the store to terms of chairs.

In a socialist State, with the prices fixed by government, price tickets could replace money. Committees of appeal and written complaints would take the place of bargaining between individuals. The individual would receive for his product a price-ticket and a complaints book. With an economic

Goods must therefore be sold for money. There exists, as it were, a compulsory demand for money equal in amount to the stock of goods. The use of money is therefore as indispensable to all as much as the division of labor is advantageous to all. The more advantageous the division of labor, the more indispensable money is. With the exception of small farmers, who consume almost all they produce, the whole population is unconditionally under an economic compulsion to sell for money what it produces. Money is the essential counterpart of the division of labor as soon as the scope of the latter exceeds the possibilities of barter.

But what is the nature of this compulsion? Must all who wish to participate in the division of labor sell what they produce for gold (silver etc.), or for money? Money was formerly made of silver, so that goods had to be sold for Thalers. Later money was divorced from silver, and the division of labor stayed; the exchange of products went on as before medium of exchange. It was not therefore silver on which the division of labor depended. The demand for a medium of exchange caused by goods was not a demand for the material of the. Money need not necessarily be made of silver. Experience has proved this once and for all.

Must then the medium of exchange be made of gold? Does a peasant who has grown cabbages and wishes to sell them to pay a dentist, need gold? Does he care what money is made of, for the short time when as a rule he retains the money? Does he have, as a rule, even time to look at the money? Why then can't money be made out of paper?[17] Would the need to exchange wares for money disappear on substituting cellulose for gold? Would the division of labor disappear? Would people starve rather than accept paper-money as the medium of exchange?

The theory of the gold standard asserts that money, to serve as medium of exchange, must have "intrinsic value", since money can exchange only as much "value" as it contains, in the same way as a weight can be raised only by a counterweight. But since cellulose-money has no "intrinsic value," it cannot exchange goods, for they have value. Zero does not equal one. Paper money has no relation to goods because it lacks "value." There is no relation between them.

The advocates of the gold standard still wield these arguments, but in the meantime paper money is quietly taking over the world. But this fact is denied, and theorists are now speaking of "transferred" forces. Paper money, they say, is in use in every country, but it circulates only because it is based on gold. If there were no metal money in existence, paper money would go to pieces, like a sparrow's nest caught in the fall of a tower. The holder of paper money is promised gold, and this promise gives life to paper. The "value" of gold is transferred to the paper by the fact, or promise, of its convertibility to gold. Paper money is like a bill of lading: it can indeed be sold, but it is worth nothing if the goods it represents disappear.

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system based on money, bargaining about price takes the place of the committee and complaint book. Differences of opinion are settled on the spot by the parties concerned, without appeal to the law. Either the transaction does not take place, or the price is legally valid beyond the possibility of appeal. Herein lies the distinction between price-tickets and money.

The frequent confusion of price-tickets and money in economic literature is likely due to the fact that both money and price-tickets can be made of any material, and that in neither case has the material any influence upon prices, unless the material of which money is made influences the quantity of money in circulation. Of late many economists have been caught in this pitfall-Bendixen, Liefmann and many pupils of Knapp. Indeed the only investigators to escape it were those who perceived the true nature of money (as revealed, for example, by the demonetization of silver described in the previous chapter).

[17] [It is rather tiresome how Gesell insists on the same point. But it is useful to understand how difficult it was, for people at the beginning of the 20th century who had spent an entire life under Croesus' illusion, to be convinced that money need not have "intrinsic value." *Auri Sacra Fames* is a hard nut to crack.]

If the gold, or the promise of redemption, is removed, all paper money is reduced to waste paper. Hence what supports paper money is "transferred value".[18]

The foregoing is about all that has been said about the matter. The argument seems so conclusive that almost all who trusts their judgment deny, without further consideration, the possibility of paper money.[19]

Money, it is stated, can only redeem or exchange a value equal to its intrinsic value. But what is this so-called value that bars the road to our understanding of paper money - declaring it a hallucination? For paper money does exist. It circulates in many countries, in some of them unconnected with any metal. Where it exists, moreover, it demonstrates its existence in the form of the millions that it brings to the monopolies manufacturing it. If paper money, judged by the theory of value, is a hallucination, these millions, judged by the same theory, should also be hallucination. The millions that the German Government gains by issuing paper money as the 7% dividend of the Reichsbank, are, according to the theory of value, a hallucination. Or should the roles be reversed? Could the theory of value really be the hallucination?

[18][Let the reader ask around to verify how alive the illusion still is.]

[19] The practical question whether paper-money has advantages or disadvantages in respect of metal money will be considered later. We shall first answer the question whether cellulose (paper) can serve as raw material for money which, without depending on any particular commodity, especially gold or silver, can circulate and perform the functions of medium of exchange. [One can understand that all this should still happen until 15th August 1971, when President Nixon declared the US dollar independent of gold. Ever since, the piling of gold ingots in bank vaults cannot be considered lack of judgment. It smacks of intentional fraud.]

# Chapter 3.

## THE SO-CALLED VALUE

“German gold money has full value, that is, its value as money is fully covered by its value as a substance. Fine silver has only half the value of the minted Thaler, and of all our silver coins; it is undervalued, i.e. its value as a substance is less than its value as money.”

“Healthy States have always aimed at money with an intrinsic and constant value, beyond anybody’s doubt.”[20]

"Gold and silver have always been universally recognized as preservers of value. These metals were collected as a means of providing purchasing power and served therefore as store of value. Coins soon became more than instruments of exchange; it became customary to measure the values of all products by the value of money. Money became measure of value. We estimate all values in terms of money. We become aware of all changes of value as changes in the relation to the value of money. The value of money functions as the measuring-rod by which everything else is measured."[21]

In these controversial works by an upholder of the gold standard and another of bimetallism, the same fundamental importance is attached to “value.” There is no discussion of the question "What is value?" or of Gottl's critical enquiry, "Does the term 'value' denote an object, a force or a material? The two opponents agree in accepting without question the existence of a reality called “value;” in this fundamental matter they are completely at one. Both use the term "value" without constraint, as if they had never heard of a "problem of value," an "investigation of value" or a "doctrine of value." Both consider the expressions "substance containing value" (*Wertstoff*), "value as a substance" (*Stoffwert*), "intrinsic value," (*innerer Wert*) "constancy of value", (*Wertbeständigkeit*) "measure of value" (*Wertmass*), "preserver of value" (*Wertbewahrer*), "conserver of value" (*Wertkonserve*), "concrete value" (*Wertpetrefakt*), "store of value" (*Wertspeicher*), "medium for transfer of value" (*Werttransportmittel*), as unambiguous.[22] Both authors tacitly assume that their readers will understand these expressions as accurately as would be necessary for the understanding of their books.

Now, what does “value” mean, scientifically speaking?

Let anyone who wants to have clear ideas about it read Gottl’s *The Idea of “Value,” a Veiled Dogma of Political Economy.* [23]Out of deference to his colleagues, our Professor does not openly spell out what his book so clearly proves, that “value” is hallucination, a mere product of the imagination.

Marx, whose economic system is founded upon a theory of value, had used almost the same words: "Value is a specter" - which did not, however, prevent him from attempting to conjure up the specter in three bulky volumes. Abstract all material properties from the finished product[24], says Marx, and only one property remains, namely value.

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[20] K. Helfferich, *Die Währungsfrage* (The Currency Question), pp. 11 and 46.

[21] Otto Arendt, *Leading Principles of the Currency Question.*

[22] “We must admit that gold is of great importance as a measure of value but of less importance as a store of value (*Wertspeicher*)." I. A. F. Engel in the Hamburger Fremdenblatt, February 1916. [I have deliberately reproduced the German terms to highlight their synthetic-analytic power, as well as Gesell’s ironic treatment of the question. Marxists of all hues have never forgiven him for this devastating criticism of Marx’s theory of value.]

[23] *Der Wertgedanke, ein verhülltes Dogma der Nationalökonomie*, Jena, Fischer.

[24] "Product of labor" in Marx's words, but the expression is misleading. What remains after such abstraction is not a property, but simply the history of the object -the knowledge that a human being has worked upon it.

Anyone who has let these words, which occur at the very beginning of "Kapital", pass without finding anything suspicious in them, may safely read on. He cannot be perverted further. But he who asks the question: "What is a property separated from its substance? – he who endeavors to grasp this fundamental statement in Marx's *Kapital* trying to make sense of it in tangible terms, will either be mistaken, or will clearly see its insanity, like conjuring a ghost.

How can the human brain, which is a substance, grasp, record, classify and develop such a complete abstraction? On what grounds, relationships and interacting does the idea rest? To comprehend something means to hold fast somewhere onto its substance (comprehend = *cum - prehendere*), to have already found in our mind an object, a notion with which to relate the new idea. But an abstraction divorced from every kind of substance or force eludes the grasp of the understanding, like the apple that eluded the grasp of Tantalus.[25]

Marx's abstraction cannot be extracted from any crucible. It remains disconnected from everything material just as completely as from our understanding. But, strangely enough, the one "property" that remains has its origin in human work.[26] It is indeed a peculiar property, calculated to turn the German language into gobbledygook! By this theory German money would have different properties according to whether its material was treasure buried by the Huns, or the gains of an honest gold miner, or the bloodstained millions wrung from France. The origin of a product is part of its history, not one of its properties; otherwise the assertion (not infrequently heard) that rarity is one of the properties of gold, would also be correct. Yet it is sheer nonsense.

If things are as explained here, if Marx, that is, mistook the origin and history of products for their properties, it is not surprising that in the event he saw strange visions and the "specter" he had conjured up began to terrify him.

I have quoted Marx, but the other theorists of value are not one whit better. None of them has succeeded in separating the "material of value" from, or in connecting the "property of value" to, any substance, and produce it before our eyes. "Value" soars above substance, intangible, unapproachable, like the Erl King among the willows.[27]

These investigators unanimously support Knies' opinion that "the theory of value is of fundamental importance in economic science". But a theory so important in economic science should be still more important in day-to-day practice. How can we then explain that in real life, in macro- or microeconomics, the theory of value is unknown? If this theory were really of such fundamental importance, one would expect to find on the first page of every German ledger after the words "Mit Gott." The firm would acknowledge the theory of value as guiding its business policy.

Should it not further be assumed that every business failure was due to a defective foundation, namely an incomplete or erroneous theory of value?

The most astonishing thing is that a theory of value of "fundamental importance" in economic science should be utterly unknown in business life. In every other sphere of human activity science and life go hand in hand; in commerce alone nothing is known of its main theory. The only things we find in commerce are prices, determined by demand and supply. A businessman speaking of the value of a thing means the price that its owner would probably obtain in certain circumstances of time

[25] [In Greek mythology, Tantalus was a king of Lydia, condemned for his crimes to spend eternity half immersed in a river. Its waters receded from him every time he wanted to drink, and the fruits hanging above his head were blown away by the wind every time he wanted to eat.]

[26] Sieht man vom Gebrauchswert der Warenkörper ab, so bleibt ihnen nur noch eine Eigenschaft, die von Arbeitsprodukten. Marx, Kapital, Vol.1, p.4.

[27] [It is the title of one of Schubert's songs.]

and place. Value, in a transaction, is an estimate, which in the exchange of a certain quantity of products is converted into price. Price can be measured to a nicety, value can only be estimated: that is the only difference. A theory of prices can therefore be applied to both price and value. A separate theory of value is superfluous.[28]

The expressions without explanation employed by the two writers on monetary standard quoted at the beginning of the chapter, in daily usage more or less mean: Gold has a "property", the so-called value. This "property", like its weight, is intrinsic to its substance. It is "value as a substance" (*Stoffwert*). This "property" is, like weight and the chemical affinities of gold, inseparable from gold: "intrinsic", unchangeable, indestructible, constant. Just as weightless gold cannot be conceived, neither can it be conceived without value. Weight and value are simply marks of a substance. One kilogram of gold is one kilogram of value: the value of the substance equals the substance that contains the value.[29] The presence of value can be stamped on a weighing scale: "fully-valued". Whether there are other processes for detecting value is not that clear. Litmus paper seems to be insensitive to value; the magnetic needle is not deflected by it; value withstands the highest known temperatures. Above all our whole knowledge of value is still somewhat meager; all we know is that it exists. This is unfortunate, considering its "fundamental importance" in science and in life. New possibilities have, however, been opened up by Dr. Helfferich's: in some substances “containing value” (*Wertstoffe*) the value is not always equal to the substance.[30] The substance containing value is greater or smaller than the value of the substance. He has discovered that the value of silver money is twice the value of the silver it contains. Silver money thus contains a double concentrate of value, nothing less than an extract of value! This important discovery gives quite a new insight into the nature of value. It shows that value can be extracted, concentrated and, as it were, separated from the substance containing it. We may therefore hope that science will at some future date be able to produce chemically pure value. But here again we run into a contradiction. In a roundabout way we have reached the theory of a paper-money standard, solely based on price and taking no notice of any theory of value.

Value is then pure fantasy.[31] Zuckerkandl explains:

> In the theory of value “almost” everything is still controversial, beginning with the terminology."[32]

Boehm-Bawerk adds:

> Despite countless efforts, the theory of value was and is one of the darkest, most confused and controversial parts of our science.[33]

Fantasies are cheap. In isolation they may form a coherent system and so appear acceptable to our understanding. Like miracles, they are supernatural. They grow, thrive and flourish in human brains, where there is room for everything. In the real world, however, there is no room for fantasies. They vanish into thin air. And

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[28] [The philosophical reason is that value is purely subjective. One who is ready to acquire something at any price values the thing more than one who wouldn’t give a penny for it.]

[29] [The original is synthetically ironic: (S*toffwert = Wertstoff*).]

[30] [As above: *Wertstoff > oder < Stoffwert*.]

[31] In trade, “value” means an estimate of the price that can be obtained for a product. The value of a product is its probable price, allowing for the state of the market. Stocktaking is dependent on "value" in this sense. Whether the estimate was correct appears later in the selling price.

[32] Since the matter is of "fundamental importance," it would have been well if Zuckerkandl had informed us what the word "almost" is meant to exclude. The only non-controversial matter in the theory of value is the alphabet used to write it down.

[33] [There is no quote in the original.]

nothing is more real than economic life, whether macro or micro. It is all matter and energy. Anything unconnected with either can be nothing more than a cheap product of the imagination.

Such is value. A science sprung from the illusion of value can only engender ghosts, and is doomed to sterility. Elsewhere science makes daily life fruitful, it acts as the Pole star of practice; but practical economic life is even today left to its own devices.[34] Economic science has not even developed an appropriate terminology, so that "everything is still debated, terminology included." All the science built upon the doctrine of value still lacks a theory of interest, of wages, of rent, of crises and even of money, and not for want of trying. A science built on the theory of value is incapable of giving a scientific explanation of the simplest daily occurrences, it can foresee no economic event, or predict the economic effect of any legal measure (such as shifting the burden of the wheat-duty, of the land-tax, etc.).

No merchant, speculator, banker, employer, journalist, deputy, or statesman can avail himself of this science as weapon or shield; no single German commercial undertaking, let alone the Reichsbank, is guided by theoretical considerations of value. In Parliament, the science that has taken value as its foundation passes unnoticed, no theory of value can boast having influenced legislation. Not even one! The characteristic of this science is its complete sterility.

Only among wage earners, fatally excluded from commercial life, so that they know of commerce, speculation, profit, etc. merely by hearsay, has the theory of value found disciples. Wage earners consent to be guided in practical affairs, particularly in their political activities and wage policy, by a theory of value. This phantom haunts the brains of our socialists. The naive belief that something called value really exists and is of practical importance has gained hold of men's minds only in the dark depths of the coalmine, in the roar and dirt of the factory and in the smoke and vapor of the blast furnaces.[35]

If this sterility were the only drawback of the matter, we might put up with it. Haven't thousands of our best intellects wasted their time in futile theological speculation? If their number got swollen by a few dozen unable to extricate themselves from speculation upon the idea of value, we may lament the waste, but not the loss, which in a nation of many millions hardly amounts to much. Belief in value costs us, however, more than the lost co-operation of these men. For despite its complete sterility, this doctrine still gives faint hopes to many who would devote their labors to more fruitful endeavors. The doctrine is thus pernicious by its mere existing.

There are in Germany many businessmen of judgment and intelligence, alert to theoretical knowledge in every branch of human activity. But these people eagerly avoid theoretical explanations connected with their calling. Businessmen are the first to feel the effects of mistaken legislation; they have to pay for its consequences, or at least temporarily advance the money to meet the costs; they are buffers between legislation and the economic life of the community, and always in danger of being crushed in some crisis; yet they anxiously shrink from discussing theoretical problems. Why? For two reasons: on the one hand these men, educated in the good old German mental discipline, cannot shake off belief in authority; they think that science is well cared-for in the hands of our professors.[36]

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[34] [Nothing has changed in 90 years.]

[35] [The entire paragraph comes from Philip Pye's 1958 version. It does not appear in the German original that can be downloaded from the Net. But given its relevance I have included it. I ignore the reasons for such discrepancy.]

[36] Whether this opinion is well founded may be judged from the following quotation (*Bund der Landwirte*, 7-8-1915): "Ruhland, from the start, entertained the idea of furnishing the scientific theories necessary for putting agriculture, industry and commerce permanently upon a sound practical basis. He

On the other hand their sober and simple understanding cannot comprehend the theory of value expounded by the professors, and they are ashamed to admit their intellectual incapacity publicly.

Such skeptical observers, many Jewish stockbrokers with the keen intellects of their race among them, are not to be put off with empty phrases of almost manifest absurdity. Only the fear of making themselves ridiculous prevents them from declaring publicly that the subject matter of the theory of value is invisible to them, as the Emperor's clothes were to the child in Grimm's fairy-tale.

This is the true success of the theory of value. Incalculable mischief has been done to both the practice and the theory of economics by this flimsy product of illusion. A science sprung from a phantom of the brain has caused the whole nation to mistrust its own power of understanding, thus preventing them from grounding the laws of people's economics on a true popular scientific stand.

A currency administration guided by a theory - any theory - of value is doomed to sterility and inactivity. For what can be administered in the "intrinsic value" of gold? The illusion of value precludes progress in matters of monetary administration. No other explanation is needed of why today's monetary system is the same as it was 4 000 years ago. It is the same at least in theory. In practice we have gone over to a paper-standard, noiselessly and by stealth, it is true, since the fact must be concealed. For if our professors hear about it, their cries of alarm might cause immense damage. Paper money, money without "intrinsic value", is, in their opinion, fundamentally impossible and therefore certain to fail.

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therefore rejected from the beginning the interpretation of the task of economic science laid down by Roscher and Schmoller: 'Economic science is concerned with what exists or has existed, but not with what should exist' (Roscher). 'Science is not concerned with influencing directly the settlement of the questions of the day. That is the task of the statesman' (Schmoller)."

Schmoller and Roscher had quite rightly recognised that we have as yet no true economic science but only the economics of a class-State and that the study of the anatomy of this State is no task for a university. But unfortunately they refused to draw the final conclusion from this recognition; that the study of the economics of a class-State is no business for a university either. What a mischievous germ of corruption such a science is for the universities, is expressed by Professor Brentano (*Der Unternehmer*, p. 6): "In the teaching of economics a truth is recognised only as long as it coincides with the interests of a powerful party, and then only as long as this party remains powerful; if another party becomes more powerful, the most erroneous doctrines are rehabilitated if they appear to serve its interests."

## 4. WHY MONEY CAN BE MADE OF PAPER

### The Fact

It is objected that paper money is impossible, since money can exchange only its own "intrinsic value", or "value as a substance", and paper money has no "value as a substance".

In striking contradiction to this contention stands the plain fact that today's immense exchange of products is carried out throughout the world almost exclusively with paper money, or with banknotes only partly backed by gold. One can travel around the world to any degree of latitude and spend or receive nothing but paper money. Germany, England and Turkey are, as far as I know, the only civilized countries today with a prevailing metallic circulation; elsewhere, gold coins are seen only exceptionally[37].

In Norway, Sweden, Denmark, Austria, Holland, Belgium, Switzerland, Russia, Italy, France, Spain, Greece, the United States, Canada, Mexico, Brazil, Argentina, Paraguay, Chile, Australia, New Zealand, British India, Japan, the Dutch Indies, that is, over almost the whole world, commerce is conducted with paper money or banknotes, plus so-called subsidiary or token coins. Those who want gold must travel to the capital and ask for it at the counters of the Bank of Issue. Even then they often receive the gold only in bars and upon payment of a premium. In ordinary business transactions nobody demands payment in gold in any of these countries; indeed, in many of them, such as Argentina, Uruguay, Mexico and India, there are no gold coins in the national monetary units.

If we use gold coins in Germany, to pay for drafts on any of these countries, the drafts are always paid in paper-money or, if we raise no objection, with a bag of silver coins, that is, in coins that, to use Helfferich's terminology, would lose half the "substance of their value" (*Wertstoff*) if defaced.

These banknotes do indeed promise the holder, according to the blurb on them, a certain quantity of gold, hence the general opinion that they are not paper money. But this circumstance is not enough to explain the fact that for every gold ruble, rupee or dollar there exist three or more paper rubles, rupees or dollars. As two-thirds of the banknotes in circulation are not backed by gold, these two-thirds must owe their existence and properties to causes other than the promise of convertibility. Somewhere or other, in commerce, on the stock exchange or elsewhere, forces must exist preventing the holders of banknotes from taking advantage of the promise of convertibility. Otherwise it would be inexplicable that for 10-20-100 years the creditors of the Bank of Issue (the holders of the notes) should make no use of their rights. Forces must also exist keeping the coins out of the jeweler's melting pot for generations.

I shall soon track these forces to their origin. For the moment I only wish to establish the fact of their existence, thus preparing the reader for the assertion that in all these countries, despite the blurb on their banknotes, the currency is paper, not metal.[38]

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[37] Since this was written in 1907, the last gold coins have disappeared from circulation.

[38] [Some superstitions are hard to die. In the thick of the 21st century one can still read promises to pay "pounds" to the bearer on the banknotes of the Bank of England and of Scotland. The first do not state the nature of the "pounds" promised. The second say "pounds sterling," which originally meant 92.5% pure silver. It's not up to me to say whether it is a question of lack of understanding or of good will.]

If the State prints on a piece of paper: "This is 100 grams of gold", all the world will believe the assertion, and such a scrap of paper may circulate for years at par with massive gold. Sometimes it may even bear a premium in relation to gold.[39]

But if the same State, on a similar piece of paper, promises a milk cow, the holders of such papers would arrive next day with a halter for the cow.

Now if a piece of paper can for generations, for endless series of people in the most varied economic situations, represent completely a certain quantity of gold, whereas the same piece of paper could not represent for twenty-four hours a cow or any other article of use, this proves that, for all the essential properties here considered, paper and gold coin are for all intents and purposes interchangeable. Gold discs or paper in the form of money perform the same services for all. Further, if the promise of conversion served as backing for the banknotes to keep them in circulation, if banknotes were regarded simply as promises to pay, if the issuer was the debtor and the holder the creditor as with bills of exchange, then the Bank of Issue would have to pay interest to its creditors, the note holders. Interest is paid by the debtor upon every other kind of promise to pay, without exception. But with banknotes the relation is inverted. Here the debtor, the bank, receives interest, and the creditor, the holder, pays interest. Banks of Issue can consider their debts (banknotes, right of issue) as their most valuable capital. To produce this miracle, to reverse the relation between debtor and creditor so completely, extraordinary forces must be at play in banknotes, removing them from the category of promises to pay.

Furthermore, if banknotes are to be considered as promises to pay by the State, it remains inexplicable that these promises to pay, only one-third covered, without a sinking-fund and bringing the holder no interest, are usually at a premium in comparison with the ordinary interest bearing State loans, which are covered by the power of the State to levy taxes. A German 100-mark note, for example, upon which the holder pays interest, is equal to 117 marks of the German Imperial Loan, which brings 3% interest to the holder.

Relying on these facts, therefore, we deny that what gives life to banknotes and ordinary paper money is the promise of conversion. We assert that forces must exist elsewhere in commerce, which play the part at present erroneously assigned to the metal reserve (so-called backing), or to the promise of conversion. These forces, hidden for the moment, which turn a promise to pay (banknote) into capital, and force the creditor to pay interest to the debtor, are, we maintain, strong enough in themselves to assure the functioning of money in the market. Relying on these facts we assert that money can be made out of paper which, without any kind of promise of conversion and without the backing of any particular commodity (gold, etc.), bears only the following inscription: "One Dollar" ("Mark", "Shilling", "Franc", etc.) or, "This Piece of Paper is in itself one Dollar," or, "This Piece of Paper is in commerce, in State-Treasuries and in Courts of Justice legal tender for 100 Dollars." Or, to convey my meaning, if not more clearly, at least more drastically:

"He who presents this Piece of Paper for redemption at the Bank of Issue will receive 100 Lashes (negative promise of payment)."

In markets and shops, however, the holder will receive in goods as much as demand and supply allow; that is, as much as, by bargaining, he can make his own."

I think I have here expressed myself with sufficient clarity and that there can be no further doubt as to what I mean by the term "paper money."[40]

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[39] In Sweden in 1916, 105 kronen in gold were paid for 100 kronen in paper money. The ersatz products of the war were dear and bitter. Only ersatz gold, paper money, failed to make us sigh for peace.

Let us now investigate the forces that make it possible for people to scramble for papers with any of the foregoing blurb. Men work in the sweat of their brow to earn such papers; they give their produce, goods with "intrinsic value", in exchange for such papers; They accept bills of exchange and mortgage deeds payable in such scraps of paper and hoard them as so-called "store of value;" they "eat their bread in sorrow and weep their nights away" brooding upon how they can obtain these scraps of paper to meet an expiring draft. Such forces expose to bankruptcy, sequestration and loss of honor people who fail to meet their liability to deliver, at a given time and place, papers of the kind described. Such forces, finally, allow some to live grandly, year in, year out, without work or loss of property, because they have placed these papers somewhere as capital.

What is the hidden source whence such scraps of paper - paper money, the money of John Law and other paper money swindlers,[41] the abhorrence of orthodox economists and little minds - draws its force?

## Explanation

A person needs something and wishes to obtain it. But the desired object happens to be in the possession of another and cannot otherwise be obtained; he will usually be forced to offer some of his possessions to induce the possessor of the desired object to surrender it. The object will come into his possession by giving something in return. This he must do, even if the object he desires is useless to the other. It suffices for the possessor of the object to know that someone needs it or, even better, is compelled to obtain it, for him to refuse to give it for nothing; indeed, a man will often keep or gain possession of an object solely because he knows that behind him there comes someone else who can employ it usefully. And the more urgent the latter's need of the object, the higher will the owner push up his demands.

What we have just said seems today so natural and obvious that many will consider superfluous expressing it; indeed, so far as I know, this is the first time the statement occurs in a piece of economic writing. Yet this is the fundamental law of present-day economic life, of commerce, of the economic relations between the individuals composing a State and between them and the State.

This "epoch-making discovery" is not more stupid and obvious than Newton's discovery of the law of gravitation, and it has the same fundamental importance for economic science as Newton's gravitation has for physics.

In gaining possession of an object useless to us, but which we assume or know will be sought after by others, we can have only one purpose in mind, namely to embarrass others so as to exploit their embarrassment. Our purpose is usury, for to embarrass someone and to exploit that embarrassment is to practice usury.

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[40] [It would be interesting to know Gesell's opinion about the full-page advert on *The Economist* of 23rd January 1999. The World Gold Council (www.gold.org) had organised an opinion poll in France, Germany and Italy. 71% to 85% of the people polled were of the opinion that gold "helps bolster public confidence in a nation's economy," "protects against future economic shocks, it's important to maintain [the] historical level of gold reserves," "it's important to the strength of the national money," "it's important for the economic and monetary independence it provides," and that "the country should either maintain or increase the level of gold reserves held by the Central Bank." I refrain from naming the countries with such level of monetary illiteracy.]

[41] [John Law (1671-1729) was indeed a swindler, but not in monetary questions. He convinced the Regent of France Orléans, during the minority of King Louis XV, to adopt paper money, but he made the mistake of backing it with gold he did not have. When the Prince of Conti arrived at his bank with a *carrosse* full of paper notes and demanded gold, there wasn't enough and Law's bank collapsed. Law escaped to Venice, where he died in poverty.]

That the exploitation is mutual may possibly extenuate the offence, but it is nevertheless true that exploitation of our neighbor's need,[42] mutual plundering conducted with all the wiles of salesmanship, is the foundation of our economic life. The whole fabric of exchange is built upon this foundation; it is the fundamental economic law automatically regulating relations in exchange, that is, the prices, of all commodities. Remove this foundation and our economic life would collapse. The only remaining method of exchanging commodities would be the Christian, socialistic, communistic, fraternal method of mutual giving.

Are examples necessary?

Why does the post-office charge two cents for a letter but only one cent for printed matter, although the service rendered is the same? Simply because the letter writer is likely to have urgent reasons for sending it, whereas the sender of printed matter could do without sending it if he considered the charges too high. The letter writer is under compulsion, the sender of printed matter is not, and solely for this reason the letter-writer must pay double the postage.

Or why are chemists' shops in Germany with a stock worth 10,000 marks sold for half a million? Because the privilege granted to the chemist by the State allows him to charge higher prices for medicines than would be possible with unrestricted trading. (This explanation holds even if the State requires scientific training in return for the privilege).

Or why does the price of wheat often rise in Germany in spite of plentiful harvests? Because the import-duty excludes competition and the German farmer knows that his countrymen must buy his produce.

It is indeed said that prices are raised or lowered by "the state of the market". We try to ignore the personal motive, the human act, and find a scapegoat to bear the odium of usury, by saying that prices are determined by demand and supply; but how could “demand and supply” and "the state of the market" exist without the living agents behind each transaction? It is these living agents who cause the fluctuations of price, and the condition of the market is their tool. And who are these agents but us - the whole population? Everyone who brings something to market is animated by the same spirit, namely to obtain the highest price that the state of the market allows. Everyone then seeks to exculpate himself by speaking of something impersonal, the state of the market, whereas in reality everyone is exculpated by the fact that the exploitation is mutual.[43]

It is true that anyone who agrees with Karl Marx that commodities exchange themselves (in proportion, be it noted, to their "intrinsic value") is spared the necessity of practicing usury; he needn’t have scruples in pressing his debtors or in letting his workmen go hungry. For usury is caused not by him, but by his property. It is not he who exchanges; his shoe-polish exchanges itself for silk, wheat or leather.[44] The product concludes the deal, and by reason of its "intrinsic value".

But those of us unable to grasp this ghostly property of commodities called “value,” and therefore regard the exchange of commodities as a human action, with the commodities and state of the market as accessories to such action, will be able to discover no other motive for such action than the desire common to all owners of

[42] One must not always picture shivering beggars in this connection. Rockefeller is "embarrassed" when fuel-substitutes interfere with the sales of petroleum. Krupp is “embarrassed” when the expansion of his factories requires the purchase of a peasant's field.

[43] [Gesell fails to mention the doctrine of the “just price” in force throughout Christendom until the Reformation, which introduced “supply and demand” as masterfully described by him in this chapter. This passage from Aquinas renders the idea: “The just price of things is not at times fixed; it is bargained so that a slight increase or decrease does not injure the rights of justice (II IIae Q. 77 ad 1).]

[44] Marx, Capital, Vol.1, p.3.

commodities, to give as little as, and to receive as much as, possible. In every exchange, from wage-negotiations to dealings in stocks, we observe that both parties seek information about the state of the market. Sellers try to find out whether buyers urgently require their commodities, and they are especially anxious to conceal the fact that they are compelled to sell immediately. In short, we soon convince ourselves that the principles of usury are the principles of commerce in general, and that the difference between commerce and usury is one of degree, not of kind. The merchant, the workman, the stockbroker have the same aim, namely to exploit the state of the market, which is the same as the public at large. Perhaps the sole difference between usury and commerce is that the professional usurer aims his shots against a person at a time.

Let me repeat: the force directing and controlling the exchange of commodities is the tendency to seek the largest possible return for the smallest possible effort.

It is necessary to state this with the utmost clarity, since nothing but the recognition of this fact can enable us fully to understand the possibility of paper money.

Let us now assume that Müller has somehow or other obtained possession of pieces of paper money with which he can satisfy none of his physical or spiritual needs. But here comes Schultz, to whom for some reason they are useful, and asks Jones to let him have them. From what we know it is clear that in such circumstances Müller will not hand over the piece of paper for free.

The very fact that such paper cannot be had for nothing transforms it into money, since all that we expect of paper money, for the time being, is that it should cost more than the paper of which it is made. It must not be possible to obtain paper money free of charge. Money fulfils its function because there is always someone looking for it and forced to give something in exchange.[45]

To account for the possibility that paper may become money, it only remains to be proved that Schultz be actually compelled to obtain the piece of paper money in Müller's hands. Proof is not difficult.

The goods produced by the division of labor,[46] are destined for exchange from the outset. They have, for their producers, the same characteristic that money has for any of us: they are useful only as objects of exchange. It is only the prospect of exchanging his products, his goods, for other goods that entice a producer into abandoning primitive forms of production and adopting the division of labor.

But if goods are to be exchanged for goods, a medium of exchange, what we call money, is a necessity. The only alternative is barter, and barter, we already know, becomes impracticable beyond a certain degree of the division of labor. It is easy to see that barter is possible only under quite primitive economic conditions.

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[45] Bourgeois and socialist economic theory deny the possibility of this return service, and must continue to do so, for the return service would stamp the surrender of the paper as an exchange, and an exchange would, to use the terminology of these theories, presuppose "intrinsic" or "exchange" value. But we have assumed that the piece of paper was in itself without "intrinsic" or "exchange" value (it is immaterial, for the moment, whether we can connect these terms with reality). Bourgeois and socialist doctrines of value assert that a commodity can exchange only for the amount of value it contains (exchange value) and if the pieces of paper money in the hypothesis have no exchange value, the exchange, the price given, is impossible. For such an exchange there is, according to the doctrine of value, no "measure of value" to "measure" the return service. Paper money and commodities are incommensurable quantities.

[46] By "division of labor" we mean here work resulting in objects of exchange, or goods, in contrast to subsistence economic production aiming at the immediate satisfaction of needs. The industrial division of labor, the multiplication of the processes by which single products are manufactured, is a technical division of labor, not to be confused with the economic division of labor.

Money, a medium of exchange, is the essential condition of a highly developed division of labor for the production of goods. It is indeed indispensable.

But the nature of a medium of exchange is such that there must be no free production of the medium chosen. If everyone were free to manufacture money according to his own system, the variety produced would disqualify it for the purpose it has to fulfill. Everyone would declare his own particular product to be "money," and we would go back to barter.

The need for units in the money system appears from the fact that not even a bimetallic standard was considered workable. Or suppose that agreement had been reached to adopt gold as the standard, but with a free manufacture of the coins. Coins of every shape, weight and degree of fineness would then be in circulation together - an impossible situation. (Any such unifying "agreement" would in itself be a State action, as any agreement reached among citizens is).

By whatever method the free manufacture of money is excluded, whether by law or by difficulties in obtaining the raw material (gold, cowry-shells, etc.), voluntarily or not, whether by the people gathered in solemn assembly or simply by yielding to the thrust of advancing economic forces, it is always a matter of popular action. And what is such a unanimous action of the people but a law, an action of the State? Thus a medium of exchange has always the character of State institution, whether coined metal, cowry-shell or banknote. The moment a people agrees - no matter how - to recognize a certain object as money, this object bears the stamp of State institution.

The alternative is, therefore, between State money and no money.[47] Freedom of enterprise in the manufacture of money is impossible. This is too obvious to require further explanation.[48]

It is true that at present the production of the money-material is unrestricted, and that the right of free coinage in practice converts the money-material into money. But this is not an argument against the above theory of money; for, in spite of the right of free coinage, the money-material is not in itself money, as is strikingly shown from the history of the Prussian Thaler.

As the right of free coinage of gold is granted by law, the law can equally withdraw it by closing the mints, for instance, as was done for silver.

But the production of the money-material is at present only nominally unrestricted. The natural difficulty of gold mining makes this freedom illusory.

This theory of money does not contradict the fact that in many undeveloped countries (colonial America, for instance) powder, salt, tea, hides, etc., were used as medium of exchange. That was barter, not money. Salt, tea, powder, etc. received in exchange for the pioneer's produce, were used in his household. They did not circulate, they never returned to the point of their unloading: they were exchanged for their material properties, and consumed. They had to be continually replaced by new goods. But it is characteristic of money that it is exchanged not because of its material, but because of its function as a medium of exchange; it is not consumed, but merely used and re-used. Money describes a circle around which it continually moves; it returns repeatedly to its starting point. If a package of Chinese tea had to be

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[47] [This was true at the time of writing. But money scarcity during the Great Depression led Mayor Michael Unterguggenberger, a Gesell disciple, in the Austrian Tyrol, to issue money called "Work Certificates" during 14 months, thus counterbalancing the harmful effects of deflation. Today more than 30 000 communities the world over have discovered that it is possible to issue their own social currencies to make goods and services produced **within the community** to circulate.]

[48] Where natural products serve as money, unrestricted production is rendered impossible by the choice of a money-material (cowry, gold) which at that time and in that place cannot be produced in unlimited quantities or at all.

considered as money, it should have returned to China after circulating for years through the American colonies. A silver dollar of the United States might, in the course of trade, have reached China, circulated for years there and, again by way of trade, returned to Colorado to be paid out as wages to a miner and to descend once more into the mine whence it came. Furthermore, the price of the package of tea continually increased in proportion to the distance separating it from the port of entry, all charges for transport, interest and middleman's profit being added to its price, whereas the silver dollar could travel ten times around the world and be given back to the miner for the price for which he originally sold it. In most countries coins 100 years old, or more, are in circulation. Such a coin may have changed hands 100,000 times, yet no one in this long chain of holders has ever thought of consuming, that is, melting it on account of its content of gold or silver. For 100 years such a coin has been used as a medium of exchange; for 100,000 holders it has been not gold but money; not one of the holders has had any use for the money-material.

This, then, is the criterion for money, that the holder should be indifferent to its raw material. Solely for this reason, solely because of this complete indifference, can poisonous, oxide-coated copper coins, worn silver coins, handsome gold coins and gaily printed slips of paper circulate side by side at par.

The cowry-shells used as a medium of exchange in the interior of Africa have a somewhat greater resemblance to money. They are not consumed, the purchasers are much more indifferent to them than are the purchasers of tea and powder. They circulate and so do not need to be continuously replaced. Occasionally they may even reach their point of departure, the coast. Here and there they may, indeed, be diverted from their function as money and used as ornaments by local girls, but their economic importance is independent of this use. Cowry-shells - if not expelled by some other medium of exchange - would certainly continue to be used as money, even if they went out of fashion as ornaments. They would then be a true medium of exchange like our copper, nickel and silver coins, or our banknotes, which can be used only as medium of exchange; they would be true money.

And they could, like our money, be called social or State money, the word "State" being applied in a restricted sense to such undeveloped countries. State monopoly for the manufacture of money would be here replaced by the impossibility of fetching in Central Africa a kind of shell found at the coast, thousands of miles away. (Cowries can be obtained, like gold in Europe, only by way of trade, by exchange.)

But if a medium of exchange is the necessary condition for the division of labor, and such a medium of exchange can only be conceived as State money, i.e. money produced or controlled by the State by law, what choice does the producer have who brings his goods to market and finds no money other than pieces of paper - the State having decided to produce no other form of money than paper?

Should he reject this money for not being in harmony with bourgeois or socialist theory of value, he must also give up hope of exchanging his produce, and return home with his unsold potatoes, newspapers, brooms or whatnot. He must give up his trade and the division of labor, for he could buy nothing if he sold nothing, i.e. if he refused to accept the money issued by the State.

His strike would come to an end in 24 hours. His “theory of value” and his mistrust towards “fraudulent” paper-money would not last longer. For hunger, thirst and cold would then have done their work, forcing him to offer his goods in exchange for pieces of paper with the inscription, more or less as:

The bearer presenting this at the Bank of Issue will receive 100 Lashes, but in the markets he will receive as much merchandise as demand and supply will allow.

Not only hunger, thirst and cold, but also the tax-gatherer force all those who cannot return to primitive production and who desire to preserve for their work the advantages of the division of labor (in a modern State that means almost everyone), into offering their products for the paper issued as money by the State.[49] In other words all these people are forced to create, with their goods, a demand for paper money. Because of this demand the possessors of such paper will not surrender it for nothing. They will ask as much for it as the market conditions allow.

Paper has thus been transformed into money:

1. Because of the great advantages of the division of labor;
2. Because the division of labor creates wares, that is, commodities useful to their producers only as objects of exchange;
3. Because at a certain stage in the development of the division of labor, the exchange of goods becomes impossible without a medium of exchange;
4. Because a medium of exchange, from its very nature, is only possible as social State money;
5. Because the State, according to our hypothesis, provides no money other than paper money;
6. Because all possessors of goods are faced with the alternative: either accept State paper money or abandon the division of labor. And finally:
7. Because the holders of this paper money do not surrender it for nothing when they see that producers are in difficulty and must offer their wares for such pieces of paper.

Proof that money can be made of cellulose is now complete, and I could at once proceed to the next question, "How much produce will, or should, a piece of paper-money obtain for its holder?" But the importance of the subject induces me to tackle first the prejudices opposed to the idea of paper money, thus exposing the fallacy of the more prominent among them. By this method I hope to gain the confidence of those judicious or cautious readers who are ready to admit that the proof given above is logically correct, but who fear that the premisses may be incomplete and thus the proof invalidated by some circumstances not yet taken into consideration.[50]

I reserve to go back on the issue already dealt with, fully to convince the readers that it is altogether possible to make money out of cellulose without intrinsic value,[51] but exclusively with the inscriptions mentioned above. This is the indispensable premiss to stay on the same wavelength as my readers.

If it turns out not to be true that money out of cellulose can be made, that "Marley[52] is dead," everything I say will collapse into nothing.

Like others who have wrestled with the problem of paper money, I could have cut a long story short by saying that the State could demand the payment of taxes, fines, etc. in paper money.

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[49] [Today, especially in English speaking countries, money is issued not by the State but by a Central Bank, and loaned to the State instead of being spent into production. Central Bank policy is "independent," which at times means "against the interests of the citizens." Places like China and the Channel Islands, where the State issues money free of debt and spends it into production, have a superior level of prosperity, or are about to attain it.]

[50] I again take the precaution of mentioning that up till now I have discussed only the possibility of making money out of paper. The question of the advantages and disadvantages of such money over metal money remains quite untouched and will be treated later.

[51] [Gesell ironically remarks "ohne Wertstoff und ohne Stoffwert" which escape translation.]

[52] [Character from Dickens' "Christmas Story."]

If the State, for example, sold postage-stamps, State railway tickets, State forest timber, State mined salt only for paper-money manufactured by it, if import-duties, tithes, school fees, etc., could be paid only in such paper, everyone would of course consider this paper something highly valuable and would refuse to part with it for nothing. The State would thus promise the holder State services instead of gold, that is, many services instead of one. These services then would give life to paper money.

But as will appear later, this explanation would soon confront us, as has confronted all other paper money reformers and manufacturers, with insoluble problems. He who is unaware of the real foundation of paper money, as given in the seven points above, can trace back no single economic phenomenon to its final cause.

Among the most conspicuous "proofs" of the impossibility of paper-money is the assertion - we may call it the bullion supporters' masterpiece - that goods can be exchanged only for goods, since no one would give a useful object for a useless one like a scrap of paper.

This argument seems so conclusive that, as far as I know, all paper money theorists have prudently avoided tackling it, probably because their inability to see through its fallacy. With its aid the advocates of a metal standard have always succeeded in proving a priori the impossibility of paper money and in staving off scientific inquiry from this field.

"Goods can be exchanged only for goods." That is undoubtedly true, but what is a good? It is the product of the division of labor, and to their producers the products of the division of labor are useful only as medium of exchange. They are of no immediate use, as we have already shown. Take a farmer who has grown 100 tons of potatoes, or a cotton spinner employing a million spindles. What could they do with their products but sell them, that is, use them as objects of exchange?

After defining terms, the assertion that goods can be exchanged only for goods requires a very different interpretation. All that the term "good" implies is, first, that the possessor or producer of the thing to be exchanged should have no use for it.

Secondly, it implies that the thing for which the good is exchanged should also be useless to its possessor - and is this not true of a piece of paper money? Is not this slip of paper, apart from its property as money, an absolutely useless object?

The assertion that "goods can be exchanged only for goods" becomes therefore proof that paper money is possible, not that it is impossible. It is evidence against, not for, metallic money.

If we turn now to the reason given for the assertion: "No one would give a useful object for a useless one" we at once discover a fallacy. The assertion is true for goods meant to be consumed. It is false for goods meant to be exchanged. In our case, it is not true for paper money.

Let us apply this to our example: "Potatoes can be exchanged for thread, since potatoes are useful to the farmer and thread to the cotton spinner by virtue of their intrinsic value." The proposition is obviously false. What possible immediate use, we repeat, can the cotton spinner find for the enormous quantity of thread produced?

But the untruth of the foregoing argument does not impair the truth of the assertion itself "goods can be exchanged only for goods". To make paper money conform to this contention, we must prove that it is as much a good as the goods that it helps to exchange.

We wish to leave no room for misunderstanding; we claim for the piece of paper, for the gaily-printed leaflet with the absurd inscription:

"100 Lashes will be paid on sight to the bearer of this paper if presented at the National Currency Office, but presenting it in the market he will receive for it as much produce as he can make his own by bargaining ",

the status of a good, and one of enormous importance at that. We do not want to give paper money the status of borrowed, stolen or transferred property. Above all we must not give the piece of paper money the status of good simply because the State promises its holder some service unconnected with its function as money. On the contrary, we wish to persuade the reader to endorse the apparent paradox: "Paper-money is a chemically pure ware; its only function is to be of use to us as ware."

To be regarded as good, an object must possess two characteristics:

1. It must be in demand, i.e. someone must want the object or be forced to obtain it, and for this reason be prepared to give another good in exchange for it.
2. To create this demand the object must of course be of use to the buyer, otherwise it is not sought for and purchased.

Fleas, weeds and stench are for this reason not goods, even though not ownerless. But if an object is useful (to the buyer), and cannot be obtained free of charge, all the conditions are fulfilled for it to be a ware.

We proved that paper money satisfies the first condition on demonstrating that State money is an absolute necessity for the division of labor, and that all possessors of goods, are, by the nature of their possessions, compelled to offer them for paper money. They create a demand for paper money, if the State provides no other form of money. If Germany demonetized gold as she demonetized silver, and substituted paper for gold, the owners and producers of wares would be compelled to accept this paper money. One and all would have to create a demand for the paper money with their produce. Nay more, the demand for this paper money would be exactly as large as the supply of goods awaiting sale, which in turn would depend upon their production.

Paper money therefore plainly fulfils the first condition. Petroleum, wheat, cotton, iron have also, most certainly, the characteristics of goods; they are among the most important staple articles on the market. Yet the demand for these articles is not as unconditional as it is for paper money. Everyone today carrying on a trade and producing goods, that is, everyone who has given up subsistence production to take part in the division of labor, creates with his products a demand for a medium of exchange. All goods without exception are the embodied demand for money - for paper money if the State provides no other form. But not all owners of goods buy iron, petroleum or wheat with the money obtained for their products. There are many substitutes for iron, petroleum and wheat, whereas for money the only substitutes are subsistence production and barter. These substitutes would only come into consideration if 90% of the present population, i.e. all those who owe their existence to the division of labor, had starved to death.

The demand for paper money arises, therefore, by the fact that the products of the division of labor are wares. The division of labor, original mother of goods for sale, is the inexhaustible source of the demand for money, whereas the demand for other goods is far less urgent.

A given demand for an object can of course be explained only by the fact that the object demanded, in our case paper money, performs some service for the buyer, not for the present possessor. It would be point 2.

Let me ask: is this piece of gaily-printed paper, raised to the dignity of money, exclusive medium of exchange recognized by the State that permits all types of exchange, really useless?

Is this scrap of paper, which permits the workman, the doctor, the dancing-master, the king, the clergyman, to convert products or services personally useless to them, into goods for consumption, really useless?

Plainly we must here keep in mind not, as usually happens, the material aspect of the paper money, the scrap of paper itself, but the whole - the paper plus its public status as medium of exchange, money. We must think of money as a manufactured product, moreover protected by law and monopolized by the State.

It is indeed true that if we deprive paper money of its distinctive characteristic as the only legally recognized and practically universal medium of exchange, what remains is but waste paper. But is not the same true of almost any other object when considered simply as a material, apart from its use?[53] Scrape together the colors of an oil painting, strike with a hammer a token coin, an inkpot, a soup tureen, and what remains but rubbish? If we regarded a house as a pile of bricks, a king's crown as metal, a book as paper, if we saw in everything merely its raw material, the great majority of objects would have few advantages over paper money.

We do not use a piano as firewood, a locomotive as cast-iron or paper money for papering walls. So why, in speaking of paper money, should we mention paper, and not its being medium of exchange? All other objects are considered in connection with their intended use; paper money thus treated, i.e. regarded as medium of exchange, is not a mere scrap of paper, but a highly important, indeed indispensable, manufactured product, the most important and useful of commodities.

That its cost of production is practically nil, subtracts nothing from its importance. We do not seek in other products the sweat and blood of the producer. Have the building sites of Berlin, with a combined value of thousands of millions, have not cost a penny to produce.

To understand paper money, therefore, we must pay no attention to the paper out of which it is made; we must get used to thinking of it as an indispensable manufactured article, and protected by the State at that. We shall then have no difficulty in recognizing paper money as something with all the characteristics of a good. We shall find therein a proof, not a refutation, of the proposition that goods can be paid for only with goods.

Those who take the trouble to search the literature on monetary theory will find money constantly treated, not as a manufactured product with an exactly determined purpose (medium of exchange), but as a raw material for industrial purposes (jewelry), its function as money being regarded as merely subsidiary and transitory. Yet in many countries coins struck 100/200 years ago are still in circulation (such coins circulated until quite recently in Germany),[54] whereas goods scarcely a year old are as a rule un-saleable, and are written off at stocktaking.

If money were but a raw material for industrial purposes it would be purchased only as other goods are purchased, namely on condition that it could be passed on with the addition of interest and profit. But if the dollar already mentioned which, mined in Colorado, had circulated 10 or 20 years in China before being used to pay wages in the original mine, had on its travels been loaded again and again with interest, transport-charges and profit, what would have been left to the miner who

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[53] [Frédéric Bastiat (1801-1850) had noted the same thing a generation before Gesell. A “good” is but a service incorporated into a material object. If for any reason the service ceases, the “good” turns into a piece of junk.]

[54] [Maria Theresa Thalers still circulate in Ethiopia, struck by the Austrian mint with the date 1750.]

finally received it? Yet this loading would have been necessary if the dollar had always been bought for the silver it contained, if no one had noticed that it performed quite another service - namely exchanging one's products for consumable goods.

Money is thus the most characteristic of goods, for money, especially paper money, is used as a pure good, a commodity for exchange. Unlike the other goods, it is not bought to be consumed in the factory or kitchen, away from the market. Money is and remains a good; its usefulness lies entirely in its services as a medium of exchange. All other goods are bought for consumption (except by merchants, who make no difference between goods and money). A person produces goods for sale, but buys them for consumption; he sells goods, he buys consumables. Money alone remains a good as it performs the service of exchange. Money, above all paper-money, is thus the only useful good.

The supporters of a metallic standard commonly think of metal money merely as raw material for the goldsmith. A Mark, says the bimetallist Arendt, is the 1392nd part of a pound of gold, and the advocates of the gold standard had naturally no reason to attack an opinion that deprived their opponents of all weapons of defense.[55]

The champions of paper money, who should have demolished this fallacy once and for all, beat around the bush. Obviously they have not recognized with sufficient clarity that money itself, regardless of its material, is a useful, indeed an indispensable object; and so, in devising the inscription on paper money, they all felt themselves constrained to promise the holder something independent of the function of money: gold, interest, wheat, work, land and so forth. The exchange of goods, made possible by money alone, evidently does not seem to them a service sufficient to ensure a ready market for paper money.

The only exception known to me is the inscription on the paper money issued in 1869 by the Province of Buenos Aires. Here, for the first time, the paper itself is declared money, and the holder is not promised anything. The inscription runs:
La Provincia de Buenos-Aires reconoce este Billete por un Peso moneda corriente, 10 de Enero de 1869.[56]

I have never been able to discover whether this inscription was due to an insight or to embarrassment, like the wording of the present Argentine paper money, promising to pay the bearer on sight so many pesos - in paper money! "La Nación pagará al portador y a la vista y por medio del Banco de la Nación 100 pesos moneda nacional." Clearly nonsense, since a peso “moneda nacional” is nothing else than the same paper peso. The bank promises to hand back the piece of paper handed in for conversion.

The following proposal has been made repeatedly and even quite recently: The State prints enough paper money to buy up the whole land of the nation, thus at once solving the greatest of all social problems, the problem of how to return rent to the people. The land is then security for the paper money, but in accordance with the aim of the proposal, is not given in exchange for the notes. The holder of the paper money has to be satisfied with the security of the land just as the holder of a banknote is supposed to be satisfied with the security of the gold in the cellars of the bank (which is certainly not the case, for the holder of the banknotes satisfies himself with the services performed by them as medium of exchange. Otherwise he would, like a goldsmith in need of raw material, go and fetch the gold at once). From the standpoint of monetary technique it is a crazy proposal. It overlooks that paper money's service

[55] Chevalier, *La Monnaie*, Paris, 1866, p.36. “I must hold to this fundamental opinion, that coins are simply bars of metal, the weight and fineness of which are guaranteed by the State."
[56] Translation: The province of Buenos-Aires recognises this piece of paper as one Peso of national money.

is sufficient to mediate the exchange of goods, and that if this service is guaranteed (for which it is only necessary that no other form of money should be issued),[57] every other kind of service is superfluous.

The difficulty of grasping the notion “money” lies in the fact that the service we expect of it is utterly independent of the raw material. The material is necessary only to make money visible and tangible, so that we can assure ourselves of its existence and transfer it; it is not necessary because we expect something of it as material. Otherwise it would be impossible for a coin to remain 1, 10 or 100 years in circulation, or for a banknote to remain 24 hours in circulation. The quantity of money alone is of importance, for upon it depends, partly, the magnitude of the supply of money and the amount of commodities that we cay buy with it. Money has no properties as a material; at least no active, working properties that would be missed even if they were not there. Why did the Germans choose gold instead of silver for their money? Did they do it because they wanted to obtain sixteen times more wares for one kilogram of gold than for one of silver? The real reason is that they could use sixteen times less raw material; hence they preferred gold to silver.

Of every kind of goods for use, without exception, the buyer says "the more the better," but of the money-material, on the contrary, he says, "the less the better". Money only needs to be countable: the rest is ballast.

We buy honey because it tastes sweet, beer because it intoxicates, lead because it is heavy, a foot-ruler because it measures a certain length, a liter measure because it has a certain cubic capacity. But with money we do not ask for taste, weight, cubic capacity, or any material quality for the direct satisfaction of our personal wants. We buy money as a good that can be passed on.

A proof of the general indifference to the physical characteristics of money is the fact that not one person in a thousand is able to state how much fine gold he is legally entitled to demand for a Dollar, a Mark, a Franc, or a five-pound note. The incredulous can easily test the truth of this statement.

For this reason all we ask of money is that it should possess the fewest possible physical properties; for this reason mankind has gradually and unconsciously adopted as money material a natural substance, gold, which of all substances has been most niggardly endowed with properties. How poor in properties is gold compared to any other product, say a hammer, a book or a canary-bird! Gold has not been chosen as raw material for money for its color, weight, bulk, ring, smell, taste or chemical affinities. Gold neither rusts nor rots, neither grows nor decays, neither scratches, nor burns, nor cuts. Gold is lifeless, the archetype of death.

In the substance of money we seek negative, not positive, properties. The minimum material properties is in fact what all demand. Everyone feels for the substance of money what the merchant feels for his goods, utter indifference. If the shadow of gold sufficed, the shadow of gold would be preferred, witness the existence and popularity of banknotes. The more negative the properties of a substance, the more positive its advantages as a money material. That is the whole secret of a paper-money standard.

It is said that a universal predilection for precious metals led to their adoption as money. I believe, on the contrary, that the universal indifference of producers to gold and silver was the reason why mankind could agree to recognize these metals as money. It is easier to agree upon something indifferent, upon something neutral, than

[57] [Gesell overlooks that public acceptance is also necessary for a given money to circulate. During a bank strike in Ireland, in the 1970s, the public introduced bank checks drafted in round figures which circulated as money. The experiment was so successful that one is entitled to suspect it stopped the strike.]

upon something possessing positive properties that vary in effect for each man according to temperament. Of all natural products gold has the fewest properties, the fewest uses in industry and agriculture. To no substance are we as indifferent as to gold, hence the facility with which it could be adopted as money.

Gold has an industrial use in the manufacture of jewelry. But those who use money as a medium of exchange, producers, workmen, farmers, artisans, merchants, the State, the courts of justice, as a rule need no jewelry. Young girls may covet gold (often only because it is money); but young girls who are not producers need no medium of exchange, they create no mercantile demand for money. The desires of young girls can hardly be allowed to determine the material chosen for money. Money, by far the most important means of economic intercourse, the essential condition of the division of labor, must have some basis other than the desires of the economically weakest members of the community -young girls with a taste for self-adornment.

The material part of money has for economic life about the same importance that the leather of a football has for the players. The players do not concern themselves with the material of the ball, or with its ownership. Whether it is battered or dirty, new or old, matters little; so long as it can be seen, kicked or handled the game can proceed. It is the same with money. Our aim in life is an unceasing, restless struggle to possess it, not because we need the ball itself, the money-material, but because we know that others will strive to regain possession of it and must make sacrifices to do so. In football sacrifice takes the form of hard knocks, in economic life, of goods; that is the only difference. Lovers of metaphor may find pleasure in the following: Money is the football of economic life.

## Chapter 5.

## SAFETY AND COVER OF PAPER-MONEY

The tender new idea that sprang into being in the previous chapter, germinating amongst the clods of prejudice, must now be protected from the cold wind of doubt until it grows into a vigorous thorn-protected shrub. The idea of paper money must give the common man a feeling of security instead of making his flesh creep. The German farmer, who still prefers to keep his savings in silver rather than in gold, will come to prefer paper to silver when his hard skull can no longer reject the truth that, when all is said and done, paper offers more security than gold or silver.

It is a question, therefore, of showing not only that paper money is possible, but also that it is "covered" and secure. I wish to prove that whereas metallic money can, without breach of the law, be destroyed by the State that coined it, paper money can only fall with the State itself.

Otto Arendt's statement "our German mark is but the name for the 1392nd part of a pound of gold" cannot be refuted by the authority of the German currency laws. No law protects the holder of specie or bullion from such a legal interpretation of the conception of money. Indeed, the inscription on the former German coins, "XXX One Pound Fine", and the present inscription on banknotes and treasury notes, "The Bank (or the State as the case may be) promises to pay the holder . . . etc." show that the drafters of the inscriptions shared Arendt's views on the nature of metal money. We can therefore easily imagine the following situation: The State, for some reason, demonetizes gold, just as in the past it demonetized silver. But instead of exchanging the coins for new money, it defaces the inscription on them by a stroke of the hammer and returns the metal to its possessor with the words, "You have now, on your own admission, all that you are legally entitled to, a lump of gold of a certain weight. But this gold is henceforward not money. The State has adopted another form of money and no longer recognizes gold as money, nor will it exchange the new money for gold. Gold coins were, in your words and according to your explanation of the nature of money, protected by their content in gold. You are now in possession of this metal content; do what you like with it, the State has no further interest in the matter. You brought bars of gold to the State, and it coined them without expense to you, but at considerable expense to itself. The State now returns to everyone what it received, a gold bar. You can demand nothing more, for you have supplied nothing more."

There is no law protecting the citizen against such monetary policy. On the contrary, it is in complete harmony with current theory, with public opinion and with the inscription on the coins.

Yet such policy would be pure swindling. It would be confiscation directed against the holders of ready money, mortgages, bills of exchange, government securities, promissory notes, annuities and bonds, who would all lose a large part of their property. For mortgages, municipal or government loans, promissory notes, annuities and bills of exchange, are simply promises to deliver so many grains of gold,[58] and if gold were suddenly demonetized, it would instantly cheapen. The coins defaced by the hammer, now simple lumps of metal, would pour into goldsmiths' shops, and such an increased supply would, of course, lower the price of gold.

When silver was demonetized, its ratio of exchange to gold fell from 16:1 to 30 or 35:1 One ton of gold had for centuries bought 16 tons of silver, but after

[58] It is clear that no one can be compelled to pay debts in coined gold if the State ceases coining gold, and private coining is prohibited. No one can be compelled to deliver something which is the object of a monopoly.

demonetization it bought 30 tons or more. If silver had simultaneously been demonetized in all countries, the slump in the price of silver would have been much greater.[59] After the adoption of nickel as money, the price of nickel, until then trivial, rose several hundred per cent.

The withdrawal of the right of free coinage of gold, here sketched, almost became a reality in the year 1856. Creditors of the time found that the general increase in prices caused by the California gold discoveries injured them in favor of their debtors, so they pressed for the withdrawal of that right. Holland did in fact adopt this policy. Had not the California gold mines get exhausted as suddenly as they expanded, the fate of the gold standard would have been sealed beyond all doubt.[60]

Suppose that gold lost its privilege as money. If everyone who had abandoned subsistence economic conditions and gone over to the division of labor, everyone in short who produced or possessed goods, ceased to create with these goods a demand for gold, what would be gold's present importance? What would the importance of gold be, not being money any longer? It would have as little economic importance as silver has had since being demonetized. It would become the raw material for an insignificant industry, the least important in fact of all the industries that make up the thousand-branched tree of commerce. Who ever speaks today of silver? Who would now think of hoarding silver bars as a medium of saving? Does anyone care if the price of silver rises to 200 or falls to 50? Does anyone gain or lose, or become insolvent, if the ratio of the price of silver with other products changes? The change hits at most a few dealers in precious metals; the ordinary businessman is as indifferent to the price of silver as a marble statue is to toothache.[61] Formerly it was otherwise. A rise of a few percent in the ratio between silver and other products was enough to stop the wheels of industry, to bring about an economic crisis, to spread death and destruction, to cause suspension of payments, unemployment, starvation and social unrest.

For the price of silver, the exchange ratio between silver and other products, determined how much money people received for their products and whether their products could be sold at all. Formerly, asking how much this or that cost meant asking at the same time how much silver[62] it cost.

This is no longer true. The State, by a stroke of the pen, divorced silver from money. Let no one imagine that a great popular movement was necessary to deprive silver of the privileges that for thousands of years it had enjoyed as money. The "great monetary reform" was introduced in Germany by a few wordsmiths, and without sweat or blood defended by them against another half-dozen wordsmiths. Read, if you

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[59] It is probable that if one of the great commercial countries demonetised gold, the other nations would immediately follow its example. They would seek to protect themselves from the stream of gold from the first demonetising country, and to avoid losses such as the ones the Latin Union suffered by hesitating too long in selling off its silver. [This particular prophecy has not come true. Not only excess gold is still piled up in bank vaults, but gold is still eagerly mined from the depths of the earth to rebury it in bank vaults.]

[60] Let me draw attention again to the fact that this is a new edition of a book that appeared in 1911, i.e. before the war. The war has furnished many new proofs of this theory of money, but I have no wish to gain anything material from the war, not even for proving a theory. [The proof was simple: all the gold in the world could not have financed three weeks of war, let alone the four long years it lasted. The gold standard was abandoned during it, to resume it in 1925. The drastic drop in wages led to the 1926 General Strike, and finally to the abandonment of the Gold Standard as already described.]

[61] [In the years 1973-1982 the Hunt brothers from Texas tried to corner the silver market. They were accused of speculation. The price rose from $3 per ounce to $50, to stabilize at $11 about 1982.]

[62] In French and Spanish the word for silver and that for money are synonyms, *argent* and *plata* respectively. [Ditto for the Swahili *fedha*. In 1907 there took place a famous car race between Peking and Paris, never repeated. Prince Borghese paid the service of Mongol nomads with slivers of silver cut with a knife from ingots he carried.]

have patience, these wordy duels about monetary reform. The Huns could have written them. Empty phrases, undigested theories, cheap assertions, special pleading - such was the great conflict of those days over monetary reform; and in every succeeding one, up to the present time, the arguments have been quite as superficial. Nothing has ever been heard of a medium of exchange, of the needs of goods awaiting exchange, of the division of labor. It really seemed as if the German mark were nothing more than the 1392nd part of a pound of gold.

Statements in favor of the gold standard were taken for granted. Nothing was tested; there was no trace of scientific inquiry into the subject. Even today, after many bitter experiences, we have no legal definition of the word "money" to which recourse could be had in case of doubt when applying monetary laws.[63]

It is also a fact that today's cultured men and women, to say nothing of peasants and laborers, have childish ideas about the nature of money; that "many persons, even economists of repute, lack a thought-out theory of money".[64]

In these circumstances we are justified in asking: Where are the security and cover of German money, the German Mark? They are certainly not in the metal. That is obvious from the fact that silver, which was more closely united to German money than gold, was one good day legally demonetized without fuss or trouble.

Nor is the security of money guaranteed by the law, for a legal definition of the German Mark is wanting - so completely wanting, that the question: What is a German Mark according to law?, invariably receives the same witty answer: "A mark is 100 pfennigs" - no matter whom one may ask.

The only real security would be the monetary education of a sufficient number of people who, in the event of legislation affecting monetary standard, formed a bodyguard, so to speak, to protect the mark from bunglers and swindlers. But at present this security does not exist, for the indifference of the general public, of science, of the press, of businessmen, to monetary theory is so great that it would be difficult to gather together among the millions of Germans a dozen persons for a serious discussion of the subject.[65]

What, then, makes the German mark secure from bunglers and manipulators? The leaflets of the Society for Protecting the German Gold Standard? Are not these defenders also bunglers? Examining such leaflets attentively, it is apparent that the writers have no idea of the functions that money has to fulfill. The fact is never mentioned that money should secure, accelerate and cheapen the exchange of products; that the market, not the metal content, nor its weight, is the criterion for money excellence. Money is here viewed from the lowest possible standpoint, that of the goldsmith or banker. Yet at present victory rests with this Society! What heroes must the attackers have been!

That the metal content provides no security or "cover" for the German mark we have proved from the history of silver. The conclusion to be drawn from silver is so obvious that it should alone be enough to brand as a falsehood the assertion that a

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[63] [It is still true at the beginning of the 21st century. Economics textbooks give four definitions of money, which is the same as no definition. The contradiction medium of exchange/store of value turns money into an oxymoron, as indefinable as a square circle, a married bachelor, virtual reality, etc.]

[64] (Knut Wicksell, Interest and Prices). The post-war experience of inflation, deflation and stabilisation have convinced most people that the monetary standard is the very foundation of national life. Nevertheless the new constitution of the German Republic makes no mention of the monetary standard. After the German Government had caused the greatest inflation the world has ever known, our legislators, with German thoroughness (deutsche Gründlichkeit), determined in lengthy debates the colour of the nation's flag-and completely forgot to determine the standard of the nation's money.

[65] Of late the "Society for a Free Economy has made some progress. The number of those who intend to push the idea of Free Money, orally or in writing, is constantly increasing.

mark is the 1392nd part of a pound of gold, and that it is sufficiently secured by its metal content.

Further, it is well established that through the play of forces known as Gresham's law,[66] gold can be driven out of a country by the issue of paper or silver money whenever the party in power so determines.

Thus during the years 1872-1874, when Germany was flooded with the French war indemnity, German imports exceeded exports by 3 646 million marks, or almost the whole amount of the indemnity. Yet before the war German exports had exceeded imports.

The State need only coin more silver, or the Bank of Issue print more notes, and before long gold coins begin to cross the borders. But if the law determines whether gold gets driven out by some other form of money, where is the security and cover of gold money? Silver and gold were in circulation in France when John Law began to experiment with paper money. The security of French gold money was so perfect that in a short time it disappeared, leaving only paper money in circulation. The experiment was repeated with the assignats during the French Revolution, with the same result. Later still, when the war indemnity was being delivered to Germany, paper money cleared the market of gold once again.

Three times this experiment was repeated in France, and always with the same result. Three times the security purportedly given by metal proved illusory. In Scotland, England, Austria, Russia, Spain, Italy, the United States, South America, metallic money has countless times, as often as the ruling power (autocrats or people's representatives) desired, been expelled by paper. The metal has never been able to protect the money of these countries from bunglers and swindlers, just as the silver content of the Thalers failed to protect German money.

The belief that the mark is protected from bunglers and swindlers by its gold content shows complete ignorance of monetary history.

But quite apart from Gresham's law - whom did the metal content of money protect? Obviously only the chance holders of the four or five billions of coined money circulating in Germany. But what importance has this quite insignificant quantity of gold in comparison with the 1 000 billion of public debt, mortgages, bills of exchange, leases and other rent agreements? Are these 1 000 billion also covered by the metal content of the five billion of gold? The only security for these 1 000 billion is the law; the law, not the metal content of the coins, determines the meaning of the German mark in mortgages, government securities, etc. Forty years ago all German mortgages, securities and bills of exchange were payable in silver, yet the law forced debtors to pay their debts in gold.

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[66] About Gresham's law: When in any country the stock of money exceeds the needs of the exchange of products, the result is a rise in prices. This rise hinders export and facilitates import. The balance of foreign trade consequently shows a deficit of export in relation to import, which is most easily met by exporting gold. This export of gold, which entails a decrease in the stock of money in the country, reduces prices and therefore automatically re-establishes equilibrium between export and import. But if the State takes no heed of the warning given by the export of gold and continues to increase the stock of money by the issue of paper money, gold continues to leave the country until importers begin to find it difficult to obtain gold (or foreign bills of exchange) to pay for their imports. These difficulties are at once translated into a premium, or agio, upon gold, and this premium then regulates foreign trade by putting difficulties in the way of import and facilitating export. But at the same time the premium renders the circulation of gold within the country difficult, since government offices and courts of justice accept only paper money, and the varying premium is soon considered a vexatious concomitant of gold by the Public, which becomes unwilling to accept this form of money. Gold cannot circulate, it becomes superfluous and collects in the banks where it lies fallow until sent abroad by its possessors to seek interest. It thus happens that if within a country gold and paper are in conflict, paper always wins. Paper-money, or base currency, drives its rival, gold, over the borders, and this "law" is called Gresham's law in honour of the Elizabethan statesman who discovered, or rediscovered, it.

From this same standpoint, the security given to the German mark by its metal content proves illusory.

The coined money of a country is a drop in the ocean of non-coin money.[67] And at any time the play of forces known as Gresham's law can remove even this infinitesimal security.

In the above-named countries, when gold and silver money was expelled by paper money and copper coins, when in many cases this paper money became as worthless as the paper upon which it was printed, all agreements between debtor and creditor -government securities, mortgages, bills of exchange - sank simultaneously to the level of the paper-money!

Once again I ask: where was then the security of metal money?

Money requires the State. Without the State money is not possible; indeed the foundation of the State may be said to date from the introduction of money. Money is the most natural and the most powerful cement of nations. The Roman Empire was held together more by the Roman currency than by the Roman legions. When the gold and silver mines became exhausted, and coins could no longer be struck, the Roman Empire fell asunder.

The fact that money is as indispensable as the control of the State over it, gives the State unlimited power over money. Compared to this unlimited power the metal cover of money is like chaff driven by the wind.

Money is as little protected from abuse of State power by the material out of which it is made as much as the constitution of the State is protected from arbitrary usurpation of power by the parchment upon which it is written.

Only the State itself, the will of those in power (whether autocrats or representatives) can protect money from bunglers, swindlers and speculators - on condition that they be capable of purposefully using that power. Up to the present they have never, unfortunately, possessed this capability.[68]

What has here been said of metal money applies, of course, also to paper money. Paper as such offers no security either to the holders of the money itself or to the holders of promises to pay (bills of exchange, government securities, titles to pensions, leases and other rent agreements, insurance policies mortgages, bonds).

Paper money is in this respect somewhat more insecure than metal-money; but, to compensate for this, it is more completely protected by the State.

We have seen that the State, without infringing the law, and in complete harmony with current monetary theory, can by a stroke of the hammer convert coins into the raw material of which they were made. The State can deprive gold coins of the privilege of being money. The loss of the privilege of being money would depress the price of gold. The State is bound by no law to compensate the holders for this loss and, if it decides to compensate them, it acts not in accordance with the law but merely in accordance with fair play, an elastic term. Much depends upon the class of society that invokes it.[69]

The legal position of paper money is much stronger. The State cannot deprive paper money of the privilege of being money without compensating the holders. By

[67] With a circulation of five billion gold marks in Germany, the circulation of bills of exchange was 40 billion, the amount of mortgages 143 billion, etc. (all being agreements to pay money). Consequently the security given by the metal content of the coined money is negligible.

[68] [The general abdication by the European States of their monetary power to a European Central Bank that issues money with no regard to the interests of the real economy, especially of the marginal areas, fully confirms Gesell's intuition.]

[69] The German landowners asked the State to increase the cost of the nation's food by erecting tariff-barriers, and their request was granted. The German working class asked the State to reduce the cost of food by abolishing the tariff-barriers, and met with a stern refusal.

issuing paper money the State has received something for which it is in the holder's debt. This something must be given back; from whatever standpoint the matter is considered, this cannot be denied. The best proof of the duty of compensation is its obviousness.

The State deprived Thalers of their privilege of being money and compensated their holders by exchanging Thalers for the new money.[70] There was no legal right of compensation, but sufficient grounds were discovered for this action apart from the law. The State had, for example, by levying taxes, compelled its citizens to purchase Thalers. To pay his taxes, a peasant had first to purchase Thalers by selling his cow. Because the State demanded silver, the peasant had to buy silver, even if he had no personal need for it. The State therefore undertook the duty of assuring the sale of these Thalers from which the duty of compensation might be deducted.

The reasons for such compensation are worth hearing, but we know that none are as deaf as those who will not hear. How useful were those reasons?

To give reasons for a right is to acknowledge its weakness. If the German landowners had known, when the gold-standard was being adopted in Germany, that the demonetization of silver would cause a slump in its price sufficient to have freed them from 50% of their mortgages contracted in silver Thalers, their attitude to the question of compensation might have been very different. But they understood it too late. Otherwise they would have adopted the monetary theory that declares a Thaler to be the thirtieth part of a pound of fine silver. They would have insisted on paying their debts, contracted in terms of silver, in uncoined silver at the ratio of 1/30th of a pound of silver per Thaler. This would have been an equally profitable and more honorable line of conduct than the one they actually adopted, i.e. raising of their rents through protective duties.

With paper money there are no such uncertainties. There are no laws and no interpretations of the law, no arguments to support the State's duty to compensate, the duty being obvious. For this reason the security of paper money is greater than that of metal money. The security of paper money is the interests and ideals that weld a people into a State. It can only go down with the State itself.[71]

Besides the imaginary security of money in relation to the absolute power of the State, a "cover" or economic security is also claimed for money. Granted that the State makes the best possible use of its powers; granted that there is no abuse of power, the advocates of a metal standard say that there is still no guarantee that the holder of money will have to recoup the outlay made in obtaining it. Metal money contains in itself the material for recouping this outlay; it has "intrinsic value" (for the moment let us ignore the meaning of this term), whereas paper money has no content and must seek its cover elsewhere, apart from its material.

This objection is void and shows confusion of thought, as already learnt in the chapter "The so-called Value" and in the above discussion of the security of money. The mere fact that all the holders of the demonetized silver coins, without exception, made use of the right of exchange, shows clearly that metal money does not fully "cover" the holder for his outlay in obtaining it. If the cover had been full, the holders would have kept the silver.

To what has already been said in reply to the above objection let us reasonably, though perhaps superfluously, add this:

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[70] That the holders of Thalers could suffer loss through withdrawing the privilege of their silver from being money was, and remains in contradiction with the theory of metal money.

[71] [This actually happened in Africa at the outbreak of war in 1914. Herr Schnee, the German colonial governor, insisted in trundling various cases of German colonial money through the bush for two years. He did not understand its utter worthlessness after the British had invaded Tanganyika. General Von Lettow did, and as soon as the opportunity arose, he set that heap of paper on fire with his own hands.]

A good is covered as long as someone is prepared to give the usual quantity of other goods or money in exchange for it, in other words as long as there is demand for it. But no good acts as cover for itself. The division of labor and the word "good" imply that the product of the producer's labor should be useless to him. What, we repeat, can tailors, shoemakers or chemists do with their products, or a farmer with the gold of the coins, if no one bought anything from them?

By the “cover” of money is meant its usefulness, like that of provisions and tools for their possessor. It is thought that the possessor of money finds it useful by reason of the material of which money is made. Money is to be at once money and a material for the satisfaction of personal needs. But if money is a good, this wish is for an impossible hybrid.[72] The moment the money-material became useful to all its possessors, money would cease to exist. The utility of the money-material would force the coins into the melting pot. But money is indispensable precisely because it is impossible to turn it into a consumer’s item.

As long as the division of labor makes us produce goods, products useless to us personally, so long we need a medium of exchange, money. Demand for money is permanent and continuous; it is based upon the division of labor, the foundation of economic life. Why should anyone have the power to use up and destroy money? Would not the possibility of consuming the medium of exchange endanger the exchange of goods and the division of labor?

A cover for money, as the above objection implies, does not and cannot exist.

What covers money is not the material of which it is made, but its function as medium of exchange, the economic demand for it. In the last analysis money’s cover is the inexhaustible treasures that the division of labor brings within reach of humanity.

Apart from the division of labor there is no other cover. The division of labor assures a never-ending stream of goods and a never-ending demand for a medium of exchange, i.e. money, regardless of what material it is made. Gold, silver or paper have no influence whatever upon the supply of goods, i.e. upon the real cover of money. Whatever the form of money, the products of the division of labor must be offered in exchange for it. Whether a farmer receives gold or paper for his potatoes has no influence upon the quantity of potatoes he brings to market, for in either case he brings all he can spare. Whether the Reichsbank has 10 or 100 tons of gold in its cellars has no influence upon the supply of goods and upon the demand for the medium of exchange. This demand for money (wares for sale) is its real cover, and such cover is independent of the material of which money is made.

Goods, demand for money, and cover of money are three different expressions for the same thing. What is the cover of a railway share? Is it rails and embankments? Everyone knows that the covering of a railway share is the bulk of goods daily offered for transport. The division of labor covers the share.

The same is true of what appears to be a certificate of possession of money, i.e. money itself. Without freight and passengers a railway share is worthless; without the division of labor and the stream of goods for sale, money becomes the most useless of objects; paper money becomes waste-paper, and metal money raw material for the least important of industries.

Let us now summarize:

- The money-material is no security against misuse of State power in monetary matters.

[72] Usually when a German wants anything he also wants the opposite." Bismarck

- Even disregarding Gresham's law, the money-material can cover coined money only to a very small extent (silver used to cover but 40% of the Thalers). The thousand-fold greater volume of contracts payable in money (mortgages, government securities etc.) remain quite uncovered.
- If a certain form of money is demonetized, the State has the duty to compensate only in the case of paper money. With metal money this duty must be defended against the opposition of large sections of the community whose interests are at stake. For this reason the security of paper money is greater than that of metal money.
- The money-material cannot influence the demand for money and cannot, therefore, serve as cover for money. The money-material can neither cause, nor influence, nor control the demand for money.
- Money is, independently of its material, at all times covered solely by the division of labor.
- The security of money can be attained only by a sound currency policy shared by the people and their rulers.

## Chapter 6.

## THE PRICE OF MONEY

We have by now shown, with the detail demanded by the importance of the subject, that money can be made of paper, or, which is the same, that a higher price can be obtained for paper money than for the same amount of paper without the privilege of being money.

Let us now ask how much higher the price of monetized paper should be than the price of paper as such, which is the same as to ask what the exchange rate between money and goods ought to be.

This important question is one of burning interest to the producer, in fact the only one of interest. For producers the substance of money is mere ballast; but their attention is riveted to questions like: How much money do you ask for your cow? Or, what do you offer for my tools?

The success or failure of the whole process of production depends on the answers to such questions.

If the exchange rate between goods and money changes, everyone selling goods receives more or less money, and upon selling, his money receives correspondingly less or more goods. If everyone bought and sold simultaneously, a change in the price of money would not matter much.

But not everyone buys goods immediately with the money he has received; for such persons it is certainly not a matter of indifference whether prices changed in the interval between selling and buying. Still less are prices a matter of indifference to debtors and creditors. To them the questions: How much of my produce must I sell to meet the interest upon my debt and to provide for repayment? (or: How much produce shall I receive for the money coming in as interest and repayment for the loan I have granted?), are of vital importance. We shall also see that the question of prices, considered simply from the technical standpoint of commerce, is decisive for the life or death of the exchange of goods, and with it of the division of labor, the foundation of economic life.

To illustrate the importance of prices, let us consider only the relations between creditor and debtor.

The assets of a debtor (mortgagor, issuer of bonds, acceptor of bills, tenant, holder of life-insurance policies, taxpayer) usually consist of goods, machinery, land, cattle, whereas his liabilities always consist of a definite sum of money. The debtor can obtain money to meet his liabilities only by selling for money part of his assets, usually his produce.

If the exchange rate goods-to-money changes, the ratio of the debtor's assets to his liabilities evidently changes in the same proportion. Suppose, for example, that the price of wheat is 250 per ton (the price in Germany after the introduction of import duty on wheat) and that a farmer needs one quarter of his harvest to provide for taxes, insurance and interest, including redemption charges on mortgages (or for rent, in the case of a tenant-farmer). If now the duty on wheat is removed, the farmer may have to sacrifice one-third of his harvest to make the same payments. This increase may mean the disappearance of the debtor's profits, and hence his ruin.

The position is reversed if prices rise, and it is also, of course, reversed if looked at from the standpoint of the creditor. He gains exactly what his debtor loses, and loses exactly what his debtor gains through a change in the level of prices.

Credit has expanded enormously in modern times. German debtors owe German creditors some three to four hundred billion marks.[73] The interest and amortization for this sum can be raised only by the sale of the products of labor. A small change in prices is sufficient to throw a burden of billions upon billions upon one of these two great classes, to the benefit of the other.

A 1% average fall in prices, the commonest of events with our much touted gold standard, is enough to throw upon the German debtors a greater burden than the five billion of the 1871 war-indemnity threw upon the citizens of France.[74]

Or suppose a taxpayer pays 100 annually, in direct and indirect taxes, to meet his share of the interest and sinking funds on local and government loans. The ratio of exchange between money and the product of his labor determines whether he must devote ten, twenty or fifty days to earning that money.

Should monetary policy aim at raising prices, thus exploiting the creditor for the benefit of the debtor, or should it lower prices, thus enriching the rentier class? Briefly, should we let creditors, or debtors, decide the question? Should monetary policy be left in the hands of scoundrels? Answer: we do not intend to cheat anyone, and private interests must never influence the management of money. Money must be managed in the interests of the economic common good, not of private individuals.

Independently of time and place, money should always obtain the price it obtains today. What the holder of money has paid for it in commodities he should be able to demand in commodities tomorrow, or ten years hence, by spending it. In this way the debtor pays back what he has received, and the creditor receives what he has given, neither more nor less.

That is self-evident and requires no proof.

[73]Throughout this book, in accordance with American usage, a billion means 1,000 millions. The German word is "milliard."

[74] [The reference is to the Franco-Prussian war of 1870-71.]

## Chapter 7.

## CAN THE PRICE OF MONEY BE MEASURED PRECISELY?[75]

If the price of money is to remain constant, proof must be given that it has actually remained constant. Without such proof, either debtors or creditors will be dissatisfied, the first demanding the lowering and the second the raising of the price of money. The only way of silencing the complaints of creditors and debtors is to prove in black and white that the price of money has remained unchanged.

The conflict between the advocates of the gold standard and the bimetallists turned upon the question of whether the price of money had changed. Both sides debated the question under the illusion of the so-called "value" ("intrinsic value," "store of value") and therefore it could not be settled. This fiction reduced the bimetallists' finest scientific proofs to absurdity again and again. If the bimetallists, with the help of laborious statistics, showed that prices had fallen 10, 20 or 50% since the introduction of the gold standard, the champions of the gold standard replied that this objection was meaningless, since the question was not the price of money but its "value"!, which the bimetallists also admitted. The general fall in the price of commodities was ascribed to the decrease of costs of production and transport, i.e. to technical progress. Only a few convinced opponents of the theory of value could succeed in proving that the introduction of the gold standard was a blunder, through which debtors (among them the State) were plundered to the profit of creditors. The bimetallists would have won, and won with ease, had they confined the issue to the price of money, but they disarmed themselves by their docile acceptance of the fraud called "value".

The price of money can be expressed only in commodities. If barter is excluded, the price of commodities can be expressed only in one way, namely by a sum of money, but the price of money can be expressed in as many ways as there are kinds and qualities of commodities, terms for the delivery of commodities, markets for commodities. If we read every current market report, price-list and catalogue in a country, we know what its money is worth at that moment.

But if we need to find out whether the price of money has changed, it is not sufficient simply to compare the prices of commodities today with their prices yesterday. For it is likely that the price has increased for ten million items, and decreased for another ten million.

Keep in mind that a change in the price of coal, wheat and iron is, of course, vastly more important than a change in the price of needles, canaries or buttons. For instance, A person has bought: -

| | 1906 | 1907 |
|---|---|---|
| 1 tobacco-pipe | 1.00 | 1.10+ |
| 1 tin of boot-polish | 0.50 | 0.60+ |
| 1 doz. steel pens[76] | 0.50 | 0.80+ |
| 1 hat | 3.00 | 2.50- |
| 1 pair of boots | 4.00 | 3.00- |
| 1 pair of trousers | 11.00 | 10.00- |

[75] By "Price of money" is meant the amount of commodities/goods that must be given in exchange for a certain amount of money.

[76] [For those who have forgotten what they look like, they were stamped pieces of steel with a groove in the middle, to be dipped in ink and inserted in holders to write with.]

| | | |
|---|---|---|
| Total | 20.00 | 18.00- |

Thus although one half of these six articles increased in price and the other half decreased, yet the "average price" fell by 2, or 10%. Judging by the above commodities the buyer will observe an increase in the price of money of approximately 11%. The buyer receives 11 % more commodities for his money than formerly.

To reestablish equilibrium it is not necessary to re-establish the former exchange rate of the commodities with one another. It is enough to lower the price of money. The price of all commodities must simply rise by 11%. Money has no influence upon the exchange rate of the commodities among themselves. If, simultaneously, boot-polish rises, and a pair of trousers falls in price, that is the result of changed conditions in the production and sale of these commodities. Only when, "on the average", more or fewer commodities of the same quality are exchanged for the same amount of money, can we say that the ratio of exchange of commodities and money has altered. Therefore, to re-establish the former equilibrium, an increase of 11 % (11.1 %) must be made upon each of the above six articles, no matter what their former prices were. We should then have: -

| | | |
|---|---|---|
| 1 tobacco-pipe | 1.10 + 11.1% | 1.22 |
| 1 tin of boot-polish | 0.60 | 0.67 |
| 1 doz. steel pens | 0.80 | 0.89 |
| 1 hat | 2.50 | 2.78 |
| 1 pair of boots | 3.00 | 3.33 |
| 1 pair of trousers | 10.00 | 11.11 |
| Total | 18.00 | 20.00 |

The total is now 20 as before.

This uniform proportionate increase can only come from a cause acting uniformly upon all commodities, not from changes in the various costs of production. Money alone can act uniformly upon the prices of all commodities.[77] To re-establish equilibrium we need only bring more money into circulation until prices have risen by 11 %.

To measure variations in the price of money we must therefore determine the average price of commodities and compare it with the average price of some earlier time.

Thousands of millions are at stake here, since the price of money determines the prosperity or the ruin of creditors and debtors. Careful work is therefore necessary; the method employed must be proof against vested interests and must give an exact scientific result; otherwise there will be no end of complaints from debtors and creditors.

Unfortunately this exact, unimpeachable result is not attained by the methods hitherto proposed. Dismayed by the difficulty of officially determining the prices of

[77] General changes of price affect the relation between debtor and creditor, between the earning class and the stockholding class. This affects the demand for, and consequently the price of, the (very different) commodities bought by these two classes. This reaction is not treated here, as it is immaterial to the understanding of this part of the subject.

millions of commodities of different quality, at different places, and of classifying them according to their relative importance, statisticians have proposed to choose a limited number of commodities from among the staple articles bought and sold at the exchanges, and to estimate the relative importance of these commodities by the amount of capital sunk in their production and marketing.

In this manner Jevons, Sauerbeck, Soetbeer and others have compiled their "Index numbers."

To facilitate the understanding of a matter of vital importance to economic life, I shall here print such a table - with the prefatory remark that all the figures in it are fictitious and are used simply as illustrations.

**Table for the Calculation of the Average Price of Staple Commodities**

| | | 1860 | | | 1880 | | | 1900 | |
|---|---|---|---|---|---|---|---|---|---|
| | a | b | c | a | b | c | a | b | c |
| | Price | Qty. | Total | Price | Qty. | Total | Price | Qty. | Total |
| Wool | 1.00 | 100 | 100 | 0.80 | 90 | 72 | 0.70 | 40 | 28 |
| Sugar | 1.00 | 20 | 20 | 0.90 | 90 | 81 | 0.80 | 110 | 88 |
| Flax | 1.00 | 70 | 70 | 1.10 | 40 | 44 | 1.20 | 10 | 12 |
| Cotton | 1.00 | 20 | 20 | 0.90 | 40 | 36 | 0.80 | 60 | 48 |
| Wood | 1.00 | 150 | 150 | 1.20 | 100 | 120 | 1.30 | 80 | 104 |
| Iron | 1.00 | 50 | 50 | 0.80 | 100 | 80 | 0.70 | 130 | 91 |
| Wheat | 1.00 | 400 | 400 | 0.80 | 300 | 240 | 0.75 | 260 | 195 |
| Meat | 1.00 | 150 | 150 | 1.20 | 200 | 240 | 1.40 | 260 | 364 |
| Indigo | 1.00 | 30 | 30 | 0.80 | 5 | 4 | 0.75 | 1 | (1) |
| Petroleum | 1.00 | 10 | 10 | 1.10 | 35 | 38 | 1.20 | 49 | 58 |
| | | 1 000 | 1 000 | | 1 000 | 955 | | 1 000 | 989 |

Explanation: According to this table the average price of these ten commodities changed from 1000 in the year 1860 to 955 in the year 1880 and 989 in the year 1900.

The quantities in the three columns (b) must of course always be brought to the same total amount (1000) if the result is to have meaning. The figures chosen are unimportant; it is only necessary that the ratios of the separate quantities among themselves in each column (b) should be consistent. If for instance, we reduced the sum of these quantities in our table to 500 or 100, the final result would be the same; the ratio of the numbers 1000 - 955 - 989 would remain.

Each figure in the first (a) column is the price for the quantity of the commodity obtainable in the year 1860 for one monetary unit. They were 220 grams of wool, 1.53 kilos of sugar, 197 grams of flax, etc. For this reason all the prices appear as one in the first column. The figures in the second and third (a) columns, for 1880 and 1900 respectively, are the prices for the same amounts of commodities obtainable for one unit in 1860; that is, again 220 grams of wool, 1.53 kg of sugar, 197 grams of flax etc.

To illustrate the chief difficulties posed by this method of determining the general level of prices, I have matched commodities in twos: one of decreasing importance in the economic life of the country is followed by one of increasing importance.

Wool and sugar are an example. German sheep breeding has steadily declined during the last decades and wool has by no means the same importance in German economic life as it had 40 years ago. At that time the price of wool depended upon the price of an enormous flock of sheep and upon the rent of a large tract of country used for sheep grazing. Today German agriculture is hardly concerned with the price of wool. If it fell from 100 to 50, scarcely one German farmer in a hundred would be aware of the fact; wool-merchants, weavers and cloth-merchants alone would suffer.

Only by "weighting" the price of wool with the quantity bought can we reduce the price in the above table to its real importance. In percentage, the numbers are 100 - 90 - 40.

Of sugar the reverse is true. The German beet-sugar industry has expanded greatly since 1860, not only absolutely speaking, but also relative to other industries. Many sheep-pastures have been converted to beet-fields; large numbers of German farmers and considerable amounts of capital in land, factories and stores are affected by the price of sugar. Sugar therefore gets a place of increasing importance in our table.

It is the same with the other pairs of commodities: flax and cotton, wood and iron, wheat and meat, indigo and petroleum.

If we can make sure that: -

1. The data are complete,
2. The separate prices are correctly ascertained,
3. The estimates of the comparative importance of the separate commodities are correct,

the result will doubtless be unobjectionable.

But this is a large assumption. There are millions of separate commodities, each with its own differences of quality, as any catalogue of any firm shows. Take, for example, a catalogue of photographic articles, of drugs or of hardware. A thousand different articles strike the eye. And how are the prices to be officially ascertained? Furthermore, factories have for their different customers blue, red, green and white quotation-lists with different rates of discount. What color will the official price-collector be given?

But if there were no other, simpler, methods of reaching a sufficient degree of accuracy, we might be content with an approximate result: determining not the average price of all commodities but of 100, 200 or 500 of the most important ones.

If the work of price-collecting was left to the Chambers of Commerce, and the price average calculated from there, no great objection could be made as regards impartiality towards debtors and creditors.

Absolute precision could not be obtained, since

1. The prices of commodities cannot be exactly ascertained by third persons, especially if these persons are government officials.
2. The estimate of the relative importance of the different commodities is exceedingly intricate.

But is this sufficient reason why we should make no attempt at measuring the price of money? The tailor who measures cloth does not use the Standard Meter of Paris; his customers are satisfied with the wooden yardstick. The rough result obtained by the above method of ascertaining the price of money would be preferable to the empty protestations of the President of the Reichsbank. What do we know today of the price of money in Germany? Nothing but what our own observation tells us, or what interested persons, without proof or fact, choose to assert.

Compared with this blind ignorance, an approximate measurement of the movements of the price of money would be of immense practical and theoretical advantage. Such a measurement would perhaps bring surprises and embarrass the worshippers of the gold standard, but is this enough reason for giving it up? Does the judge take into consideration the thief's embarrassment when framing his questions for the jury? Is not a tallow-candle better than inky darkness, scientific doubt better than blind superstition?

For 40 years we have been put off with the assertion that the German monetary standard is an excellent one, and for 40 years we have been waiting in vain for proof.

Statistics of prices collected by the above method would give us a basis for examining the correctness of this assertion. The reason why such statistics have not been compiled up to the present is fear of the unwelcome light they would throw upon our present currency administration. Conventional wisdom hates science.

It is curious to observe how the same persons who are blind to the acrobatics of the gold standard suddenly become meticulous pedants and raise the claims of accuracy beyond all practical requirements when considering a paper-money standard and the possibility of its being measured. The complaint that within short periods of time, prices, under the gold standard, rise or fall 10-20-30% is met with the counter-complaint that the proposed method of measurement is not absolutely reliable, that it is not free from error, though possibly the existence of such errors cannot be proved.[78]

But even such malevolent pedantry can be silenced, provided we are prepared to take a certain amount of trouble. For what is the problem at the bottom? It is the joys and sorrows of creditors and debtors following price changes; whether by year's end traders have benefited or harmed by a rise or fall in prices; whether wage-earners, officials, rentiers and pensioners can buy more or less with their take-home pay.

To ascertain this beyond the possibility of error it would only be necessary to pass the following law: All producers (farmers, manufacturers etc.) are required to furnish the amount of commodities they produce, and the prices obtained, to authorities designated for this purpose, e.g. Chambers of Commerce. The figures would be collated and the result communicated to the Central Bureau of Statistics. The communication would be somewhat as follows: -

| | |
|---|---|
| 500 tons of wheat, @ 350 per ton | 175 000 |
| 2 000 tons of potatoes, @ 50 per ton | 100 000 |
| 10 000 liters milk, @ 0.3 per liter | 3 000 |
| 600 meters boards, @ 40 per meter | 24 000 |
| 5 million bricks, @ 5 per thousand | 90 000 |
| 200 sheep, @ 120 per head | 24 000 |
| 500 doz. straw hats, @ 10 per doz. | 15 000 |
| Annual production of the District X. | 431 000 |

At the Central Bureau of Statistics the amounts returned by all the districts would be added together. The grand total would give the point of comparison for determining later variations from time to time. For these new measurements new

[78] To show up the errors complained of in this method of measurement, critics would have to provide a method of measurement of their own. But this they refuse to do, because the method would be applied to the gold standard, which could not stand the test. They prefer therefore to speak of "improvable" errors and to arouse the suspicion in lay minds that what is "improvable" is, for that very reason, particularly dangerous.

prices, ascertained by the local collecting agencies, would be incorporated in a calculation similar to the one sketched above. The new total would give the average change of prices for the whole production of the country. Prices would therefore have to be collected as often as measurements were desired, but the amounts produced would only be taken annually. For foreign commodities import statistics would do.

Since the volume of production varies as much as prices do, the new statistics of production would not be immediately available. To obtain comparable quantities the new amounts of production must be used first at the old prices, and then at the new ones. The comparison of these two figures would give a valid indication of the movement of the price of money.

Merchants' stocks are left out of this calculation. They are included in production, and we may assume that changes revealed by statistics of the prices of production would apply in the same proportion to the goods held by merchants. It would therefore be a useless complication to include merchants' stocks in the statistics of prices. The same is true of wages, which are already included in the price of goods. It may also be assumed that if factory prices are generally constant, the cost of living must also be constant; that workmen, officials, stockholders and pensioners will be able to buy the same quantity of goods for their money. (Workmen's house-rent, consisting chiefly of interest, cannot be taken into consideration in this connection).

Means of production like land, houses, machinery, etc., must not be included in these statistics. They are no longer goods for exchange, but goods useful to their owners depending on what use they make of them. And the “price” of things not for sale is a matter of indifference.

That part of the instruments of production consumed by "wear and tear", and written off, is transformed into goods and reappears regularly in the market. It is thus sufficiently represented in the prices of wares.

By this plan, the State neither ascertains the prices nor estimates the importance of separate commodities. The whole exercise is carried out by the people themselves. The price of money is thus ascertained impartially, outside the sphere of politics. The people play the main role in the money question.

The duty to supply the figures to be placed at the disposal of the State would hardly be a burden on the business world, while the records required would be extremely useful to the producer, showing him to what extent his balance was affected by the management of the monetary standard. He would learn how much depended on his activity and how much on the activity of the Reichsbank.

The weightiest objection to this method is that individuals interested in the rise or fall of prices (debtors/creditors) would falsify their reports; farmers in debt, for example, would endeavor to prove that prices had fallen, in order to cause the State to raise prices by issuing money - a rise in prices being equivalent to a general relief of debtors. But this danger is not great, since everyone would know how infinitely little his declaration would affect the total result. If an indebted farmer wrongly declared a loss of 1 000 marks on a turnover of 10 000 marks, this would be a negligible quantity in comparison with fifty billion marks, the turnover of Germany as a whole. False declarations could be made punishable, and individuals would ask themselves whether the risk was not out of all proportion to the expected gain.

Each declaration would also be counterchecked. If the majority of farmers reported a rise in prices, an exception would be noticeable, and the falsifier would have to be prepared to face an inquiry.

Obviously this procedure takes no account of the illusion of "value".

Goods are paid for with goods, and money can be measured only by goods, specifically by their material characteristics. There is no other measure for money. I have given goods for money and I shall receive goods for it. Not work, not sweat. In exchange for my money someone gives me an article. How he came into possession of it, how long he worked upon it, is his concern, not mine. I am interested solely in the product. Labor must be sharply distinguished from the product of labor, and wages must therefore be rejected as a measure of the price of money. Wages do indeed depend upon the product of labor and not, as Marx asserts, upon the factory clock. But wages are not identical with the product of labor, inasmuch as rent and interest must be deducted from it. But wages plus rent plus interest equals the product of labor, which measures the price of money in the form of goods as already seen.[79]

[79] I use the word "measure" reluctantly. A measure is always a part or multiple of the object to be measured; the length of a bale of cloth is measured by the length of the yardstick. But what part of a horse can be found in the dollars for which it is sold? For 100 years economists have called money "a measure of value" and none of them has as yet felt the need to improve on this manifestly erroneous expression.

That money and commodities are exchanged does not prove that they have something in common; on the contrary, it is because money and commodities have little or nothing in common, it is because they are incommensurable, that they are exchanged to the advantage of both parties. But how can we "measure" two things that lack a common property?

This criticism also applies to the expression “purchasing power of money,” which causes the same illusions and must be rejected. For price is the result of bargaining and is influenced by thousands of factors.

A real measure, like the standard platinum Metre at Paris, is kept in a special compartment deep in the earth in order to remove it from the influence of variations of temperature. Apply such a measure to the action (bargaining) on which price is based and you will at once recognise the illusory character of the expressions "value", "purchasing power", "measure of value", as applied to money.

And perhaps, if you are a bad mathematician but a good philosopher, you will then discover the term that economists can henceforward without reluctance employ.

## Chapter 8.

## DETERMINING THE PRICE OF PAPER MONEY

The theory that the ratio in which commodities are exchanged is determined by the amount of work necessary for their production cannot be applied to paper money. Paper money has indeed a price but it has no "value", since it has cost no work. Paper money has no "intrinsic" or "extrinsic" value, no "value as a substance"; it cannot serve as a "store of value", a "conserver of value" or a "means of transport of value"; it is never "undervalued" or "over-valued". The price of paper money cannot "oscillate about its value as centre of gravity" (Terminology of the theory of value).[80]

Paper money must therefore go its own way; it is completely subject to the forces determining price, and serves but one master.

The forces that determine price are none other than demand and supply. To answer the question: “What determines the price of paper money?” we must therefore understand the meaning of these words clearly.

On asking, “What is demand for money? Who creates a demand for money? Where do we find it?” we get contradictory answers. Probably the answer most frequently given would be: "In the banks, where employers and merchants discount bills. If the demand for money increases, the rate of interest rises, so the rate of interest can be used as a measure of the demand for money. States that, unable to balance their budgets, float loans, create a demand for money; so do beggars".

But this demand has nothing to do with the meaning of medium of exchange, which is the primary function of money. We must learn to regard money simply as a medium of exchange. That the above answers are nonsense becomes apparent by using the expression "medium of exchange" instead of "money."

The merchant who asks the bank for money exchanges nothing; he gives nothing but his promise to repay; he borrows, he does not exchange. He gives money for money; there is no question of commerce and prices, but one of interest. Nor does the State create with its loans a demand for the medium of exchange; it offers nothing in exchange either. It changes today’s money for tomorrow’s money.

This is not demand for the medium of exchange; it is not a demand for money compatible with its purpose. To demand money as a medium of exchange, something different from money must be offered for it.

Where, then, can one find such demand?

Evidently wherever there is need for a medium of exchange; wherever the division of labor throws upon the market goods which, to be exchanged, require a medium, i.e. money.

And who demands money? The farmer that brings his produce to market, the merchant that sells his wares across the counter, the workman that offers his services and demands money for the product of his labor. Where the supply of goods is great, the demand for the medium of exchange is equally great; where the supply of goods increases, the demand for money, the medium of exchange, increases. If there are no goods to be exchanged, the demand for money disappears. Primitive production and barter cause no demand for money.

Let us therefore sharply distinguish between the merchant offering a farmer calico in his shop and the same merchant an hour later visiting the bank to discount a bill. With the calico in his shop the merchant creates demand for the medium of exchange; with the bill of exchange at his bank he creates no demand for money,

[80] We might here ask why price must "oscillate" about "value", why the forces that are strong enough to separate price from value are not also strong enough to render the separation lasting.

since a bill of exchange is not a good. We speak here of rate of interest. This is simply desire for money, not demand.

Demand for money has nothing to do with desire for money. Desire for money is proper to the beggar, the State, the farmer in the grasp of the usurer, the employer, or the merchant discounting a bill; but demand for money is only created by those who have goods for sale. Desire for money is complicated; demand for money is simple. Desire for money comes from a person; demand for money comes from a thing, a commodity waiting to be sold. The beggar desires alms; the merchant desires to enlarge his business; the speculator desires to keep loan-money out of reach of his competitors, so as to monopolize the market; the farmer has fallen into the trap laid by the usurer. All of them have an intense desire for money, but none of them is able to create a demand for it, since demand depends not upon the cares of men, but upon the stock of wares awaiting exchange. In this sense it would be false to say that desire for a thing and the supply of it determine price. There is a world of difference between the desire for money, measured by the rate of interest, and the demand for money, measured by prices. The two have nothing in common.

Those who on hearing the word "demand for money" do not at once think of goods, or on hearing the words "a great demand for money" do not at once think of a pile of goods, a market, a goods train, an overloaded ship or perhaps of "over-production" and unemployment, have not grasped the meaning of the expressions: "Demand for the medium of exchange", "Demand for money." They have failed to understand that the division of labor produces goods, for the exchange of which money is as necessary as railway wagons are for the exchange of coal.

If we hear someone speaking of an increasing demand for money because the rate of interest has risen, we may be sure that this person is unable to give clear expression to his ideas. And if we find a professional economist confusing demand with desire, let us tell him that scientific questions require more than loose language.

We thus separate the demand for money from human desires, from the state of the market, from business projects, dealings, speculations and so forth; we rescue it from the enveloping fog of "value" and enthrone it upon the mountain of goods that the division of labor throws upon the market - visible to all, tangible, measurable.

We thus distinguish demand for money from its desire. Upon another mountain, not of goods but of bills of exchange, mortgages, bonds, government securities, insurance policies and so forth we write, "Desire for money". On the first mountain we write "Prices" and on the second "Rates of interest". Anyone who, in the course of the following inquiry, thinks of desire for money when I write “demand” for it, had better lay aside this book. It was not written for him.

Demand and supply determine price, i.e. the exchange rate between money and goods. What demand for money is, we now know. It is material; it is the stream of goods continuously flowing from the division of labor.

But what is the supply of money? We must give this conception form and content, in the process pushing it also out of the atmosphere surrounding it.

The farmer who harvests potatoes, like the tailor who stitches a coat, must offer the product of their labor for money. But what do they do with the money? What have the 100 000 farmers and artisans done with the Thaler that for 100 years has passed through their hands? Each offered it for goods, which once in their possession were used up and disappeared from the market. But the Thaler returned to the market all over again. It remained there for one, ten, 100 years; and perhaps, supposing it to be re-coined, for 1000, 2000, 3000 years. To all through whose hands it passed, the Thaler was useful only as a ware; of all the 100 000 not one could use it otherwise. The uselessness of the Thaler as an article of consumption compelled everyone to get rid of it again, to sell it, that is to offer it in exchange for commodities.

Those with much money were forced to offer much money in exchange; those with little were forced to offer the little they had. The offer of money was, and is, quite correctly called the demand for commodities. Where the stock of commodities is great, the demand for money is great. It can also be said that where the quantity of money is large there is necessarily more demand for commodities than where the quantity of money is small (the limitations of this statement will soon appear).

Is there any demand for commodities other than the supply of money?

Here again, as with money, let us distinguish between desire, need and demand for commodities. The "needy" need or desire commodities, but only those who offer money demand them. The need or desire for goods is expressed by requests or begging letters; the demand for goods by the ring of hard cash upon the counter. Merchants shun desire for their wares, but demand for them attracts them like a magnet. In short, the demand for goods consists in the offer of money. Those who have money must create a demand (we shall see later when they must do so.)

Demand for commodities, or demand per se, is always backed by money. A mountain of money means a great demand for commodities, though not indeed always, as is clearly proved by the 180 millions in the Spandau war-chest.[81] For 40 years this mountain of money has not bought a Pfennig's worth of commodities. Such exceptions will be treated later. The discovery of a new gold mine means an increasing demand for commodities, and if a country with a paper money standard sets in motion the money printing-presses, everyone knows that demand, and thus prices, increase. If everyone were given the right to cut banknotes, treasury bonds and coins into two, and to use each half as a whole, demand, and prices, would double.

So far so good; let us now ask, can we do with the supply of money what we did with the supply of goods? Can we say: "To measure the stock of money is to measure the demand for goods?" In other words, is the supply of money identical with the stock of money to such a degree as to be completely independent of the wishes of its possessor? Or is the offer of money, partly at least, subject to the whims of the market, to the greed of speculators? Briefly, is the supply of money something material, namely money itself, or does it entail human action?

The answer is of extreme importance for the solution to our problem.

The division of labor causes a never-ending stream of goods called "supply". The stock of money causes the offer of money called "demand". The stock of money is a definite quantity. If, therefore, the offer of money were continuous, price, the ratio of exchange between money and wares, would be independent of human action. Money would be the embodiment, sharply defined, of demand, just as the wares are the calculable, measurable embodiment of supply. We should then only need to ascertain the ratio of the stock of money to the stock of goods in order to know whether prices were about to rise or fall. This would actually be true of Free-Money as described in the next section of this book. Free-Money embodies demand, it eliminates from demand the wishes of the possessor of money in respect to the time, place and amount of demand. Free-Money dictates to its possessor order for commodities, making this order an imperative necessity. With Free-Money the amount of demand can be measured directly by the amount of Free-Money issued by the State, just as the supply of potatoes or of a morning newspaper can be measured by the size of the harvest or of the edition printed.

But this is not true of the present form of money, as we shall soon see, and we cannot therefore at once answer the question posed at the beginning of this chapter. We must inquire further before saying what determines the price of the present form of paper money.

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[81] [Paid by France as a war indemnity in 1871.]

## Chapter 9.

## INFLUENCES UPON DEMAND AND SUPPLY

Goods are produced for the market and are useful to their producers only as objects of exchange. For this reason supply equals the stock of wares; it is something material, an involuntary action as it were, carried out by the goods. Without goods no supply can exist, and with goods it must exist. To offer goods for exchange is the only useful thing that can be done with them. In general therefore, the action of supplying is so closely identified with the substance necessary for it that substance and action are one and the same.

Supply, i.e. demand for money, is therefore identical with the stock of goods.

Such stock depends upon:

1. The stream of goods flowing to the market, due to the division of labor;
2. The stream of goods leaving the market for consumption after being exchanged.

If the stream of commodities into and out of the market never varied, the supply, i.e. the demand for money, would be constant. But this, we know, is far from occurring. The stream of goods into the market continually increases because of the continuous increase in population. One hundred workers throw more goods onto the market than ninety. The stream of goods onto the market also increases because of the steady expansion of the division of labor. If a farmer organizes his farm for cattle breeding, instead of wasting his energy in producing articles for his own consumption, he must make more frequent journeys to the market. Formerly he bought and sold little, now he sells his whole produce; he has therefore increased the supply of goods, i.e. the demand for money, almost by the whole amount of his production.

In the country, and in small towns, many artisans used to practice their trades intermittently; they had subsidiary occupations such as farming or gardening; they made their own tools, clothes, furniture, they even taught their children. No artisan can now spare time for such occupations. His trade occupies him full time and pays him better. The whole product of his labor takes the form of goods and comes to market, where it creates demand for money. In this way demand for the medium of exchange has been greatly increased during the last decades.

The offer of goods, i.e. the demand for money, increases still more with improvements in the means of production. If a weaver with a handloom wove 10 ells of cloth, he marketed only 10 ells of cloth, which was also his demand for money. With modern machinery the same weaver weaves 500 ells. He therefore sends 50 times more goods to market; his demand for money has increased 50-fold.[82] It is the same with all the other arts and crafts. To copy the books produced annually by a single modern printing press, the whole population of the Chinese Empire would have to be copying from morning till night, year in, year out. Ditto for color printing.

In Argentina 30 men with steam-ploughs and threshing machines produce as much wheat as 3,000 German smallholders, for the same effort. These Argentine

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[82] Value theorists, who have succeeded in enveloping economic phenomena in an impenetrable fog, will here object that the improved means of production have reduced the "value" of 500 ells to the value of the former 10 ells, with the result that 500 ells now only cause the same demand as 10 ells formerly. In reply we may ask why improvements in the means of production should halt before money. We should be justified in replying as follows: "The improved processes of production have reduced the 'value' of 500 ells of paper-money to the 'value' of 10 ells. With the fall in the value of goods, the 'value' of money has also fallen, thus remaining at the same level as that of the goods."

farmers consequently produce one hundred times the supply of goods and increase the demand for the medium of exchange 100-fold.

The amount of supply should not, however, be measured solely by the quantity produced, but also by its quality. A ton of first-class wheat represents a greater demand for money than a ton of second-class wheat.

The quality of modern products is constantly improving. Breeding stock and seed are being steadily improved; machinery-given finish is becoming finer and finer; purer and more useful chemicals reach the market. With electric chisels and the splendid models furnished by our exploited proletariat, artists produce miracles of sculpture, and the demand for money increases by the full increase of present-day art over that of the past.

The stream of products to the market also increases following the discovery of uses for formerly useless products. The German blast furnaces supply over a million trucks of basic slag for use as fertilizer. Slag, at one time a troublesome waste product, now creates a demand for many hundred million marks of medium of exchange. (This does not, however, mean that the circulation needs to be increased by so many millions). The same is true of potash salts and of many other substances. Less money, less medium of exchange would be required in Germany if the usefulness of basic slag and potash salts had not been discovered.

But the demand for money is also influenced by factors independent of production. The institution of property turns things formerly meant for use into goods for the market. Land, for instance, can now be bought and sold; formerly it was the inalienable property of the community. Year after year large sums of money are required for the transfer of real estate. The demand for money has increased since the land of the country was degraded to the level of a good. Interest upon mortgages and rent require much currency. Less currency would be enough if farmers did not have to set aside part of the money received for their produce to pay the rent and interest due on Martinmas;[83] less money would be needed, had land remained common property.

The same is true of house-rent. When most people lived in their own huts or houses, rent was something exceptional. At present, living quarters are seldom the property of their dwellers, and part of the weekly or monthly wage must be set apart to pay rent. Many millions are thus locked up for days, weeks or months.[84]

The provision of water, light, power, etc., by the community, converts a number of important things into goods, which were formerly produced for direct consumption. This also increases the demand for money.

Again, nothing can become a good unless it can be brought to the purchaser. How many things are today lying useless because, for want of railways, roads, canals, they cannot be transported! Mountains of ore and timber, herds of cattle are brought to market by a new railway line, a tunnel, a bridge, a voyage of discovery, and the demand for money increases by the whole amount of these products.

In general, therefore, the supply of goods, or demand for money, constantly increases. But sometimes the demand for money decreases, for example through a general reduction of working hours. War, crop failures and epidemics can cause important reductions in the demand for the medium of exchange, as does the whole present-day wage policy.

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[83] [11th November was the traditional date for discharging obligations.]

[84] Whether rent on land and houses or other regular payments are made quarterly, monthly, or weekly also affects the demand for money. If a workman sets aside the part of his wages destined for rent in the first weeks of the quarter the money lies unused for three months. If, as in England, he pays rent weekly, the money at once returns into circulation through his landlord. This is one of the reasons why England manages with a much smaller quantity of currency than any other country.

These examples suffice to illustrate some of the many factors determining the flow of wares to market. But the offer of wares depends also, as already stated, upon the stream of wares out of the market. Before a commodity reaches the consumer, it is offered for sale and creates demand for money. Every commodity, carried away from the market, means a reduction in the demand for money.

Thus the supply of goods or demand for money depends also upon how quickly they find purchasers and cease to be goods for exchange. A comparison with the means of transport will serve to make this clear. Suppose that 1 000 tons of bricks must be brought daily from the kilns to the city. The road is bad, there are no bridges, and the bricks have to be unloaded to go over a marsh. The carts proceed slowly, with small loads, and many carters must be engaged to cope with the work. Suppose now that the road is improved, the marsh filled in, and bridges built. The carters can now take larger loads and can make two journeys instead of one. Only half of them are required; the same thousand tons of bricks now represent only half the former demand for carters. Or a narrow-gauge railway is built, and the thousand tons of bricks represent but a hundredth part, or less, of the former demand for carters. This is how we must think of the demand for the medium of exchange caused by the stock of goods.

To bring goods from producer to consumer by way of exchange, a series of commercial organizations is necessary. The speed with which goods leave the market depends upon the existence and efficiency of such organizations.

Suppose a bag of Brazilian coffee has to be exchanged for prints from Aix-la-Chapelle. It would have to be exchanged countless times, endlessly drifting about the market as a good. But with the help of money, a bag of Brazilian coffee often reaches the German consumer after three or four changes of hands.

The technique of commerce has reached a comparatively high degree of perfection,[85] and each improvement accelerates the conversion of goods from wares to consumables. We need only mention the improvements in modern banking and in the laws relating to bills and checks; co-operative societies and department stores; the postal, telegraphic and consular services; advertising and printing; commercial schools for the training of young businessmen; uniform weights and measures; telephones, typewriters and printing presses.

A modern commercial undertaking can do 10, 20, 100 times the amount of business that was formerly possible; the salesmanship[86] of a modern merchant is, from the merely technical standpoint, 100 times greater than that of his grandfather.

The division of labor continuously throws masses of goods into the market, and merchants, with the help of commercial organization, continuously direct these masses of wares out of the market into the hands of the consumers.

If merchants did not have these commercial organizations at their disposal, the stores, shops and markets to receive the slowly flowing stream of wares would have to be many times larger. A mountain stream broadens as it enters the plain, as the head decreases; and it would be the same with goods. Without the modern commercial organization the stock of wares would be larger and the demand for money incomparably greater. Even today we often experience the breakdown of some form of commercial organization, for instance credit, and we can then observe how the flow of goods from the market is retarded, how the stock of wares increases until it threatens to flood the market (so-called over-production). Under the pressure of this growing demand for the medium of exchange, prices weaken and then there is a crisis.

[85] Only the power of money to exchange goods is steadily decreasing - as we shall prove later.
[86] Salesmanship: Capability of bringing goods from the place of production to the consumer.

Suppose a given road incapable of dealing with the traffic because of its many turnings and bad surface. The road is straightened and its surface tarred. Rapid traffic, in spite of its increased volume, will make it appear half deserted.
If, now, the old conditions are suddenly restored, the traffic will perhaps be completely blocked by the congestion of vehicles. It is the same with the commercial organization that straightens and mends the roads for the rapid exchange of goods. If part of the organization breaks down, the stock of wares immediately becomes greater, that is to say the demand for the medium of exchange increases.

As credit transactions powerfully influence the demand for money, we must consider them somewhat more closely.

We said that goods represent a demand for the medium of exchange exactly matching their amount and quality. So, if there was a method of exchanging goods without employing money, the demand for money would be reduced by the amount of goods so exchanged. This is self-evident with the aid of our conception of the demand for money. Here again we may use a railway line as an illustration. The demand for rolling stock is exactly equal to the amount of goods awaiting transport. But if a canal is built along the railway, the demand for rolling stock decreases by the amount of the goods transported by water.

Credit transactions substituted for money in the exchange of goods have an effect analogous to that of such a canal. If A in Königsberg sends to B in Aix-la-Chapelle a consignment of butter, and B pays the bill with a consignment of wine, the transaction is completed without money. If B had no credit with A or A had no credit with B, both butter and wine would have to be exchanged for money. The demand for money created by wine and butter is here eliminated by credit.

The demand for money is therefore reduced by the exact amount of goods exchanged by way of credit. If the sum of credit transactions increases, the demand for money decreases; if credit decreases, the demand for money increases proportionally. The influence of credit transactions upon the demand for money is unchanged if the price of the butter and wine are calculated in money represented by checks, bills of exchange, or other credit instruments. Credit is always an evasion of the demand for money. Credit instruments, although drawn in terms of money, render money superfluous for the transactions they negotiate. But as credit instruments, they rise and fall with credit. They are substitutes for money for as long as credit flourishes.

We may again illustrate with the railway from which traffic was diverted by a canal. If the water in the canal freezes over in winter, or evaporates in summer owing to drought, the goods that would have been transported by canal return to the railway. If the ice melted, the demand for rolling stock would decrease once more. An unreliable canal, sometimes silted up and sometimes frozen over, would disturb rather than relieve railway traffic. Credit transactions have a similar effect upon the demand for money.

Let us now summarize.

Demand for money matches the goods continuously coming to market thanks to the division of labor. Demand for money therefore increases, or decreases, with the quantity of goods produced by the division of labor. Demand for money is not merely proportional to the stock of goods; it is that stock. There is no demand for money except the stock of goods, together with their material properties. When using the word "goods" we mean casks of beer, hams, ships laden with tobacco, etc. We mean a palpable, not an abstract ham. When we speak of demand for money, of goods, we do not mean crystallized or mummified labor, or a quintessence of labor, or a social substance, or sweat and blood and working hours. We do not think of a ham apart from all material properties, the lean, the fat and the bone. Demand for money, for a medium of exchange, emanates from the visible, tangible things that we purchase in the market by the pound or by the yard, to feed and clothe ourselves. And in the demand for money is included the quantity as well as the quality of the goods.

Demand for money depends upon the stream of goods produced by the division of labor and the division of property. The size of this stream depends again upon the number, industry, skill and wisdom of the workers, and upon the quality of their means of production. An English weaver throws five times as much calico upon the market as an Indian weaver. He creates, therefore, a five-fold demand for money.

Demand for money depends also upon the speed with which commerce brings the goods to the consumer, and this speed increases with every improvement in the technique of commerce. If the salesmanship of a young man trained in a school of commerce is greater than that of an ordinary retailer, the demand for money decreases on establishing that school of commerce. (And if it doesn't, such schools don't make any sense).

Demand for money is in inverse ratio to the speed with which the products of the division of labor and of property cease to be commercial wares to become consumables.

Demand for money also depends upon the growth or limitation of credit, i.e. upon the constantly varying quantity of goods withdrawn from the market, and the demand for money varying with the constant expansion and contraction of credit.

The daily demand for money therefore equals the quantity of goods daily brought to market, minus those exchanged by way of credit or barter.

In short: The supply of goods equals the demand for money. The demand for money and the supply of goods are equivalent concepts. Supply is the stock of goods.

## Chapter 10.

## THE SUPPLY OF MONEY

### (Demand for goods, or demand *simpliciter*)

The characteristic of the products of the division of labor and of property is that such products must be sold. As wares, they are for sale, and no product is more purely a ware for sale than money. This we have already shown.

Ordinary wares sooner or later leave the market as goods for consumption, but money is bought only to be sold again.

Goods can be sold only for money, and by the same token money can be sold only for goods. Just as goods embody demand for money, so money embodies demand for goods. An increase in the stock of money means an increase in the demand for goods. He who has no money creates no demand for goods. The money in the cellars of a bank could at any moment pour upon the market thus creating a powerful demand for goods, whereas a thousand starving unemployed casting longing glances at the riches of the market can create no such demand.

The demand for goods depends therefore chiefly upon the stock of money. The demand for goods not always coincides with the stock of money (we shall very soon come to this crucial point), but money is itself a ware and therefore sooner or later compels its possessor to offer it in exchange.

A person can offer less money than he possesses, but not more. Our stock of money is the upper limit of our offer of money. Again, since money is a ware, where its stock is large more of it will be offered in exchange, on the average, over a period of years, than where it is small.[87]

The 180 millions stored for 40 years in the German war chest at Spandau prove without doubt that money and the supply of money are not, like potatoes and the supply of potatoes, identical. Nevertheless the function of money is to be offered, in certain circumstances, in exchange.

Just as a vehicle becomes useful to its owner only by changing place, so money becomes useful only by changing possession, when it circulates as a medium of exchange. Inherent in money is its circulatory character. To a certain extent the present form of money is under a material compulsion to circulate. (With Free-Money this compulsion becomes complete).

We said that the stock of wares is in inverse proportion to the speed with which commerce dispatches such wares from the market to the consumer. But since money is used and not consumed, thereby preserving its characteristic of ware, since it is bought only to be sold (disregard the use of gold in jewelry) an accelerated rate of money's changing possession, by improving the commercial organization, has the opposite effect to an accelerated rate in the sale of wares.

The more rapidly money passes from hand to hand, the sooner it appears at its point of departure, the market, to begin circulating again. With each change in possession of money, a certain ware is brought closer towards the consumer. Just as the number of ton-miles completed by a railway wagon in a given time is proportional to the rapidity at which the wheels rotate, so the quantity of wares that a piece of money clears from its path is proportional to the rapidity with which it completes its circuit. A mint-condition Thaler (genuine of course), changes possession maybe only ten times a week, since some into whose hands it comes will think twice before parting with it. With a worn-out Thaler this hindrance to circulation is smaller, and

[87] [The so-called "underdeveloped" countries suffer of this very ailment.]

with a suspect one non-existent. To complete the same circuit a new Thaler may require a month, a worn-out Thaler a fortnight, and a suspect Thaler a week. Four new Thalers, two worn-out Thalers or one suspect Thaler perform the same amount of work. The power of money to effect exchanges, its technical quality from the mercantile standpoint, is in inverse proportion to its technical quality from the banking standpoint. From the mercantile standpoint a suspect Thaler may be four times as efficient as one fresh from the mint. Please note this little detail.

Supply is a stream rising in the division of labor and flowing into the homes of consumers. Demand is not a stream, but an object moving in a circle, much like a flywheel. Supply is always composed of fresh goods (wares), making one single journey and disappearing forever. Demand is composed of a mass of coins which have completed the same journey thousands of times and are destined to complete it as many times again.

This comparison serves to show that the laws of demand are not the same as those of supply. The mere fact that a ware on its journey to the consumer becomes dearer, whereas the price of money may remain the same after changing hands a thousand times, shows clearly that we cannot always compare money with wares. (Nothing in this sentence authorizes one to think that money today performs the exchange of wares free of cost).

None of the conditions determining the amount of the supply of wares, noted in the previous chapter, applies to demand (supply of money). On the contrary one condition, the improvement of commercial techniques, has an effect upon money opposite to the one it has upon wares. Improved commercial techniques accelerate the progress of wares to the consumer, thus reducing their stock and therefore supply. A technical improvement in the circulation of money, on the contrary, causes the same coin to reappear sooner at its starting point to begin its work again. Every improvement in money circulation increases the supply of money. For this reason, after the introduction of Free-Money, about one-third of the stock of money would probably be enough to create the same amount of present-day demand.

The amount of the supply of wares is determined in the first place by the conditions of production - the fruitfulness of nature, the skill of the workers and the efficiency of their tools. For demand all this is immaterial. Gold is not produced, but found; the stock of gold of today's generation has been inherited from their forebears. Similarly, the stock of paper money has been arbitrarily "issued". Wares produced a year ago have almost ceased to influence supply, but the gold that Solomon brought from Ophir doubtless forms part of the currency of today, still influencing demand. Supply is each year created afresh; demand is an inheritance including Solomon's treasures, Spanish plunder from Mexico and Peru and, in recent times, the abundant gold discoveries from the Klondike and the Transvaal. The magnitude of demand is determined by men whose bones have decayed into dust long ago. A thousand million human beings are engaged in feeding supply; demand, on the other hand, is kept up by a handful of adventurers in the goldmines of Alaska and South Africa.

But demand also depends on the velocity of money circulation, and many find it difficult to set limits to this velocity. They are inclined to think that demand is something indeterminate. Yet demand and supply have the supremely important function of determining price.

It is impossible in fact to imagine a velocity of circulation that could not be increased by some improvement in commercial organization.

Suppose, for instance, that we have worked out carefully the highest imaginable limit for the velocity of paper money. Someone then proposes to impregnate the notes with some nauseous chemical like hydrogen sulphide. Everyone would try to get rid of such money still more quickly, so the previously limit set to the velocity was obviously too low.

In practice it is immaterial to the demand of today whether the velocity of circulation of money can be increased tomorrow. "Today" is what matters in the market; "tomorrow" is important only if it can be clearly foreseen. We cannot imagine a limit to the speed of a railway train that could not be exceeded by some technical improvement; but for the present the limit is set by the existing locomotives, bridges, curves and embankments. It is a matter of course for all of us that we cannot travel at any speed we please. After a little consideration we should be able to familiarize ourselves with the thought that the existing commercial organization prescribes a maximum velocity for money, which for the present cannot be exceeded.

This does not mean that commercial organization cannot be improved. As a matter of fact it is being improved almost daily. German currency reform, for example, replaced the former medley of coins with a unified coinage passing from hand to hand without examination, and certainly made a faster circulation possible.[88]

The stock exchange, clearing-houses, checks and bills of exchange increase the velocity of circulation of money.[89]

The habit of saving has more influence on the velocity of circulation than any other habit. Savings were formerly hidden in mattresses, buried jars, etc.; today they are mobilized into circulation time and again through the medium of the savings banks. In this manner large sums go to increase demand.

Money circulation is also accelerated by modern department stores, since a purchaser can spend in such a store in one day a sum that would have required two days to spend in separate shops scattered through the town. In short, the possibility of a continual acceleration of the velocity of circulation of money cannot be denied, but this possibility does not obscure in any way the picture of demand drawn in the previous pages.

Demand, then, is determined by the amount of the stock of money and its velocity of circulation. Demand increases in exact proportion to the increase of the stock of money and of the velocity of its circulation. That is what we must first know of demand and supply, to form a general picture of how they determine price. It must be admitted that what we have learnt so far is very little. But at least these words have been given content. We can weigh and handle demand and supply; we no longer dream with our eyes open. When speaking of supply we no longer think of business transactions, speculation and such nonsense. We see, trundling before us, a goods train loaded with timber, straw, lime, vegetables, wool, minerals. With our eyes and the other senses we fully realize we are not dreaming.

And speaking of demand we do not see beggars, deficits, or interest. We see money, paper or metallic, which we can handle and count. We know that money is brought into circular motion by a force inherent in it, and that this motion can be accelerated by improving the commercial organization. We observe that every time money completes its circuit, it seizes a certain quantity of wares and propels them from the market into consumers' homes. We grasp, in following the events, how demand depends on the rate at which money, after each ejection, returns to the market

[88] Arguments could be found for the opposite conclusion. The greater security against a fall in the rate of exchange and the greater security from false coinage must make the coins more attractive to savers than the worn Groschen, Thalers and Gulden.
But to save the actual currency means to interrupt the circulation of money. We have here without doubt a somewhat restraining influence.

[89] Merchants formerly, like cattle-dealers today, carried, when travelling, ready money for their purchases. The ocean bed on the sea route to India is said to be covered with a layer of silver lost through shipwreck.

seeking another piece of ware. We speak no longer as parrots, but conscious that we are uttering the fundamental truth of economic science when we say: Prices are determined by demand and supply. Let us show it in a table:

| Supply | Tons | Demand | Tons |
|---|---|---|---|
| When commercial organization is working smoothly, division of labor and of property throw daily on the market a quantity of wares equal to | 1000 | State metal or paper money creates, at its present velocity of circulation and yesterday's prices, a demand also equal to | 1000 |
| Supply increases due to: | | Demand increases due to: | |
| 1. Increase in population +10%<br>2. Division of labour +5%<br>3. improvement in means of production +20%<br>4. Better quality by more efficient workmen +30 % | 150<br>50<br>200<br>300<br>1650 | 1. Increase in the stock of money through the discovery of new gold mines or new issues of paper-money +10%<br>2. Increase in the velocity of circulation of money through improvements in commercial organisation, + 20%<br>3. Mobilisation of savings by banks +10% | 100<br>200<br>100<br>1400 |
| On the other hand supply decreases due to:<br>1. Better commercial organization and the elimination of middlemen. Wares flow more rapidly from the market to the places of consumption<br>2. More credit replacing money | 100<br>300<br>400 | But this demand is not constant. It does not appear regularly in the market, as we shall see in the following chapters. | |
| Total supply 1 650 - 400 | 1 250 | | |

Explanation: A ton can be a ton of any kind of ware, peat for example. We then calculate the quantity of potatoes, milk, cranberries, buckwheat, etc. that can be exchanged, at present prices, for a ton of peat. 100 lbs of first quality potatoes, or 20 gallons of whole milk, or two bushels of buckwheat would then be equal to one ton of supply.

For demand, we calculate from the actual stock of money and its actual velocity of circulation how much money can today be offered for wares, and how many tons of wares can be bought at present prices by this amount. The answer is 1000 tons. Since demand and supply determine the prices of goods that make up these 1000, demand expressed in tons in lieu of money, must necessarily correspond to supply also expressed in tons. When this is not the case, as in the above example, where a supply of 1250 tons confronts a demand of 1400 tons, the discrepancy is sooner or later removed by a change in prices. In our example equilibrium would be established by a 12% increase in prices.

## Chapter 11.

## THE LAWS OF MONEY CIRCULATION IN ITS PRESENT FORM

Upon recognizing that demand and supply are the sovereign regulators of prices, that the subject-matter of the theory of value is an illusion, and further, that production oscillates about price as the centre of gravity and not vice-versa, clearly price and the factors influencing it will absorb our interest, and certain facts, which could have seemed trivial, will acquire an immense new importance.

An apparently trivial fact, which has up until now been utterly overlooked, is that the nature of our traditional money allows demand (the offer of money) to be delayed from one day, one week, one month, one year to another. Supply, on the other hand (the offer of wares), cannot be postponed a day without causing its possessor losses of every kind. The French war-indemnity of 180 million marks worth of gold stored in the fortress of Spandau has not entered the market once in 40 years. All the expense that this so-called war-chest has inflicted upon the German government have come from without, not from within, the Julius tower. The quantity and quality of the gold has remained the same. Not a pfennig has been lost through loss of material. The armed sentry protects the gold not from moth and rust, but from thieves. He knows that as long as the locks remain intact no harm can come to the treasure piled within.

In contrast, a real war chest, the so-called "wheat of the Swiss Confederation" stored at Berne, suffers annually a loss of 10% of its material, apart from the cost of guarding and storage (interest is not counted in either case).

The wares making up supply decay, lose weight and quality, and decrease continually in price in comparison with fresh wares.

Rust, damp, decay, heat, cold, breakage, mice, moths, flies, spiders, dust, wind, lightning, hail and earthquakes, epidemics, accidents, floods and thieves wage a relentless and successful war upon the quantity and quality of wares. Few wares fail to exhibit the results of this warfare within days or months after their production. And it is precisely the most essential wares, food and clothing, that are least able to withstand these enemies.

Like all things earthly, wares are in a constant state of flux. Rust is converted into pure iron by fire, but the oxygen of the air converts back iron into rust. Costly furs fly out of the window in the form of a thousand moths. Dry rot converts the woodwork of a home into dust. Even glass, apparently better able than other products to withstand the assault of time, sooner or later shatters.

Each item is threatened by a particular enemy: iron by rust, furs by moths, glass by breakage, livestock by disease; and these particular enemies have for allies common enemies like water, fire, thieves and the oxygen of the air, which slowly but surely burns everything away.

Who could pay insurance premium against all these risks? How much does the shopkeeper pay just for storage?

And wares not only deteriorate, but also become obsolete. Who today would buy a muzzle-loader or a spinning wheel? Who would give a penny even for the raw material of such goods? Production is constantly bringing newer and better models into the market; the Zeppelin had no sooner proved airworthy than the airplane outperformed it.

How can the owner of merchandise protect himself against all this loss? Only by selling his wares as fast as possible. And to sell he must offer his property for sale. Should he resists this compulsion, he would be punished, and the punishment is meted out by his very property, the wares in his possession.

Remember also that new wares are continually coming to market. A cow must be milked daily; hunger compels a proletarian to work daily too. The offer of goods must therefore become the larger and the more urgent the more their sale is delayed. As a rule the most favorable time for the sale of a product is the moment it leaves the factory. The longer sale is delayed, the less favorable market conditions become.

Why do newsboys shout and run? Their wares are unsaleable within hours of their production. The milkman's cart jangles its bells because he must make his sales to the hour and minute. The vegetable-selling woman is the earliest riser of God's creatures; she awakens even the sleeping rooster. The butcher cannot afford to oversleep or to close his shop for the Whitsun holidays, for in twenty-four hours his meat would be on the verge of putrefaction. Bakers can sell their bread at the asking price for as long as the loaves are warm. They are throughout their lives as hurried as the good Zürchers who once every year take their millet broth to Strasbourg. The farmer who has harvested his potatoes and fears an early frost hurriedly collects them and as hurriedly brings them to market to take advantage of the fine weather and to save, as far as possible, the laborious loading and unloading of his cheap and heavy product.

Or take the wage earners, ten thousand battalions of them. Are they not as hurried as the newsboy, the vegetable-seller, the farmer? If they do not work, part of their assets, their capability to work, is lost with every swing of the pendulum.

Thus the nature of wares, their ephemeral properties, arouses the majority of us every morning from sleep and hurries us up forcing us to appear at a given hour in the market. The possessor of wares is under their prod to seek the market under threat of punishment, which the wares themselves mete out. The offer of a ware for sale depends, therefore, not upon the will of its possessor, but upon the ware itself. Wares seldom leave their possessors freedom of the will, and then only within narrow limits. A farmer, for instance, can, after threshing his wheat, store it in his barn to wait better terms of sale. The nature of wheat allows its possessor more time for reflection than the nature of salad, eggs, milk, meat or labor. But time for reflection is not unlimited; for the wheat loses weight and quality, is eaten by mice and mites, and must be protected from fire and sundry dangers. If the farmer brings his wheat to a granary for storage, even neglecting interest it costs him in six months a considerable part of the wheat. In any case the wheat must be sold before the next harvest, and the harvest, owing to imports from the southern hemisphere, now occurs every six months.

Mlle. Zélie of the Théatre Lyrique, Paris (1860), receives for a concert on the island of Makea in the Pacific, as entrance money for the 860 tickets sold, 3 pigs, 23 turkeys, 44 chickens, 500 coconuts, 1200 pineapples, 120 measures of bananas, 120 gourds, 1500 oranges. She estimates the receipts, at Paris market prices, at 4 000 francs and asks; "How can I convert all this into money? I hear that a speculator from the neighboring island of Manyca is prepared to make a cash offer. Meanwhile, to keep my pigs alive, I give them the gourds, and I feed the chickens and turkeys with bananas and oranges. To preserve the animal part of my capital, the vegetable part must be sacrificed."[90] It should be obvious then that supply is subjected to a mighty, compelling force inherent in the objects composing it, and that this force increases daily, breaking down the barriers separating supply from the market. Supply cannot be postponed. Quite independently of the will of the possessors of wares, a supply of them must daily appear in the market. Whether the sun shines or the rain falls, whether political rumors alarm the exchanges, supply is always equal to the stock of

[90] Wirth, Das Geld, p. 7.

wares even if the price of wares is unsatisfactory. Whether the price brings gain or loss to the producer, the wares must be offered for sale -and promptly.

We may therefore regard the supply of wares, or demand for money, as identical with the wares themselves. Supply is independent of market deals. It is a thing, a material, not a business transaction. Supply always equals the stock of wares.

Demand, on the contrary, as already shown, is not subjected to this compulsion. It consists of gold, a precious metal. As the adjective implies, gold occupies an exceptional position among the products of the earth. It may be almost regarded as foreign matter intruded upon the earth and successfully withstanding all the destructive forces of nature.

Gold does not rust, decay, break or die. Frost, heat, sun, rain or fire do no harm to it. Gold money protects its possessor from all loss. Not even its quality changes. Were we to bury it in a swamp, or in coal, we would retrieve it intact after 1000 years.

Furthermore, the production of gold is trivial in comparison with the mass of gold accumulated since ancient times. Gold extracted in three, six, twelve months hardly equals a thousandth part of the existing stock.

Neither is gold affected by fashion. The only monetary change of fashion in 4000 years was from bimetallism (silver and gold) to the gold standard.

Gold has perhaps only one danger to fear -the invention of an efficient form of paper money. But even here the holder of gold is safe enough, for such paper money would have to be introduced by the will of a whole people - a slow-moving force that would leave him time to save himself.

The possessor of gold is protected against loss of his material by the unique properties of this foreign body. Time passes unnoticed by gold. Its ravages charm it.

The nature of gold does not force its possessor to sell it. It is true that by waiting he forgoes interest. But doesn't he also gain interest simply because he can wait? The owner of wares also loses interest by delaying his sale. But he must also be prepared for the loss of part of his product and for the expense of storage and caretaking, whereas the possessor of money suffers only the loss of interest.

The possessor of money can therefore postpone his demand for wares at will. It is true that sooner or later he must offer his gold for sale, for gold is in itself useless to him. But he is free to choose when to do so.

Supply can always be measured by the stock of wares in existence; it is exactly equivalent to it. Merchandise commands and brooks no contradiction; the will of the possessor is so powerless that can be disregarded. With demand, on the other hand, the will of the possessor of money comes into play, for gold is a patient servant. The possessor of money holds demand like a hound on the leash and lets it slip at the quarry of his choice. Wares are the quarry of demand. Or, to imitate Karl Marx's picturesque language: Demand enters the market proudly confident of easy victory; supply appears dejected like a beggar expecting more kicks than ha'pence pieces. On the one hand there is compulsion, on the other freedom; and the two together, compulsion and freedom, determine price.

Why the difference? Because on one side there is indestructible gold to sell, on the other there are perishable commodities. One can wait and the other cannot. One possesses the medium of exchange, and thanks to the physical characteristics of this medium, can, without personal loss, postpone exchange. The other suffers personal loss from the postponement - a loss proportional to its duration. This relation makes the possessor of wares dependent upon the possessor of money; to quote Proudhon, money is not the key that opens the gates of the market, but the bolt that bars them.

Suppose now that demand makes use of the freedom it enjoys and withdraws from the market. Supply must then, because of the compulsion to which it is subject, seek out demand, hasten to meet it and entice it back to the market by offering it some special advantage.

Demand, instant demand, is a necessity to supply, and demand knows of this necessity. Consequently demand can usually ask for, and obtain, some special advantage from its privilege of being able to withdraw from the market. Is there any reason why the possessor of money should not ask for this tribute? Have we not shown that our whole economic system, the determination of prices through demand and supply, is founded upon the exploitation of our neighbor's embarrassment?

A and B, separated by space and time, wish to exchange their wares, flour and pig iron, for this purpose needing the money in C's possession. C can at once effect the exchange with his money, or can delay, hinder or forbid the exchange; for his money gives him the freedom to choose the time when such exchange shall take place. Is it not obvious that C will demand payment for this power, and that A and B must grant it in the form of a tribute on their flour and pig iron? If they refuse this tribute to money, money withdraws from the market. A and B must then retire without completing the sale and undertake the heavy cost of returning home with their unsold products. They will then suffer equally as producers and consumers; as producers because their wares deteriorate, and as consumers because they must do without the goods that they hoped to obtain by bringing their products to market. If instead of gold, C owned any other product, tea, powder, salt, cattle or Free-Money, the characteristics of these media of exchange would deprive him of the power to postpone demand; he would no longer be able to levy a tribute on other products.

Usually therefore, i.e. commercially, money in its present form acts as intermediary for the exchange of wares only behind payment of a tribute. If the market is a road for the exchange of wares, money is a tollgate built across the road and opened only upon payment of the toll. The toll, profit, tribute, interest or whatever we choose to call it, is the condition for exchanging wares. No tribute, no exchange.

I wish here to avoid all possible misunderstanding. I am not now speaking of commercial profit, the payment that the merchant can and does demand for his work. The profit spoken of here is the profit that the possessor of money can demand of producers, otherwise he can paralyze the exchange of wares by withholding his money. This profit has nothing to do with the merchant's profit; it is a separate effect produced by money itself, a tribute, which money is able to exact because, unlike any other ware, is free from the material compulsion of being offered for sale. For supply, material compulsion is inherent in the wares; for demand, freedom of the will and independence of time necessarily impose tribute. Wares must pay a tribute to money because money is free; there is no other reason. Without this tribute money will not be offered in exchange, and without money to effect exchanges no wares will reach their destination. If, for any reason, money cannot exact its accustomed tribute, there is a crisis; wares stay where they are, and rot.

But if tribute is an obvious condition for the appearance of demand, it is still more obvious that demand will not appear in the market if loss awaits it there. Supply is forced into the market regardless of gain or loss. Demand, if conditions are unfavorable, withdraws into its fortress of indestructibility and quietly waits there until conditions are again suitable for a sally.

Demand, therefore, the regular offer of money for wares, materializes only when the conditions of the market ensure: -

1. Sufficient security against loss.
2. A tribute over and above that.

The tribute can be levied only on the sale of wares, and requires the fulfillment of one essential condition: in the interval between buying and selling, the price of the product must not fall. The selling price must exceed the price of purchase, for the tribute is contained in the difference between them. In times of trade expansion, when the average price of wares is rising, the merchant's profits also rise. The difference between the two prices is then sufficient to cover the merchant's profits and the tribute he pays to money. When prices are falling, the collection of the tribute becomes doubtful or impossible.

Doubt alone is enough to keep the merchant from purchasing wares. No merchant, speculator or employer will discount a bill at the bank and undertake the obligation of paying interest if he suspects that the price of the product he thinks of buying may fall. A fall in price may mean that he may not recover even the amount of outlay.

If we now consider the two conditions upon which money offers its services as medium of exchange, we see that commerce is mathematically impossible with falling prices. Let us note however that the only person who speaks of this mathematical impossibility is the possessor of money. For the possessor of wares, extreme, demonstrable losses are no obstacle to supply; for him there is no question of mathematical impossibility. Whether profit is or is not probable, wares must in all circumstances be given out for exchange. But money goes on strike if the usual tribute is not assured, and that happens when, for any reason, the ratio of demand to supply is disturbed and prices fall.

Wait a minute! What have I said? That demand withdraws money from circulation, making it mathematically impossible when prices fall! But prices fall just because the supply of money is insufficient. And this supply of money withdraws, i.e. becomes even more insufficient, just when it cannot prevent a fall of prices?

It is indeed so. There is neither misprint nor mistake in what you have just read. Money actually withdraws from the market, making its circulation mathematically impossible, when its supply becomes insufficient and prices begin to fall or are expected to fall.

When, after the introduction of the gold standard, the production of money was reduced by the whole amount of the production of silver, and prices fell, circulation stagnated and money piled up in the banks. The rate of interest steadily sank. The bimetallists then opened their campaign against the gold standard and argued that the chronic trade depression of that time was due to an insufficient stock of money. In reply, the defenders of the gold standard like Bamberger and others, pointed to the enormous bank-reserves, to the low rate of interest, and asserted, that these phenomena were a conclusive proof that the stock of money was not too small, but too large. The fall of prices, they explained, was due to a general fall in the cost of production (including that of gold?) and to overproduction of goods.

The bimetallists, headed by Laveleye, brilliantly disposed of this objection, by proving that the commercial circulation of money is impossible if money is not offered in quantities sufficient to prevent prices from falling. The large bank deposits, and the low rate of interest, were proof that the supply of money was insufficient.

But our monetary philosophers, groping in the fog of "value", have never understood this. Even today they do not see their way clearly, although monetary history has meanwhile furnished many proofs of the correctness of this part of the bimetallic theory. For chance discoveries of gold in great amounts have caused the prices of commodities to move strongly upwards all along the line. They have caused the great bank reserves to disappear and the rate of interest to climb higher than ever.

It is therefore a fact that money collects in the banks, and that the rate of interest falls because there is a lack of money; and it is also a fact that the banks are emptied, and the rate of interest rises, because of excess in the supply of money.

Prices fall precisely because the supply of money is insufficient.

An actual price fall is not necessary to cause money to flee the market. If there is a general opinion (a rumor) that prices will fall (no matter whether true or false), demand hesitates, less money is offered, and for this reason what was expected or feared becomes factual.

Is not this sentence a revelation? Does it not give us a clearer explanation of the nature of commercial crises than is contained in many academic volumes? From this sentence we learn why a Black Friday, a crisis scattering death and destruction, often comes like a bolt from the blue sky.

Demand withdraws, concealing itself, because it is insufficient to effect the exchange of wares at the present price-level! As supply exceeds demand, demand must disappear entirely. A merchant writes an order for cotton. He hears that the production of cotton has increased and throws the order into his waste-paper basket! Isn't that ludicrous?

But production continues to throw heaps of new wares onto the market, so the stock of wares increases if sales are interrupted - just as the water level of a river rises when the sluices are closed.

Supply becomes larger, and more urgent, because demand hesitates, and demand hesitates simply because supply is too large in proportion to demand.

Here again there is no mistake, no misprint. The phenomenon of a commercial crisis, ridiculous to the onlooker, must have an equally ridiculous cause. Demand becomes smaller because it is already too small, and supply becomes larger because it is already too large.

And here the members of the society for the Protection of the German Gold Standard heave a sigh, and when it happens, another.

Now the comedy develops into tragedy. Demand and supply determine price, i.e. the ratio at which money and wares are exchanged.

The more wares are offered for exchange, the greater is the demand for money. Wares that reach the consumer by way of credit or barter bypass demand for money. Prices, therefore, rise with the rising of credit sales, since the quantity of wares offered in exchange for money decreases by the amount of these credit sales, and since demand and supply - the ratio in which money and wares are exchanged - determine price.

Conversely, prices must fall when credit sales decrease, since reaching the buyer through these side channels again creates need for money.

The offer of wares for money therefore increases in proportion to the decrease of credit sales.

Credit sales decrease:

- when prices fall;
- when selling prices fall below cost prices,
- when a merchant usually loses on his stock of wares, as when on stocktaking day he can buy for 900 those articles now in his warehouse which cost him 1000, and must therefore write them down as 900 in his inventory.

The solvency of the merchant increases or decreases with the prices of his wares, so credit sales also increase or decrease with the increase or decrease of prices.

This fact is so well known, and yet regarded as not too strange. Yet it is rather strange.

If prices rise, that is if demand exceeds supply, credit comes into play, depriving money of part of the wares to be exchanged and driving prices still higher.

If prices fall, credit withdraws, wares must be exchanged for cash, and prices are further depressed!

Need we search further for the explanation of commercial crises?[91]

The supply of wares (the demand for money), has increased because:

- Improvement in our means of production;
- We have been more industrious and inventive;
- Good weather and abundant harvests;
- Our population has been fruitful;
- We have extended the division of labor, mother of all progress;

And the prices of wares have fallen because we have not balanced this greater demand for money with a greater supply of money.

As prices fall, demand withdraws and money gets hoarded. And as demand is withdrawn and sales hindered, the wares pile up like ice blocks in rivers when the flow of ice is obstructed. Supply breaks down the obstruction and floods the market, for wares must be got rid of at any price. But prices keep falling all along the line; no merchant buys for fear that what he is tempted to buy so cheap today could be bought still cheaper tomorrow by his rival, with whom in this case he could no longer compete. Wares become unsaleable because they are too cheap and threaten to become still cheaper. This is crisis.

As the crisis breaks out, merchants' assets dwindle and their liabilities (in proportion to their assets) increase. Anyone who has signed a contract to deliver bills of exchange, promissory notes, bonds, rents and leases, insurance policies, and so forth, finds the commitment difficult to keep because of the falling prices of commodities (his assets); suspensions of payments begin, and the exchange of wares becomes a form of gambling. For these reasons credit sales are restricted and the demand for money increases by the whole mass of wares hitherto exchanged by way of credit - at a time when money is scarce and about to disappear.

Just as the draught created by a fire makes it blaze, so obstacles to the circulation of our present form of money stimulate demand for it. The equilibrating forces, so much bandied about, never come into play. The evil is intensified, not mitigated, there is no sign of compensatory tendencies.

Many still maintain that an increased demand of money increases also the velocity of circulation. They imagine that the wish to buy cheap must bring increasing quantities of "money from the reserves" into the market. The contrary is the truth. A rise in prices, not a fall, stimulates the merchant to purchase; a fall in prices can only injure him. The fear that what is offered cheap today[92] will be offered still cheaper tomorrow closes all purses. Purses remain open only as long as a rise of prices is expected. Again, where are these supposed "reserves" to be found? Are they to be found in the banks? The banks withdraw their money from circulation when the general fall of prices endangers the safety of its circulation. The millions thus

[91] The amount of the circulation of bills of exchange in Germany in 1907 was given by the Reichstag as 35 billion marks. This sum should possibly be reduced to 9 billion if it represents the total of bills stamped during the year, as these would be three months bills. But even in this case we can imagine how greatly the steadiness of demand and prices is imperilled by such an amount of credit- credit which depends on men's moods and the turn of the market.

[92] From the merchant's point of view no ware is in itself cheap; a ware is cheap only in comparison with its selling price. When prices are falling, all wares are dear. Wares become cheap when a general rise of prices raises the price at which the merchant sells above the price at which he buys.

withdrawn from the market at the time when they are most needed cannot be regarded as “reserves.” If the harvest fails and the sheriff seizes a farmer's cow, he does not increase the livestock. The banks are always overflowing when prices are falling, that is, when the supply of money is insufficient; when prices are rising they are empty. If the contrary were true, we could indeed speak of reserves. If there are actually reserves in existence, they should, in the interest of the exchange of wares, be used up as quickly as possible, since their existence would be a further cause of price fluctuations. Reserves, i.e. hoards of money, can be formed only by withdrawing money from circulation, from the market, from the exchange of wares. But if such reserves are formed only when money is already scarce in the market, they are not reserves but poison.

This, therefore, is the law of demand: that it disappears when it becomes insufficient.

But what happens when demand is too large in proportion to supply, when the prices of commodities rise? One must reckon with this possibility. Our explanation makes it clear, and the history of the market during the last decades shows it. No one denies that since about 1895 prices, in spite of greatly increased production, have risen sharply.

What does the possessor of money do when prices rise? He expects, or knows, that what he has bought today can be sold tomorrow at a higher price. He knows that rising prices make everything cheap from the merchant’s viewpoint, and that by turning over his money he can increase his profits. He buys therefore as much as he can, i.e. as much as his money and credit allow. And merchants obtain credit as long as prices are rising and the selling price exceeds the buying price of merchandise. The optimistic feeling among merchants caused by rising prices makes them more inclined to purchase; they do not turn a piece of money over ten times before deciding to spend it. Money circulates then more rapidly; during a trade-boom the circulation of money attains the maximum velocity allowed by the existing commercial organization.

But demand is the product of the quantity and velocity of circulation of money; and demand and supply determine prices.

As prices rise, the demand for wares increases owing to the accelerated velocity of money, and at the same time the quantity of wares offered for ready money decreases because of the increase of credit sales. Prices therefore rise because they have risen. Demand is stimulated and enlarged because it is too large. Merchants buy wares far beyond their immediate needs; they seek to secure stocks for future sale because supply is too small in comparison with demand. When supply increased and became too large in proportion to demand, the merchant reduced his orders to the minimum, to what he could dispose of at once. He could not allow time to elapse between buying and selling, for during this time the selling price would have fallen below the price he had paid for the ware. But if wares are scarce he is eager to buy; all the purchases he can make seem nothing to him; he is anxious by all means to increase his stocks. The debts based on bills of exchange, which he contracts in doing so, sink daily in importance compared with his credits, which daily increase with rising prices. These debts cause him no anxiety -as long as prices keep on rising.

Is this not a fantastic phenomenon, worthy of the other fantastic phenomena of a trade boom? The demand for wares must always increase far above their usual volume as often and as long as their supply is insufficient.

Our gold standard, offspring of the theory of value, has undergone the test, as clearly proved by our investigation. It causes an increasing demand when demand is already too large, and restricts demand to the personal bodily wants of the few holders of money the moment demand becomes too small! A starving man is deprived of food because of starving, and a glutton is filled to bursting because of gluttony.

We know how useful money is (Chap. 4). But the true usefulness of money has unfortunately been hitherto overlooked, with the result that no one can foresee the demand for a kind of money made of worthless paper. Something must stimulate people into purchasing money, and if this something is not its usefulness as medium of exchange it must be the usefulness of the material it is made of.

Now gold is in fact an industrial material, and its utility would be much enhanced if it were cheaper. The high price of gold alone prevents its being used as often as iron, lead or copper.

Gold is not too dear in jewelry, where money is no object. Gold is in fact the special raw material of the jeweler's trade. Bracelets, chains, watch cases and such trinkets are made of gold, as are chalices for Catholic worship. The fittings of motor cars, church clocks, lightning conductors, picture frames, etc. are gold plated, and dentists and photographers use considerable quantities.[93] All this gold is withheld from its use as currency. Gold coins are usually the goldsmith's cheapest raw material.

The use of gold for industrial purposes increases with the love of splendor, with the growth of prosperity and wealth; and wealth increases through production, through work. In years of prosperity goldsmiths work overtime; during periods of economic depression people in difficulty bring back their gold trinkets to the goldsmith's melting pot.

That is, when more wares are produced, when the demand for money, the medium of exchange, increases, large numbers of gold coins go into the goldsmith's melting pots.

But that can't be! Surely this statement is nonsense! The more work performed, the more wares produced, the greater is the increase of wealth. And the greater the increase of wealth, the more money (the medium for the exchange of wares) is melted down for jewelry. We can't have heard right!

You have heard right. There is no misunderstanding. I repeat them with the gravity of a judge's passing a death sentence. I know, in these words there is cause enough to condemn the gold standard. Let those who have the temerity to deny this truth produce their arguments before my eyes!

I repeat: the more production increases, the more general prosperity grows, and with it the accumulation of wealth and the love of splendor. People are better off than before, and so empty jewelers' shops. The jewelers throw part of the money they receive into the melting pot to replace the watches, chains, etc. that they have sold with money-material (gold).

Production has increased. We have been blessed with abundant harvests. Thomas has invented a process for making good steel from indifferent ore.[94] This steel has given us good tools, increasing the product of our labor ten-fold. In addition, the basic slag, formerly a waste product, proves to be an excellent fertilizer, trebling the produce of our fields. Our workmen have learned the intelligent use of their hands in technical schools. And the supply of wares has increased. And because of this increase, we destroy demand by melting down its bearer, the medium of exchange!

What would be said of a railway company deciding that the best way to celebrate a good harvest, or a time of industrial prosperity when factories working overtime, was to burn its rolling stock?

If my potato crop is a success this year, I shall buy my wife a gold necklace, says the landowner.

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[93] [Today one can add integrated circuits, connected to the outside by invisible gold threads, thanks to gold's excellent conductivity and ductility.]

[94] [1875. Sidney Gilchrist Thomas (1850-1885) improved the Bessemer process by combining phosphate, which depressed the quality of steel, with limestone.]

If my cow calves twice this year, I shall buy my sweetheart a wedding ring, says the young farmer.

If I can finish twice as many pairs of trousers with my sewing machine, I shall buy a gold watch, says the tailor.

If I can produce ten times the amount of nitrogen with my new process, I shall re-gild the chapel of Our Lady of Succour, says the chemist.

If the production of my steel works increases again this year, I shall buy a service of gold plate, says the capitalist.

In short, the purchase of the wedding ring, necklace, and so-forth, is always stimulated by an increased production of wares or supply, and the gold for these necklaces and wedding rings is always deducted from demand, from the coinage (uncoined gold is by law also money).

The money melted down by the jeweler decreases demand, and decreases it, unfortunately, at a time when the supply of wares is increasing (see below). But demand and supply determine price. Prices therefore fall. And this fall of prices interrupts the exchange and production of wares. The result is unemployment and poverty.

The gold standard, with the concomitant usefulness of the money-material for industrial purposes, acts thus as the saw that saws away the branch upon which prosperity grows. Money is the condition of the division of labor, the division of labor leads to prosperity, and prosperity destroys money.

Prosperity, the offspring of gold, cannot help committing economic parricide.

The gold standard and beggary belong together. When Frederick the Great declared to be ashamed to be ruling over a nation of beggars, he only showed an over-delicate sense of honor. He had no special cause for shame, for wherever the precious metals have been the standard of money, kings have always ruled over nations of beggars. If men continue to love display and to spend part of their increased income on the products of the goldsmith's art; and if gold continues to be the raw material for the medium of exchange - prosperity is well-nigh impossible.

But a farmer not always uses a good harvest to buy his wife a gold necklace, nor do all chemists implore a blessing upon their inventions by vowing to re-gild a statue of the Blessed Virgin.

If the harvest turns out well, I shall buy a harvester, says the farmer.

If I become a successful breeder I shall drain the swamp, says the landowner.

If my invention fulfils my expectations I shall build a factory, says the chemist.

If my mill pays a good dividend and the strike is settled, I shall build a tenement house, says the capitalist.

That is, the greater the production, the greater is the increase in the means of production (so-called real capital).

But from these investments, from real capital, interest is expected. The rate of interest falls when the proportion of real capital to population increases. With many houses and few tenants, house-rent is low. With many factories and few workmen, the dividends of factories are low.

As soon as real capital multiplies and the interest upon it in consequence falls below the traditional rate, no money will be given for new undertakings. No interest, no money![95]

Wait a minute! Once more, can I trust my ears? If the interest on factories, houses, ships, falls, no more houses are built, since no one will give money for new real capital? Is this true? How then can cheap housing ever be built?

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[95] The reader is referred to the theory of interest developed at the end of this volume.

Yes, it is true, that's what I said. Will anyone dare to deny it? If the interest on houses and other real capital falls, the money employed in such enterprises withdraws. What is then to become of the production hitherto consumed in renewing and extending real capital?[96]

Precisely when men are industrious and inventive, when harvests are favored by sun and rain, when many products are available to multiply houses and factories, this is the time when money (supposed to facilitate exchange), chooses instead to withdraw and wait.

As money withdraws, demand lags behind, prices fall, and it is crisis once again.

A crisis must therefore always occur when, on account of increased production of real capital, the rate of interest on factories and houses sinks.

In the theory of interest at the end of this book, proof will be given that interest on money is independent of interest on real capital (but not vice versa). The objection that interest on money decreases simultaneously with the decrease of interest on real capital, and that therefore there is no lack of money for new real capital, even if the rate of interest on real capital falls, is an error.

This is the only reason why economic life hops from crisis to crisis. Under the rule of precious metal money, men must periodically eke out their existence as homeless beggars. Gold, our hereditary king, is the true "roi des gueux", the king of beggars.[97]

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[96] At the German Congress for Housing Reform, the banker Reusch of Wiesbaden estimated the amount of money required for house-building in Germany at 1500-2000 million marks annually.

[97] [In French in the original.]

## Chapter 12.

## ECONOMIC CRISES AND HOW TO PREVENT THEM

Economic crises: the stagnation of the market, unemployment and concomitant phenomena, take place only with falling prices.

Prices can fall for three reasons:

1. Because insufficient gold production does not allow the supply of money (demand) to keep place with the supply of goods.[98]
2. Because when the production of goods, and consequently of physical capital, increases, the rate of interest upon the latter falls. No more money is then offered for the formation of new physical capital, and the market for goods destined for this use (an important part of production, especially with an increasing population) stagnates.
3. Because with increased production and prosperity money gets melted by the goldsmiths in direct proportion to the increase in the supply of goods.[99]

Any of the three causes of falling prices is sufficient by itself to produce a crisis; and it is their nature that when one of them (say the first, owing to sufficient discoveries of gold) fails, the others leap into the breach. One or the other of the three regularly and inevitably occasions the periodic breakdown of economic life.

Only if gold were to be unearthed in such unusual quantities that, despite its increased consumption for industrial purposes, there was a large and steady rise in prices (at least 5 % annually), could economic life develop without crises. Even the resistance to the circulation of money caused by the fall of interest on real capital would be ineffective before such a general rise in prices; rising prices would compel money to circulate. But such a general rise in prices would in itself constitute a breakdown of the monetary standard.[100]

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98 [This assertion is far from being anachronistic. The world shifted from the gold standard to a dollar standard with the Bretton Woods agreement of 1944. Today it's the decisions of the World Bank that determine how much money can be issued by governments that have had the misfortune of falling under its control.]

99 The Chinese are said to make silver figures, which are much valued as the protecting gods of the household. But silver is the general medium of exchange among the Chinese. The following course of events is therefore probable: For some reason silver flows into China in greater abundance than usual and stimulates trade and industry (trade-boom). Merchants prosper, and out of gratitude increase the size and weight of their silver household gods. The silver they obtain in exchange for their products - the cause of the trade activity - melts and disappears forever into the household shrine. If, however, conditions are reversed and from lack of silver prices fall and business is bad (crisis), the Chinese merchant comes to the conclusion that his household god is powerless because it is too small. So he scrapes together the little silver he has, and increases its size. Even without other causes, this cause alone would be sufficient to explain the striking stagnation, extending backwards over a thousand years, of the development of China.

Has a European any right to laugh at the Chinese? If trade is good he buys a gold watch-chain for ostentation, and if trade is bad he buys a still larger one to persuade others to give him credit. Both, for different motives, saw off the branch upon which they are sitting.

100 [Prophetic. In 1918 Gesell foretold "another and more terrible war" if the system based on compound interest were not eliminated, and so it was. At Bretton Woods Keynes (1883-1946) proposed excess issue of money by means of deficits. Although another war has been avoided for 60 years, the world monetary system has broken down, as Gesell had foretold. When asked about the long term consequences of such policy, he replied, "In the long term we shall all be dead." Excellent example of diversion to evade troublesome questions.]

The foregoing explanation of the causes of commercial crises indicates what to do to prevent them from occurring. Prices must never, in any circumstances, be allowed to fall.

The next question is how. It can be done by:

1. Separating money from gold and issuing money in accordance to the needs of the market.[101]
2. Adopting a form of paper money impossible to hoard, therefore able to be offered in all possible circumstances in exchange for wares, even if interest on capital (interest on money as well as interest on physical capital) were to fall or disappear.[102]

A form of money fulfilling these conditions will be described in Part IV of this book (Free-Money).

[101] [Done in the 40 years 1931-1971.]
[102] [This reform is yet to be carried out. It is possible that the onslaught of China will force Western governments into rethinking the issue.]

## Chapter 13.

## MONETARY REFORM

Demand and supply determine prices, and economic life needs a stable level of prices to prosper and to enable the splendid possibilities for progress inherent in money to unfold. If for 3 000 years plus, civilization had not been again and again forced by economic crises down the slope it had so laboriously climbed, if the widespread poverty left behind by each crisis had not made a philosophy of mendicancy part of our flesh and blood, capitalism would long ago have been a historical curiosity.[103] German workers would have not tolerate the treatment they receive from employers and from the State if the demand for the goods they produced had appeared on the market as regularly as the supply. And our German landowners would not have exposed their sores (need for rent) to excite public sympathy, and begged for wheat-duties from emaciated workmen's wives, had they themselves not been ruined by the fall of prices caused by the gold standard.

The pangs of hunger and the crushing load of debt are pernicious educational influences.

Mankind would have scaled heights as yet unknown in science, art and religion if the promising culture called into life by gold (even though bloodstained and plundered) in Rome, had not been petrified and annihilated in the 1500-year long economic glacial period ushered by lack of money.

Solomon wrought miracles because the money-material he received from Ophir made possible the division of labor and a regular exchange of wares. But everything he wrought was lost with the passing of the supplies of gold.

The growth of a culture has always been thwarted by a fall in prices. For culture means division of labor, and division of labor means supply. But supply cannot lead to exchange if prices sink from want of demand, of money.

Money and civilization rise and fall together. For this reason the mercantilists, who regarded gold as synonymous with wealth and culture planned a constant increase of the stock of gold by means of import-duties. They were not that wrong. The principle was sound, but it was foolishly applied. The fact is that science, trade and art flourish when the stock of money grows. But the mercantilists confused money with gold; they thought that gold performed economic miracles because of its "intrinsic value". They could not conceive money apart from gold.

Money and gold were for them the same.[104] They did not understand that it was money, not gold, that allowed the exchange of wares, and that wealth is created by the division of labor which money, not gold, makes possible. They attributed the progress resulting from the division of labor to the characteristics of gold, instead of attributing it to the characteristics of money.

Many who have learnt to separate money from gold, who have abjured the heresy of "intrinsic value" and convinced themselves of the importance of stable prices will now be inclined to argue as follows: Why not simply manufacture paper money and bring it into circulation as soon as supply has overtaken demand or, in other words, when prices begin to fall? And conversely: Why not withdraw paper money from circulation and burn it when demand begins to exceed supply, that is, when prices begin to rise? This is merely a question of quantity: a security printing

[103] Capitalism - An economic condition in which the demand for loan-money and real capital exceeds its supply, thence giving rise to interest.
[104] [In translation the pun “Geld und Gold” is lost.]

press and a fireplace are all that is needed to adapt demand (money) so precisely to supply (goods) that prices remain constant.

Michael Flürscheim was a zealous supporter of this idea. [105] He counts me among the first to have formulated and popularized it. This honor I must, however, decline, for from the outset[106] and ever since I have denied that paper money as we know it (i.e. without direct, material compulsion to circulate) can ever be brought as close to supply as the smooth flow of commerce, national and international, requires.

I still deny this possibility, and I shall prove here, in black and white, that if the State controls the amount of money issued, but neglects to control its circulation, all the anomalies standing out from the functioning of the present form of money will continue to exist.

As long as money, regarded as a commodity, is superior to wares in general, so that savers prefer money to wares (their own products); as long as speculators can with impunity misuse money for manipulating the market, money will not mediate the exchange of wares without exacting a special tribute over and above the legitimate profits of commerce. Money should be "the key that opens the gates of the market, not the bolt that bars them"; it should be a road and not a tollgate; it should assist and cheapen exchange, not hinder and burden it. And it is clear that money cannot be at one medium of exchange and medium of saving -simultaneously accelerator and brake.

In addition to State control of the quantity of money in circulation (only possible with paper money) I therefore propose completely to separate the medium of exchange from that of saving. All the commodities of the world are at the disposal of those who wish to save. Why should they save in the form of money? Money is not meant to be saved!

Supply is under direct compulsion inherent in the nature of wares. For this reason I propose a similar compulsion for demand. In bargaining, supply would then no longer be at a disadvantage in respect of demand. Those unable to rid themselves of the superstition of "value" will not understand the justice of this claim.

Because of this compulsion, supply is a simple measurable object: wares independent of the will of their possessors. Demand must therefore also be separated from the will of the possessors of money. It must become an object measurable at all times. If we know the amount of wares produced at any time we know the amount of supply. Similarly if we know the quantity of money in circulation at any time we should be able to foretell the quantity of demand.

This reform can be attained by the introduction of a medium of exchange subject to a material, inherent compulsion to circulate, and in no other way.
(See Part IV, Free-Money).

Such material compulsion would liberate money from all the hindrances to circulation caused by greed, speculation and panic, and would set the whole mass of State-issued money in constant, uninterrupted circulation creating a constant, uninterrupted demand.

Regular demand would eliminate the stagnation of sales and the congestion of wares at the shops. The immediate result of a regular demand is a regular supply influenced only by production, just as the flow of a river becomes regular when rainfall is evenly distributed.

With money under compulsion to circulate, minute changes in its quantity would be enough to make demand fit like a glove the natural variations of production.

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[105] Michael Flürscheim, *The Economic and Social Problem*.
[106] Silvio Gesell, Nervus Rerum, p. 36-37, Buenos-Aires, 1891.

Without forcing money to circulate we would go at once back again to present-day confusion. Demand eludes the power of the State. The only fixed factor in the present chaos is the fact that money exacts a tribute for its services. Private individuals withdraw it from the market as soon as it is scarce, and bring it again into circulation as soon as it is offered in abundance.

To test the correctness of the foregoing, I shall take a closer look at Flürscheim's proposal.[107] This is all the more necessary because Argentina,[108] Brazil, India and other countries have succeeded in keeping their currencies at par with the gold standard by regulating the issue of money other than gold. This has called attention to paper money and awakened the belief that this medium of exchange can be further perfected. But advocates of a paper-money standard can do their cause no greater injury than attempting to introduce reforms liable to fail, for each failure strengthens the position of the defenders of a metallic monetary system and postpones the discussion of a paper currency by decades.

The simple reform of the note-issue, here described as inadequate, proposes to empower the State to issue or withdraw paper money in quantities determined by the general level of prices. The State is to estimate the demand for money solely by the average price of goods and services. The quantity of money in circulation is to be increased when prices fall, and to be decreased when prices rise. Money is not to be redeemable in gold or any other particular product; it is meant to be spent in the market. But in every other respect this paper money is indistinguishable from ordinary paper money; it may be used by spending it, or misused by saving, or by speculating. Demand is left in possession of all the privileges it already has over supply. Demand is to remain what it is today, an action willed by the holder of money, and therefore the plaything of money tycoons.

Nevertheless the reform professes to eliminate the ups and downs of overproduction and unemployment, to make economic crises impossible and to suppress interest on capital.

The fate of this reform would hang on the behavior of savers. Let us repeat: A saver is one who produces more than he purchases. His surplus, bought by employers with money from savings banks, is worked up into new real capital. But no one parts with money-savings unless promised interest, and the employer can pay no interest if what he makes does not bring in at least as much interest as is demanded for the use of savings. And if work upon the building of houses, factories, ships, etc. continues for a time, the interest on such things of course falls. The employer cannot then pay the interest demanded for the use of savings. The money remains in the savings banks, and as this is the money with which the surplus wares of the savers were bought, their sale is interrupted and prices fall. This means crisis.

But here, the would-be money reformers retort, why did the crisis break out? Because prices fell - and prices fell because money was scarce. Because of the lowered rate of interest on real capital, part of the stock of money withdrew from circulation. Good! Let us leave the savers and/or saving-banks their money. Let them hoard it; we shall replace it with new money. The State prints money and advances it to the employers, if the money of capitalists and money-savers is held back. If the rate of interest on real capital falls, the State also reduces the rate of interest on the money it issues. If employers can extract only 3, 2, 1% from their houses, factories, ships, the State supplies them with money at 3, 2, 1 %, or, if necessary, at 0 %.

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[107] See also Arthur Fonda, Honest Money: Professor Frank Parsons, Rational Money.
[108] Silvio Gesell, La Cuestión monetaria argentina, Buenos-Aires, 1898; La plétora monetaria, Buenos Aires, 1907.

The proposal is simple and sounds reasonable. But only to the ear of the tone deaf. A musical ear can detect a discordant note.

Isn't money manufactured to facilitate exchange? Why then are capitalists, speculators and money savers permitted to use it for purposes alien to the exchange of wares? Money was made to help the producer of goods to exchange them for the products of other producers. Money is no more than a medium of exchange. Money makes exchange possible, and exchange is complete only when two producers have exchanged their products. When a producer has sold his product for money, exchange is not yet complete; someone in the market is waiting for him. Money exists so that the sale of a product for money shall immediately be followed by the purchase of another product with the same money, so as to complete the exchange. Anyone hesitating with his purchase leaves the exchange incomplete and interrupts a sale for another producer. This is a misuse of money. Without purchases there can be no sales. Therefore, if money is to fulfill its purpose, a purchase must follow on the heels of a sale.

We are told that the man who has sold his products for money and does not set free that money by further purchasing something, is ready to lend his money upon being offered interest. But this condition is unacceptable in justice. Either he lends his money unconditionally, or he is compelled to purchase wares, or to re-purchase his own products. No private individual ever ought to be allowed to set conditions of any kind on the circulation of money. Its possessors have the sole right immediately to purchase wares, and no other. The right to exact interest is incompatible with the conception of money, for it would be akin to a tax upon the exchange of wares for the benefit of private individuals and sanctioned by the powers of the State. The right to interest is the right to interrupt the exchange of wares by holding back money, to embarrass the owners of wares waiting for this money, and to exploit their embarrassment for the purpose of extorting interest. The conditions upon which money can be lent are the private affair of the savers, with which the State has no concern. The State, for which money is purely a medium of exchange, says to the saver: You have sold more wares than you have bought and you are consequently in possession of surplus money. This surplus must in all circumstances be brought back to the market and exchanged for wares. Money is not a place of rest. It is a crossroads. If you have no personal need for wares you can buy bills of exchange, promissory notes, mortgage deeds and so forth from people who need goods but have no money. The conditions upon which you can buy such bills of exchange are your affair; you have the unconditional duty of sending your money back to market, and immediately at that. If you fail to do so voluntarily, I will punish you by penal laws, since your tardiness harms the common good.

The State builds roads for the transport of merchandise and provides a currency for their exchange; as it insists that no one shall interrupt the traffic of a busy street by slow-moving ox-carts, it equally insists that no one shall interrupt or delay exchange by holding money back. Such inconsiderateness invites punishment.

Would-be monetary reformers, in their youthful enthusiasm, pass over these fairly obvious conditions for an efficient monetary system, yet hope to realize their aim. It is a vain hope!

Savers produce more commodities than they consume, but they do not at once set free the money they receive for their surplus, unless they get interest. The proposal now before us is that the crisis directly resulting from the savers' conduct should be resolved by the State supplying money to the entrepreneurs at a lower rate of interest, simply by printing new money with its presses.

The surplus production of the savers is in this case bought not with their money, but with new money. At first this matters little; with the help of the new money the building of houses, factories and ships proceeds without interruption. It is true that entrepreneurs would receive less and less interest from these enterprises, since building would go on uninterruptedly, and the supply of ships, tenements, etc. would constantly increase. But parallel with the decrease of the interest they received is the fall in the rate of interest they would have to pay the Bank of Issue. As employers they are therefore indifferent to the amount of interest they receive on ships or houses, as it must all be handed over to their creditors. Work proceeds uninterruptedly, as do savings. Many would still find it advantageous to lend their savings at the lower rate of interest; but others, especially small savers who in any case obtain but a trivial amount of interest, would return to the old custom of keeping their savings at home and renouncing interest - even if the fall in its rate is only from 5% to 4% to 3%. The small sums thus hoarded would, added together, amount to many hundreds of millions. The State would replace the amount by issuing new money. Crisis is thus averted; work produces more houses, ships, factories, etc. upon which interest steadily, and probably quickly, falls. But the fresh fall in the rate of interest will still further check the flow of savings into the savings banks. Soon even the larger class of savers begins to find it scarcely profitable to bring money to the savings-banks; they will certainly hesitate about bringing money wanted at short notice to a savings-bank some distance away. Some will also consider their money safer in their own possession than under the control of strangers. All the forces preventing the re-entry of saved money into circulation, which were counterbalanced by the high rate of interest, are now set free, and a stream of paper money flows from the National Currency Office or Bank of Issue into millions of savings-boxes. The lithographic presses of the National Currency Office ceaselessly replace what is here withdrawn from the market. A mighty stream of paper money, of demand due from day to day, is lost from sight.

The more the rate of interest falls, the more the stream swells. Finally, before the market gets saturated with real capital, when interest has fallen to about 1%, no one will bring savings to the savings banks; everyone will prefer to keep the money under personal supervision. At this stage the savings of the whole nation, huge sums amounting annually to many billions, flow into savings-boxes. These sums will be increased by the absence of economic crises and by the fall in the rate of interest, which in turn makes saving easier. The savings of last year will not be consumed by this year's unemployment. If interest falls to 1%, the income of the workers will be doubled, and if income is doubled savings can be increased tenfold. It is the last addition to the income that gets saved, and this addition equals the whole amount of the income up to now.

All this money is to be annually replaced by the State! A whole nation is to convert its savings into money, into what should be demand falling due from day to day, scraps of paper that have some use only because a fraction of them is required for the exchange of wares. A strange state of affairs!

Billions of dollars are lent on mortgage. But if mortgages bring in no interest they are foreclosed and the money is hoarded. The State must replace these billions by new issues. Bills of exchange to a total of over 30 billion marks circulate regularly in Germany, at the same time serving as a medium of exchange. But without interest no one will any longer discount a bill. Bills of exchange therefore become useless for trade purposes, and the State will have to issue an equivalent amount of money. Many hundreds of billions will be necessary. With a hundred lithographic presses that printed notes of 1000 marks day and night the State would hardly keep pace with the requirements of currency. Hundreds of billions of demand, due in the market from day to day, lie buried in private hoards instead!

But what if, for any reason, this demand should come to life and appear in the market? Where would then the corresponding supply of products be? If supply is lacking, prices rise, and rising prices cause differential profits. This prospect of gain entices money into the market! The rise in prices, the prospect of differential profits, bursts the savings-boxes open and the billions of demand pour like an avalanche upon the market. "Sauve qui peut!" is the cry, and in the shipwreck wares are the only lifeboats. Those who can buy wares are safe, so everybody buys them. Demand rises to thousands of billions, and as supply is of course lacking, prices shoot up. The rise of prices annihilates savings. The peasant again uses paper money as he used the French assignats[109] - to paper his cowshed over.

Flürscheim indeed denies such a possibility. He asserts that the thought of a rise in prices could never occur to the savers, that is, to the holders of the billions of demand, since it is known that the State would immediately counteract the slightest tendency towards rising prices by withdrawing surplus money.

But here we meet with the second contradiction of this reform. The first contradiction was the toleration by the State of the use, or rather misuse, of money as a medium of saving, with the result that it was forced to manufacture more money than was necessary for the true purpose of money, namely the exchange of wares.

The second contradiction lies in the fact that the State, when issuing money to employers, was itself not using the money as a medium of exchange. The money was not given for wares but for bills of exchange, mortgages and other securities. But money is a medium of exchange, and as such should be issued only against wares, i.e. given out in accordance with its purpose. If the State had issued money only for wares (and if these wares had not in the meantime fallen into dust and decay), it would have no reason to fear the avalanche of demand caused by the return to circulation of the hoarded savings. As it is, the State holds only mortgages, promissory notes and bills of exchange bearing no interest, and with such instruments no ready money can be recalled.

In advancing to employers the money refused by savers, the State shows that it misunderstands the function of money. The State misuses its power, and money wreaks a sharp and sudden vengeance for every misuse of it by the State.

Here there appears a third contradiction behind such reform. Different tasks are demanded of money according to whether it is saved or exchanged. As consumer, the saver pays 100 for a certain quantity of wares, but as saver he does not pay this price. He keeps his 100. Thus 100 considered as savings are worth more than the wares that can be bought for the same 100. Savings can never be brought back into circulation by wares.

The State has here treated money exchanged as the equivalent of money saved; it has replaced money withdrawn from the market in the form of savings, by purchasing bills of exchange, mortgages, and so forth. When the time comes for the State to exchange these things for savings, the impossibility of doing so becomes apparent at once.

This becomes still clearer if we think of two different kinds of money, say gold and tea, circulating together. To those who use money as a medium of exchange it would be a matter of indifference which kind of money they received, as they would immediately pay it out again. But to those who wish to save money, it is by no means a matter of indifference whether they receive gold or tea, since gold is durable and tea

[109] [Paper money used by the French revolutionary government between 1789 and 1796, issued at 5% interest. What Gesell describes here happened at the time: when the issue rose from 400 million livres to 1200 million, the people began to lose faith in the assignats. One must add that the excess was not printed in France but in England, where 17 printing establishments worked flat out to sink the French paper money at the behest of the gold interests.]

is not. A person wishing to save will not give 10 of gold for 10 of tea; indeed, if he reckons with long periods of time, he will not deem gold and tea equivalent at any rate of exchange. For him gold and tea are simply incommensurable quantities.

Further, the State must act promptly. The slightest rise in prices would immediately bring speculators upon the scene, and once they had pocketed their first gains from the differences in price-levels there would be no holding back the flood of paper money. Any action by the State would then come too late. Let us picture the position of the State. Ten billion are necessary for the regular exchange of wares, 100 billions have been issued and the difference has been hoarded as savings. If a fraction of the surplus 90 billions reaches the market, prices rise, and the moment they do, the remainder of the 90 billion are flung upon the market. The sequence of events would be as follows: The merchants who believe prices are about to rise, buy more than they immediately require. They obtain the money for these purchases by offering interest to the savers. These savings, coming into circulation, now make the rise of prices a reality. This stimulates new borrowing and new speculative purchases. So the process goes on, step by step, until all the money from the savings-boxes is drawn into circulation by the upward movement of prices.

The slightest lack of confidence in the powers of the State to prevent a rise in prices would instantly bring billions of savings into the market, into the shops, just as the slightest doubt as to the solvency of a bank of deposit immediately causes a run on it. They would race to market, at double-quick speed, in cars, in aircraft. That is the inevitable result of a monetary reform that leaves untouched the misuse of the medium of exchange as a medium of saving.

As long as paper money remains what it was meant to be, a medium of exchange, everything works smoothly. Paper money used for any other purpose is not worth the paper upon which it is printed. It becomes a scrap of paper fit at best for lighting a pipe.

The anomaly of physically joining the function of exchange to that of saving is still more obvious if we suppose that, as in Joseph's time, a run of fruitful years is followed by a run of bad ones. During the fruitful years the people would of course be able to save, that is, to pile up a mountain of paper money. If during the following years of scarcity the people wish to make use of this mass of paper, it becomes apparent that there is no supply to balance the piled-up demand.

The reform we are examining here can be effective only as long as the interest the employer receives, and which he uses to pay the savings banks or the capitalists, is sufficient to induce the majority of savers to put their money into circulation again. But Flürscheim claims that interest, once it begins to fall, cannot help soon falling to zero if economic crises can be averted.

A reform of this kind would be short-lived, as it would be the greatest fraud ever perpetrated upon mankind. After such a failure people, as in the past, would believe that their salvation lay in the gold standard and would clamor for its re-introduction.[110]

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[110] The foregoing analysis assumes the reform to be global. If only one country, or a few, adopted it, the fall in the local rate of interest would be offset by the savings exported to gain higher rates of interest. In this case the reform would not result in a catastrophe, but neither would it eliminate interest. [Since the abandoning of the gold standard by the U.S. in 1971, the scenario is dangerously approaching Gesell's description: the world's need for a medium of exchange is around three trillion dollars. But the big financial bubble has attained the frightening figure of 150 trillion. Were this "money" to pour into the market, it would cause the scenario here described by Gesell. And perhaps at this stage the banks would offer to re-monetize the gold ingots that gather dust in their vaults.

To me a thorough reform at the outset would seem preferable. Besides paying attention to the issuing of money, I would also advocate a change in its form. Such reform would:

- dissolve once and for all the connection between the function of exchange and that of saving;
- cause the disappearance of all private stores of money;
- break the lids of all savings-boxes and force the locks of all money chests;
- in war and peace, in good years and in bad, keep exactly as much money in circulation as the market could absorb without fluctuations in the general level of prices.

With Free-Money, the traditional connection between the function of saving and that of exchange would, in conformity with the results of our inquiry, be brusquely and irrevocably broken. Money would become a pure medium of exchange, independent of the will of its owner. It would become materialized , chemically pure demand.

## Chapter 14.

## JUDGING THE QUALITY OF MONEY

The supporters of the gold standard ascribe the great economic development of the last decades, absolute and relative, to the gold standard. Look at the millions of smoke-belching stacks! They are the modern equivalents of sacrificial altars, to whose Lord the nation gives thanks for the gold standard!

There is nothing surprising in the assertion that money can cause, or make possible, an economic revival. For money makes the exchange of wares possible, and without exchange of wares there can be no work, no earnings and no marriages. When the exchange of wares is interrupted, factories shut down.

The assertion, we repeat, contains nothing surprising.

On the contrary manufacturers, shipbuilders and other employers, when asked whether they could produce more goods with their present machinery and staff, unanimously agree that production is limited only by the sales of their production. And money makes sales possible - or impossible.

This eulogy of the gold standard contains the tacit assumption that its predecessor, the bimetallic standard, hindered economic development. Such assertion causes no surprise either. For money can not only bring progress, but also evidently hinder it. Very different results can be ascribed to money, from economic prosperity to its reverse in a few decades.[111]

After Germany adopted the gold standard, its landowners started complaining of falling prices and of their difficulties in finding money to meet the interest on their mortgages. The German import-duties were devised for their protection, without which many farms would have come under the hammer. But with prices falling, who could have bought these farms? Large estates would have been formed, just as under the Roman Empire, and the downfall of Rome has been ascribed to its latifundia.[112]

The assertion of the advocates of the gold standard is therefore nothing remarkable, but it requires proof. German economic revival could have had other causes: schooling; the many technical inventions that made work more efficient, German wives producing and educating a large and healthy stock of workers, and so forth. There is, in short, no lack of competitors eager to snatch the laurels from the gold standard.

Proof therefore is needed. We must find some criterion whereby to judge the quality of money. We must determine whether the gold standard has so facilitated exchange that the expansion of the economy can be ascribed to this cause alone.

If the gold standard has facilitated the exchange of products, the result must be increased security, speed or cheapness of exchange, and this increased security, speed or cheapness of exchange must cause a corresponding decrease in the number of traders. This is obvious from the following analogy: if we improve the roads that serve for the transport of merchandise, the efficiency of transporters increases, and if the amount of merchandise to be conveyed remains the same, the number of transporters must diminish. Since the introduction of steam, sea traffic has increased a hundred-fold, yet the number of sailors has diminished. They have become waiters, cooks or servants.

The same should occur in commerce if the gold standard is to the cowry-shell standard as steam power is to wind, or as dynamite is to the wedge.

But with the gold standard an exactly contrary development can be observed.

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[111] Gesell: "Gold and Peace?" speech delivered at Berne, 1916.

[112] [The assertion is Pliny's, quoted by Henry George: *Latifundia perdidere Italiam.*]

Schmoller avers that "The middleman's activity (commerce) used to claim about 3 or 5% of workers; it now claims 13 or 15, sometimes as much as 31%. This activity (the cost of commerce) forms an increasing proportion of price."[113]

Commerce, instead of easing up, grows daily more difficult. With gold as the medium of exchange not fewer but more persons are required to exchange goods, and these persons have a better general education and a better commercial training. This can be proved from the German statistics of occupations.

| | 1882 | 1895 | 1907 |
|---|---|---|---|
| Population of Germany | 45 719 000 | 52 001 000 | 62 013 000 |
| Total number of workers | 7 340 789 | 10 269 269 | 14 348 016 |
| Traders engaged in commerce | 838 392 | 1 332 993 | 2 063 634 |

Whereas the number of workers in agriculture, industry and commerce has increased from 16% to 23% of the inhabitants, i.e. by 43%, that of traders has increased from 1.83% to 3.32%, i.e. by 80%.

The figures show that since the adoption of the gold standard, commerce has become so inefficient as to push the number of traders from 11.4% to 14.5%. Clearly the gold standard has been the cause of it.

It may be objected that in the last decades many producers have gone over from primitive methods of production to the division of labor, especially in the country, where less and less is produced for personal and family consumption and more and more for the market. This of course increases the number of merchants required. Few spinning wheels, for instance, are now in use, and village artisans paid by barter have had to give way to factories.

Again a worker, thanks to improved methods of production, now produces more goods, and of better quality, than formerly. Thus a much greater mass of wares is brought to market, and this also increases the number of persons engaged in commerce. If one merchant is required to sell the calico produced by 10 weavers, then, other things being equal, two merchants are required if the 10 weavers, with improved looms, produce twice as much calico.

This objection is valid, but it should be remembered that commercial work also has been greatly facilitated by organization and invention. We have the decimal coinage, introduced with the German gold standard (though it is independent of the gold standard, as the English currency system proves), the metric system of weights and measures, commercial staffs trained in better schools, coordinated laws of commerce, consulates, extraordinary postal facilities, (10 pfennig for a letter to the whole of the Reich, parcel-post, postcards, money orders, collection of cash through the post, etc.), telegraph and telephone. Add to it the typewriter, shorthand, copiers, cash registers, the delivery tricycle, advertising, banking services like the current account, consumers' co-operatives; in short, the countless improvements introduced into the technique of commerce during the last 30-odd years. Finally consider the technical training of the businessman, which must have increased his selling power. If such training has not done so, it is superfluous, and the merchant would be a fool to pay a higher salary to a trained assistant. If he pays a higher salary, it is because he believes that the trained assistant does more efficient work, i.e. sells more merchandise than his untrained counterpart.

If the increase in production is compensated by the increased efficiency of commercial organization, then the increase in the proportion of those engaged in

[113] Commerce in the XIXth Century, Die Woche.

commerce retains its full force as evidence against the alleged advantages of the gold standard.

But the above figures give only the number of persons engaged in commerce, whereas we are more interested in the gross profit of commerce. This, to judge by appearances, has certainly increased. It cannot be deduced directly from the number of those engaged in commerce, since the average income of persons engaged in commerce is higher than that of other workers.

To judge the effect of a monetary reform upon commerce, it would be necessary to calculate statistically the gross profit of commerce, that is, the difference between the factory price and the retail price of each product. Retail price, minus factory price, equals the gross profit of commerce. It would be possible to calculate in this way the cost of commerce to a country and the efficiency of its monetary system. There is reason to believe that such statistics would prove the well-known assertion that commerce at present consumes one-third or more of the total production! Of 1000 tons of production, 333 fall to the traders.

## Chapter 15.

## FAILURE OF THE CRUDE QUANTITY THEORY OF MONEY

Demand and supply determine the price of wares, and supply depends upon their existing stock. If the stock increases, supply increases; if the stock decreases, supply decreases. Stock and supply are identical; instead of saying "demand and supply" we could say "demand and the stock of wares" determine price. Such statement seems to justify the quantity theory of money.

The quantity theory, which, with unimportant limitations, holds good for all wares, has also been applied to money. It has been stated that the price of money is determined by its stock. But experience has shown that the supply of money is not at all dependent upon the stock of money, as the quantity theory assumes. The stock of money often remains unaltered, but the supply of money is subject to great ups and downs. The war chest at Spandau has not been offered as supply once in forty years, whereas other money annually changes hands ten to 50 times. The places where money is kept (banks, safes, chests or stockings) are sometimes empty, sometimes overflowing, so that the supply of money is great today and small tomorrow. A rumor is often enough to direct a torrent of money (demand) from the market to the hiding places. A telegram, perhaps forged, often makes hands in the act of closing the purse-strings open them again and pour an avalanche of money on the market for land.

The conditions of the market have the most significant effect upon the supply of money. When we say that demand and supply determine the price of wares, we could say with equal truth that "demand for money and the mood of its holders" determine the price of money. The stock of money is certainly important for the supply of money, for it fixes the upper limit to that supply. More money cannot be offered than the stock allows. But whereas with wares the upper limit to supply (that is, the stock) coincides with the lower limit, so that supply and stock are always equivalent, with money no lower limit has ever been be discovered, unless we arbitrarily deem it to be zero.

When there is confidence, there is money in the market; when confidence totters, money withdraws. It is an ancient experience.

But experience also teaches that if the supply of money not exactly and always corresponds to its stock, then the price of money is independent of the stock, and the crude quantity theory fails to hold.

But if the crude quantity theory is not applicable to money, neither is the cost of production theory. The cost of production can determine price only by its influence upon the quantity produced, that is, the stock; and the stock of money does not, as we have seen, always correspond to the supply of money.[114]

Of products in general it is true that when the cost of production falls, production increases. With increasing production the stock and supply increase, and with increasing supply the price falls.

But with precious metals it is by no means certain that when stocks increase supply automatically increases; it is still less certain that supply always corresponds to the stock. Proof: the stores of silver at Washington; the war chest at Spandau; the frequently discovered hoards of coins.

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[114] "The increase of the stock of money alone cannot increase prices; the new money must also cause demand by being used for purchasing in the market. That is the first limitation of this theory." Dr. George Wiebe, History of the Price Revolution in the 16th and 17th Centuries, p. 318. "Money not offered in exchange for products has as little influence upon prices as if it were destroyed." Hume.)

Both the crude quantity theory and the cost of production theory, fail when applied to money, and the reason why they fail must be sought in the characteristics of the money-material. The contents of the war chest at Spandau would long ago have fallen into dust but for certain characteristics of gold, and the silver policy of the United States would have been inconceivable but for certain similar characteristics of silver.

If gold decayed like other products, the supply of money would always correspond exactly to its stock. Confidence or lack of it would have no effect upon the supply of money. In war and peace, in prosperity and adversity, money would always be offered for exchange, even when the offer entailed certain loss, just as potatoes are offered for exchange quite apart from the question of profit to their owner. In short, demand and supply would determine the price of money as now they determine the price of all other products.

The price of a product like the Spandau gold, or the Washington silver which, without suffering the least depreciation, can be stored for decades in damp underground strong rooms, the price of a product the supply of which depends not upon intrinsic necessity but upon human judgment, is as free and incalculable as the wind. The price of such a product knows no economic laws; the quantity theory and the cost-of-production theory pass it by. Its supply is determined simply by profit.

Such money, as Lassalle[115] rightly remarked, is from the outset capital; it is offered in exchange for as long as it can obtain interest, and no longer. No interest, no money!

Removing the anomalies that we have just exposed from our money gives the possibility of changing its characteristics (see Part Four), so as to overcome the ingrained resistance of the working classes, while still relying on their strength of will.

But perhaps not even the analysis offered is going to be enough to wake them up. Let me therefore add the contents of a talk I delivered at Berne on 28th April 1916.

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[115] [Ferdinand, 1825-1864. Disciple of Marx and confidante of Bismarck.]

## Chapter 16.

## GOLD AND PEACE?

*Hail Lycurgus, who banned gold,*
*The root cause of all crime.*
*Pythagoras*

Domestic peace is the precondition for whoever desires, as we all do, permanent peace among the nations. But domestic peace on one side, and privilege, interest and unearned income on the other, i.e. domestic peace and living of rent, are incompatible. Rent and interest, the so-called right to live off the work of others, must be sacrificed without leaving trace if we truly want to enjoy first domestic and then international peace.

It is not at all easy to obtain international peace simply by limiting the arms race, as many pacifists want us to believe. The cost of war materiel is a pittance compared to what peace materials cost. This pittance should play no role in such momentous issue. War expenditure in Germany is barely one billion, whereas rent and interest amount to 20 billion, 20 times more.

A peace treaty made of paper does not cost much, true enough, but how useful is it? The treaties with Belgium and Italy were paper treaties, and they showed it. Treaties remain in force for as long as the two parties behave honestly, i.e. until they are broken or cease to be useful. But they are not worth the paper they are written on the moment when one of the signing parties spots a disadvantage in it. The worthlessness of such a treaty can be investigated simply by analyzing on what basis the domestic peace of the signatory countries rests. Ask union leaders whether they are ready to respect the Constitution. For a constitution to be able to guarantee perpetual domestic peace must do so in reality. Justice for all citizens and complete elimination of all those who earn without working: such a Constitution would be protected against all infringement and would need no paper.

Suppose now that by means of alliances, treaties, rearmament, arbitration etc. the nations promised one another to render war altogether impossible. The thing is perfectly imaginable. But let us ask, what do we put instead of war among the nations, the well-known safety valve against the outbreak of global civil war, akin to the civil war that every now and then shocks a society in the form of a general strike? Up to now a foreign war has always succeeded in preventing an armed strike. The thing develops ever the same in all particulars without fail. In peacetime such development accelerates, because those who have most to fear hasten the process as much as they can. After one or two decades of peace, the International Workers' Organization would be ready to attack. It would be a truly global civil war, which just like the crazy war raging now,[116] would extend to the whole world, all cities and villages till victory, i.e. till the complete defeat of the enemy. Against the threat of such global civil war, a foreign war breaks out, as certain as death. The process is as follows: the States where the proletariat has staged a coup, thus "subverting" the capitalist order and establishing a communist one, would very soon find themselves left behind, owing to the mangled natural order. They would not be in a position to withstand the onslaught of those States that decided to quell the revolt and re-establish the capitalist "order." Whereupon the dominant classes would restore their privileges, suppress the revolt of the proletariat in blood and send their hopes to kingdom come.

[116] [World War I, 1914-1918]

Let us ask, what use would peace efforts be in such conditions? Does it make sense to work towards international peace while completely neglecting its basis, domestic peace? Can no one see that the endeavor is akin to building on wind-driven sand? Who builds the roof before digging the foundations? As things stand, international peace is but the stopcock of the safety valve of the dominating social order in the whole world. It acts as a shortening of the reprieve, until next worldwide blaze.

Isn't there a better, more humane means? Forget the capitalistic safety valve, and let us get working until finding the true basis for domestic peace, and draft a final agreement (social contract) of which it will be possible to say: "It will last."

We know what we shall do at the end of this war. The war will end somehow. We shall sit over the heaps of ruins and scratch our sores with the broken pieces.

Let us build therefore from the ground up a new economic order technically foolproof, and live by it. And let us make sure that what regularly causes an outbreak of war between the nations will no longer be a headache.

There is a solution to stave off what has always pushed us towards utter ruin.

All these explanations are meant for those who want to see peace on earth. I intend to attract their attention to the fact that international peace depends on domestic peace; to expose gold as the instigator against that harmony; single it out as the traditional enemy of humankind, as the true cause of the division of the people into classes, of domestic war and in the last analysis of war between the nations.

## Chapter 17.

## IS THE GOLD STANDARD COMPATIBLE WITH PEACE DOMESTIC AND FOREIGN?

Every country has a war party. They are people who, following personal observation, research, or theory, their own or other people's, etc., have come to the conclusion that peace, whether domestic or international, is no more than a romantic dream.

It is obvious that one who does not believe in peace must believe in war, and does his best to bring it about. If he is not a card-carrying member of the party, is at least a sympathizer.

It is not at all necessary that such a person actually wants war and rejoices when it breaks out. It is enough to believe in its inevitability. The rest follows. It has been like that since ancient times, when the oracles warned to take precautions against a threatened disaster, which made it necessary for the disaster to happen. When in the Middle Ages the end of the world was announced for next autumn, disaster truly visited those large stretches of land than nobody sowed.

It is the same today: when the entrepreneur begins to believe that a crisis is imminent, abandons his projects and sacks his workers. It is enough to believe in the crisis to cause its coming.

A general belief in war and its outbreak follow one another.

Let me repeat: whoever cannot believe in peace among the nations, operates in the same sense as that of the war party and belongs to it. He is up in arms, and reinforces his belief in war with lectures and theories.

It is possible to divide the members of the war party into four groups, depending on how each sees war:

1. As a divine punishment;
2. As an expression of the will of ambitious people;
3. As a result of the biological process of selection;
4. As a means to improve the economy.

Be that as it may, on an evil day the opinions on both sides of the border coincide in letting war break out. In each of the two countries the four groups coalesce into one, and their precautions are more than enough to cause the outbreak. Please note that the members of these four groups need not be such scoundrels as not to desire peace personally. These people work towards war simply because they no longer believe in peace.

Here I must stop to expose the individual theory of each group and show up its emptiness. I could single out group 4, those who believe that war is the universal remedy against economic need. Incidentally this group is the biggest and most influential of the four. Its fighting power and thinking influence are such that without its support the other three would be condemned to impotence.

To fight against and defeat this fourth group, it is enough to notice that by their own principles, the first three groups are more in favor of rearmament than the fourth is. On weakening the three, then, we can disarm and capture the fourth.

To understand this part better, let us note that the belief in the wickedness of the world, which unites groups 1 and 2, has its basis in a pessimistic view of life, and it is well known to what extent external events can influence such a view. When business is slack, when dividends fail to materialize, when workers are unemployed, when merchants scrutinize their books wondering where the money to pay their bills will come from, pessimism reaps its harvest. People start mentioning this valley of tears, cloisters fill up, and war is needed to punish sinner man and make humanity improve. Everything that drives the mob appears as sinful and muddy, just as wet weather makes everything appear muddy.

Those in group 4 agree with groups 1 and 2, except for the religious factor. Pessimism is the result of bad business. The mystery that envelops their religious conclusions, which they derive from evil times, registers the same ups and downs of those times. To get rid of their pessimism all they need is an improvement in the economy. Then young men find work and earn enough to raise a family, daughters leave their homes like hot cakes leave the baker's, and when someone mentions valleys of tears and war as a rod to punish humanity with, people laugh in his face.

A similar thinking plagues those of group 3, who see war as a purifying biological bath, a more violent means of selection as it were. The longer the economic crisis lasts, the more these people see such crises as symptoms of degeneration. Unemployment, malnutrition, bad clothing, bad soap, bad housing and a bad psychic constitution wear down humanity. No one can bear it harmlessly. If the crisis lasts, as it did between 1873 and 1890, specialists are in a position to measure such degeneration scientifically, and corroborate it with crime statistics.

That's how the biological warmongers get economic data for their proof.

To believe that provoking a war and expecting it are one and the same is a false conclusion, but it means nothing to groups 1-3 of the war party, they of the purifying bath. It is enough for them to believe it. It is impossible to ascertain if their theories are the product of healthy or sick minds, but when someone throws a stone at your head it's not much of a consolation that he has missed.

How does economic want arise in reality, causing all these difficulties? I will attempt to answer these two questions.

Ancient legends[117] speak of a fabulous Golden Age. Don Quixote describes the Age as one when there was no such thing as mine and yours. He thought it was the Age of communism.

And he adds that the age was called "golden" not because one could buy this gold "of which this iron age has such a high opinion," but because all natural resources were at everyone's disposal.

I think that such interpretation of our congenial philosopher is false. I think, on the contrary, that the golden age began as soon as gold was introduced as a means of exchange, and monetized. Gold was the first medium of exchange, somehow satisfying the need for trade and for the division of labor.

With the introduction of money, the division of labor could develop much more freely.

The exchange of goods became comparatively safer, faster and cheaper than with other types of money in use until then.

To explain the legend of the Golden Age better, it would be enough to state that a better money economy promoted the division of labor. It is division of labor that unleashed the enormous forces behind progress, thanks to which human society can be told apart from animal societies.

For as long as such division of labor was hindered by the lack of a suitable medium of exchange, men were forced to produce whatever they could with their bare hands, from materials immediately available in the vicinity of their workplace. In such

[117] It would be an easy matter to prove my argument starting from the economic conditions prevailing before the war. But I prefer to start from the ancient past, so as to make them more comprehensible and examine them without undue prejudice.

circumstances their way of life was something miserable, animal to the highest extent. Hunger was their supreme, perennial overlord, as it is now for the wild animals of the desert. To have an idea of what that meant, suppose that at the outbreak of this war the National Bank had withdrawn metallic money from the citizens without replacing it with paper money. What wailings and scarcity would have resulted!

Were money to disappear from Europe for three years, half its population would be in dire straits. The rest would soon sink to the level of the civilization of pile-dwelling, possibly the highest level attainable by a non-monetary economy without mediumof exchange.

Suppose now that one good day the introduction of a medium of exchange convinced the pile-dwellers to adopt division of labor. A certain technique would develop for each zone, and productivity would increase. How many more stone axes, fishing nets, fish hooks, etc. would each of them produce in the same working time as before, and what items of excellent quality! Personal efficiency would increase a hundredfold, and prosperity improve prodigiously. How many now would be in a position to enjoy sufficient leisure to think and speculate! And if they began to exchange their products with exotic luxuries brought by merchants from faraway countries, wouldn't a high, exquisite cultural level arise in the midst of such pile-dwellers? And wouldn't they tell and re-tell their children's children about the fabulous ancient times, truly golden, recalling that it had indeed been gold to have led them from barbarity to the division of labor, to industrialization, to progress, to prosperity and good manners? That's why I think that the term "Golden Age" should be taken not figuratively but literally. Gold made the homonymous age.

But it can't be, many will say. Gold, the most inert of metals, symbol of death, cannot have played such an active part in the destinies of humanity. How lifeless gold is, one can learn from the hymns of praise sung to it by the apostles of the gold standard. What has not been said about it! It's an endless series of negatives. Gold, the hymn says, does not rust, stink, scratch, break, rot, go moldy, it has the scantiest chemical affinity, it's neither hard nor soft, one does not find it in the streets, but in very few places. It has scarcely any use, and because of its rarity only few people possess it, and in small quantities.

Briefly, gold possesses but traces of those properties that mark other materials and render them useful. Its characteristics are all negative! How on earth can we give such an enormous importance to a Golden Age in the face of such string of negatives?

This question is legitimate and deserves an answer. It is indeed so. Of all earthly materials, gold is indeed the one with the scantiest industrial use. Of all metals it is the deadest. But that is precisely what most favors money. Because of its behavior, gold is the metal that can best serve to manufacture money. Since we find in it hardly any quality that renders it useful, gold enjoys precisely the poor interaction with other materials that makes it most useful for money, better than any other metal. The more negative the material characteristics of money are, the better it can perform its task as a medium of exchange.

On selling a cow, one gets money. A quick glance and one stuffs it in the pocket. But he who takes the cow home will not give it a quick glance. Won't he observe, stroke and finger it? Every day he will discover qualities that will either gladden his heart or worry him to death.

If the material out of which money is made were not as uniform as it is, if we were to scan every single bill or coin as we do with a cow, an axe, or a book, we would need a whole day to add up a sum of 100 marks, and at the end of the exercise we would be no wiser about quantity and purity. But precisely because the material of which money is made out of leaves us completely indifferent, old and new coins, red and yellow ones of the same nominal value circulate side by side. How indifferent we are in this respect, we know from the fact that not one person in a thousand cares to know how much gold is there in a Mark.

Now we understand the happiness of the barbarians of old on discovering that providence had placed at their disposal a natural material, which because of its lack of special characteristics and affinities could change hands without difficulty, and whose quantity could be legally defined beyond doubt and according to need.

In those early days, a single natural material came handy for monetary use. As regards artificial material, like paper, the necessary manufacturing technique could only arise from a division of labor brought into being by gold money.

Gold was then the only possibility for whoever wanted to abandon barbarity by means of the division of labor.

But after raising gold to a medium of exchange, there was a general stampede of all the nations for it. This would seem to contradict what I have just said about people's indifference towards this metal. But only seems. The Morgans, Rockefellers, speculators and usurers who hunt for gold, are perhaps more indifferent than anyone else towards its being gold. What such characters seek in gold is money, the medium of exchange, which all citizens need to trade the produce of their labor. Money gives these people the power they aspire to. Were gold not at the same time money, its monopoly would be far less important than a monopoly of silver, no longer imaginable today. With his gold monopoly Morgan has brought near desperation 80 million Americans, black, white and red. The rush for gold is but the rush for money. And the rush is the same everywhere, whether money be made of gold, paper or copper. Hence Goethe's dictum should not be taken literally when he says, "Gold drives everything, and everything depends on gold. Alas, poor us!" Everybody is after money, not after gold as such. Once upon a time people were after silver. Judas betrayed his Master for thirty pieces of silver because money was made of silver.

Ever since silver has been demonetized, nobody pays attention to it. And everybody would laugh in Goethe's face, were he to say, "Silver spoons drive everything, and everything depends on silver spoons! Alas, poor us!"

By monetizing gold, the barbarians introduced the division of labor, and with it techniques that sped up production. Gold served as a ladder allowing primitive man to climb out of his cavern towards luminous heights. But it was a defective ladder, and a defective ladder is the more dangerous, the higher one climbs it.

Even today it is still a riddle how fast ancient peoples scaled the highest peaks of civilization. We are astounded at what Greeks, Romans and other ancient nations achieved in such a short time. Gold solves the riddle. Better still, money solves the riddle, with its concomitant division of labor. The power of money to promote progress has not been sufficiently appreciated, and will never be overrated. The astonishing speed in the development of those peoples gives us the best touchstone for understanding the meaning of money. The invention of the railway gives us only a pale idea of what division of labor can do driven by money. Money acts as the foundation of culture. Everything else is built on it. This same fundamental meaning of money also tells us what would happen if such foundation were to fail one day. Everything built on it would collapse in a heap of rubble. And in fact ancient civilizations did sink into nothing when money, or as we have been saying, gold, disappeared.

Gold dragged humanity out of barbarity, and pushed it back into barbarity when little by little it disappeared.

Because gold has to be found. This unique medium, used to make money, exist only if and when "found." If found, there is money; and if not, there isn't any. Babylonians, Greeks and Romans gave as much importance to finding gold as we give today. The Babylonians did not make money as we do today; they looked for it.

What gave Babylonians, Greeks and Romans a measure for money manufacturing was not the need for trade, or the need for division of labor, or culture, but blind fate.

On finding much gold, plenty of money was minted at Babylon, just as today plenty of money is minted at Berlin, London or Berne when much gold is found in Alaska.

And if little gold was found, people managed as best they could, with little money. When no gold at all was found, they simply went back to barbarity. That's what actually happened to Babylonians, Hebrews, Greeks and Romans, and what to all appearances is about to happen, seeing what European authorities, experts and financiers are doing. If gold scarcity should cause us to give up division of labor, let us go back by all means to bushmen production methods! That's what the ancients did, and this is the explanation for the mysterious disappearance of entire civilizations.

For let us not forget, let us have it clear before our eyes: gold must be found, f-o-u-n-d, F-O-U-N-D,[118] and if one doesn't find it, too bad. Whenever we need anything else, we say: let us make it according to need.

Everything then: hay, straw, gold standard literature and theories of value, are created according to need.

But gold, the raw material for money, cradle of all culture and basis of State power, cannot be made according to need. It is found, if and when found. Think what would happen if the Governor of the Central Bank had a hole in his trousers' pocket, and every now and then he lost the key to the strong room. The entire trade of the country would depend on his finding that key, much as it depends today on finding gold. While he looked for the key, the commercial life of the country would come to a standstill, and precisely because the ancient peoples failed to find the key, they and their cultures died out. For the Romans this happened more or less in Augustus' time. The gold mines were exhausted, and the Spanish silver mines, which up to then had contributed to the greater part of the manufacture of Roman coins, considerably decreased their production. The power of Rome, like any durable State power, was economic, based on trade, division of labor and money. Wherever Roman money arrived, so did the division of labor, and the region became prosperous. Such widespread, showy prosperity is ascribed to Roman domination and administration, thus advertising its power. But when the Romans failed to find silver and gold, they were no longer in a position to mint money.

Little by little, the existing stock either declined, or got lost, or was used to pay for imports from the East without balancing exports. The division of labor, which among other things was supposed to supply the army, also began to decline. So did prosperity, taxes became more and more unbearable, and the forces of dissolution got the upper hand in the whole empire.

The golden ladder collapsed. The Empire fell the lower, the higher it had climbed up that treacherous ladder. The goatherds that today wander in the outskirts of Rome look uncomprehendingly at the ruins of colossal works, which gold had caused to rise from nothing as if by magic. The splendor of Rome, like that of Babylon, Greece or Jerusalem, was only a reflection of the enormous civilizing power lurking behind money.

Whatever else is alleged as an explanation of the dying out of the ancient peoples comes from the unhappy worldview of medieval monasticism, whose power rose together with scarce gold. The division of labor decreased or disappeared; poverty, hunger and submission became widespread. It is not true that the downfall of Rome was caused by the vices of the upper classes. Nobody is so powerful as to

[118] [Emphasis and staccato added.]

influence the destiny of a whole people in fortune or in disgrace, and for centuries at that. A happy, rich and healthy people, prospering through the division of labor, do not allow degenerate and vicious little men to abuse them for long. When a successful entrepreneur signs a bill of exchange, what he really says is “that’s how much I’m worth.” He is proud and free, because he is sure of his enterprise. Tyrants have never been able to exercise power in times of economic prosperity. The incompetent are not allowed to steer the ship of State. Everything prospers with the economy, the freedom and pride of nations before everything else. But when a people, as happened in Rome, Babylon and Jerusalem, little by little abandons the division of labor, it must go back to subsistence economy. As the money supply continually decreases, the miasma of gloom overpowers a whole people, mendicancy predominates, and there is no one with the pride and courage to throw the incompetent and corrupt out of power and take their place.[119]

No, Rome did not go under because of the corruption of her mores; corrupted individuals do go under, but ordinary people have no truck with them. How often would the European people have gone to ruin because of the vices of their princes or of their upper classes! Rome went down together with the division of labor, and this languished as soon as gold was no longer found.

It is equally false to assert that the Roman people as a whole degenerated. Today one can pinpoint coffee, alcohol, tobacco and syphilis as agents of ethnic degeneration. Without such poisons medical doctors could not even speak of degeneration. But the Romans did not know such things. They new wine, and surely they didn’t drink more than is drunk today. The erstwhile quantities could not possibly destroy a whole people.

It is even more false to blame the Germans for the downfall of Rome. We see today what this people can do. They have spirit of enterprise, seriousness of intent and high aspirations. As barbarians (when they did not know either money or division of labor) they destroyed Rome. Why didn’t the Empire revive under Germanic domination? It is true that new life sprouts on old ruins. But what could the Germans do with the Roman ruins, without finding therein the gold necessary to mint money and to revive the division of labor? Without division of labor, not even the Germans could create a culture. Rome went under because of a dearth of money, and this deadly plague spread to all the people that came to her. No life could revive on the ruins of Rome, not even under German domination.[120]

And so Rome slept, for a millennium and a half, until the Renaissance. The Renaissance is to be attributed to the greatest invention of all time, artificial money. Indeed: the minting of vile metal awoke Rome, and with her the rest of Europe, from her long hibernation. As there was no raw material to mint true coins, let us mint counterfeit ones. The artists, inventors and merchants of the Renaissance are its effects, not its cause. Inventors have always existed. When there is abundant money, they prosper. Without it they languish. The true cause of the Renaissance is to be sought deeper down. It must be identified in the fact that, in the 15$^{th}$ century, everywhere in Europe but above all in Italy, there circulated, in small quantity and for the first time, coins inherited from Roman times but diluted with copper, and which

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[119] [The description fits today’s “developing” countries only too well.]

[120] [Those who maintain the thesis of the barbarian invasions as the cause of the fall of the Roman empire, use as their proof Alaric’s sack of Rome in 410. It is true that Alaric was a barbarian, and that the army that sacked Rome was made up of barbarians. But such historians forget (or do not know) that the sacking army was the **Roman army**, and that Alaric was its *Magister militum* (master of the infantry). The sacking represented the army wages, which had not been paid because of scarce money. The last barbarian army trying to get into the Empire was Attila’s 41 years later, and it was defeated by the Roman army under Aetius at Châlons in 451.]

kept their nominal value despite the counterfeiting. Thus one single ducat begat 3, 5, 10, 50 or more, and with this money one got rid of debt. It was like the Hebrew Jubilee year but in modern form. The amount of money available grew, penetrating increasing strata of society.[121]

Since Augustus times prices were either static or declining. As a result trade was either dangerous or mathematically impossible. But now prices began to attract. Merchants who now dared to sign a contract, no longer risked going to jail for debt. Good prices attracted, for selling prices started exceeding buying prices in all probability. It all happened thanks to the copper that the princes, evidently driven by pure greed, incorporated in the coins, thus rendering trade possible once more. When they, in cahoots with falsifiers, injected money made of vile metal on the market thus legalizing counterfeiting, division of labor was re-born and the world heaved a sigh of relief. Rumor spread: the Schinderling's[122] power was conferred on it by evil people, but it did good. Corrupt princes had not caused Rome's ruin by bad government, but now corrupt princes made her resurrect from her ruins.

The Schinderling resurrected the division of labor, and what was the basis of the Renaissance but the rebirth of that division? The division of labor is the foundation of culture. Thanks to the Schinderling poets and painters found buyers for their works, and were driven to new and abundant creations. The only true friend of the figurative arts, who never touched a single brush or chisel, was the Schinderling, the new, artificial and "false" money. We probably owe to the same Schinderling Gutenberg's finding the capitalist who financed his invention. He was "only" a Schinderling capitalist, but what did it matter? Without ready money, Gutenberg's invention would have perhaps never seen the light of the day, and Gutenberg would have died in prison for debt. The Schinderling had stimulated the sale of goods, of books also. To provide a sufficient supply of books Gutenberg had the idea of producing them by machine. Inventors are always around. What is worrisome is distribution and sales; everything else is a question of technology, which can always find appropriate solutions.

As remarked at the beginning, the raw material out of which money is manufactured is of no interest to those who make use of it. The Schinderlings changed hands fast, and the redder they became with alloyed copper, the faster they circulated. And wherever they circulated, people worked, and the sum total of work was equal to the sum total of exchanges they made possible. One million Schinderlings, changing hands 100 times in a year, moved 100 million's worth of goods, enough to bestow on a whole city a reputation for opulence. And so it was that the wealth of the cities was inversely proportional to the purity of money and the honesty of the princes. Had the princes proclaimed, as did Brother Martin, "Here I stand, I cannot do otherwise,"[123] and had had the neck of getting indignant at the counterfeiters, we would have had no Renaissance, and Brother Martin would have lacked the courage to rebel. Subversion needs something more than a young friar's scruples of conscience. It needs a whole people steeped in the division of labor, happy to create wealth, courageous, freedom-loving and prosperous. Beggars are not subversive.

The foregoing hymn of praise to the Schinderling should perhaps end with a request to raise such a magnificent monetary fraud into the milestone of the modern

[121] [Gesell forgets to mention the Bracteates, which brought prosperity to Northern Germany between 1050 and 1350. They were government-issued coins that lost purchasing power every year, becoming worthless on the death of the issuer. People spent all their surpluses on private and public works (Gothic cathedrals). Their demise was due to Florentine and Genoese merchants who insisted on gold coins. Hoarding them caused the depression that the Schinderling staved off.]

[122] ["Schinderling" is a nickname, something like "the little ugly one"]

[123] [It is Martin Luther's famous declaration at the Diet of Worms in 1521.]

era. It had deserved that honor before being dubbed with that injurious epithet. The landlords and usurers who made use of it for their frauds have long turned into dust. But the works that the Schinderling brought into being will not vanish for eons.

The myriad curses heaped on it, strangely approved of even by so-called economists, have to do with micro-, not with macroeconomics. These people pay attention to the harm wrought by the Schinderling on its possessor, for its increasing reddening caused a relentless rise in prices. What a mean, insignificant setback.

They overlooked the enormous political-economic influence behind the reddening.

The Schinderling made possible commercial exchanges as only money can. In a bird's eye view that includes the division of labor, exchanges, the national economy, and the reason why money exists. In any case this counterfeit money deserves the title, as a pioneer of State monetary intervention, of "milestone of the Modern Age" way above all the other events believed to have been the stimulus for that historical turning point.

The discovery of America, the Reformation, the invention of the printing press, gunpowder, each claiming that honorary title, had no immediate influence whatever on the division of labor and on trade. The Schinderling, on the other hand, has to be considered as the right stimulus towards the division of labor just as an economic boom is considered today.

Professor Sombart[124] of Berlin asserted:

> I do not know of a single period of economic prosperity comparable to that caused by the exceptional influx of gold.

Gold can certainly cause such influence, but as money, not as gold per se. The Schinderlings were money. Economically, they operated exactly as a constant increase in the influx of gold.

Let us then divide history into the following periods:

1. The age of cave dwellers until the expansion of the division of labor by means of monetized gold as a general medium of exchange.
2. Ups and downs of the ancient peoples until their downfall because of failing to find gold;
3. The medieval Ice Age until the rise of the Schinderling;
4. Ever since, an unstable cultural development as a consequence of irregular injections of gold.

Despite the new life that started almost everywhere in the 15th century with the introduction of the Schinderling, there were still miners who found courage, and credit, to prospect for gold and silver. One does not exchange bacon for sausages, or gold for miners' claims. But the Schinderlings, which got redder and redder as time went by, were willingly given away for transactions entailing uncertain profits. They had the courage of letting themselves be given away. Even in this they were pioneers of progress.

And so it was that after a millennium and a half of fruitless prospecting, silver lodes were struck in Bohemia, Saxony, Moravia and Hungary. The first silver Thalers were minted in 1485 at Joachimstal. From now on, life no longer flowed in the land of Prince Schinderling, but where princes risked becoming beggars. When silver coins

[124] [1863-1941. He had accepted Marxism at the beginning, but abandoned it later.]

left Germany, they brought blessings wherever they went. St Peter's in Rome was built with silver from the German mines, offered by penitents.

Without that silver neither Michelangelo nor Raphael could have possibly unfolded their creative power.

Did the JoachimsThalers from Bohemia find their way to Spain? Wouldn't they have performed there the same miracle? Everything is now clear: Columbus' caravels, on which he embarked in 1492, owed their existence to the spirit of enterprise that rises wherever and whenever money allows the exchange of the products of the division of labor.

I assert then that the ancient empires rose with money and with money they went under; that the millennium and a half of the medieval ice ages was a consequence of the dearth of money, that the beginning of the Renaissance was due to the appearance of the Schinderling, and that the Renaissance spread in the second half of the 15$^{th}$ century thanks to the German silver mines, which owed their existence to the same Schinderling.

With the great American gold and silver findings, the Middle Ages came to an end. The influx of metal money was enough to revive a money economy in the whole of Europe based on the division of labor.

Gold made the Old World, gold made the New World. Gold overthrew the Old World, and gold shall overthrow the New World if…

Only to describe the manifold influences of an irregular influx of gold jerking along the history of the development of Europe would take us far.

It is enough to mention that even in America, today, gold must still be "found:" today much, tomorrow little, later in heaps. Such irregular jerking injections have in the past acted like earthquakes, and still do, on the economy of the whole world. We must admit that gold findings did not fall to zero, as had been the case with the Middle Ages, but there were certainly periods when the influx of gold was altogether insufficient. This forced humanity to return to its medieval, senile hobbling and to stop progressing. The last of such periods dates from 1872. The usurers prevailed over the legislation of all countries, and managed to limit the production of money to their advantage by demonetizing silver.

In the opinion of usurers and landlords money was too abundant, and therefore cheap. It was being said that workers and farmers were living the high life, and this could not be permitted. Hence out with silver. Prices dropped everywhere, so that landlords and usurers could live a better life driven by rent and interest.

But fate, which controls such things, saw to it that around the same time gold strikes decreased sharply. It was the chronic crisis that lasted until 1890. With their manifold effect on shares and dividends, the same usurers burst into the family budgets of farmers and workers. But they made a mistake of evaluation, and killed the goose that laid the golden eggs.

From 1890 to date, gold strikes have increased rapidly and persistently. This has helped prices rise. Up to then they were relentlessly decreasing, to the desperation of entrepreneurs, traders and farmers. It is a characteristic of our money that mineral strikes of precious metals for coinage were worth 4 billion marks in 1866-70; for the next five years they went down to 2.5 billion following the demonetization of silver, and went up again since to 7 billion. And think that such enormous risk should be the most important factor that can paralyze commercial services in only 30 years! What would have happened if gold strikes, which were decreasing from 1856 to 1885, had continued decreasing instead of increasing? It is a legitimate question, for we are talking of findings, f-i-n-d-i-n-g-s, depending entirely on chance.

A constant diminution in the issuing of money exercises an increasing pressure on all prices. It chokes every initiative, proving the pessimists right who aver that in such circumstances the best thing is to do nothing. Decreasing prices have the same depressing effect on all entrepreneurs and traders, just like a swimmer against the current. Whoever attempts business goes inevitably bankrupt, and his disgrace acts as a warning for the rest.

And the people fold their arms, hungry and humbled, begging for something to do, and wait. What do gates wait for?

They wait to be told: Open Sesame, so as to open and disgorge gold. And if the magic password to open Sesame is not found, there returns, as sure as death, the ice age on the division of labor, and on works of culture.

Short-sighted people rejoice when they hear of low prices. They consider them as lowering the cost of life. But whoever is in a position to give the situation a bird's eye view immediately realizes that low prices favor parasites exclusively. For those who live of the fruits of their labor and who have to feed such parasites, it is rising prices that are truly "low."

All considered, "cheap" is a micro-, not a macroeconomic term. Here we are looking at money from the vantage point of political economy.

A continuous period of low prices is the end. The economy comes to a standstill. It is like throwing water into a forge instead of coal. With the so-called "cheap" prices, trade and the professions become mathematically impossible.

The foregoing shows what poor basis gold is for the division of labor. Further details are beyond the scope of this chapter, but will be spelled out in parts IV-V of this same book.

We ought to thank gold for the division of labor, and hence for our enjoying cultural goods, but we must also hold it responsible for the world of parasitism, due to a great extent to the production of goods.

Gold is certainly the father of capitalism. Thanks to its physical qualities of inert metal, and its legal privileges as a means of payment, gold money holds an exceptional position among all the goods that are exchanged for money.

But the same gold money has also become a medium of saving, and the saver does not give it back unless promised interest. Sooner or later, all the money that the State issues as medium of exchange ends up in saving boxes, so that it returns to circulation only out of such boxes. It comes back to market loaded with interest before it can recover its function as a medium of exchange.

This double use of money as medium of exchange and of saving is against nature, and ought to be looked upon as an abuse of the medium of exchange.[125] From the fact that money allows the exchange of goods only on condition of fruitfulness, interest becomes an indispensable condition to the production of goods absolutely speaking. Proudhon used to say that money stands square before the gates of markets, shops, factories, "capital investment" (if that is what it is) and lets through nothing that does not, or cannot, pay interest.

And so it is that interest, the great disturber of the public peace, came into the world together with gold and with the division of labor. Division of labor as such does not require interest. Who and why should pay it? Division of labor was in a position to bring general prosperity to humanity, since it does not privilege anyone, since it is accessible to all. But humanity received this almost divine power of division from the hands of gold only on condition of interest, with which the gap between the rich and the poor came into being. The envious gods were not ready to grant such power. They

[125] [In philosophical terms it entails contradiction, not theoretical but practical. Saving and exchange cannot function together in the same piece of paper. It is surprising that Gesell should have been the first to realise and to expose that. It is even more surprising how difficult it is to accept such a simple idea after having learned economics from textbooks. Both the Encyclopaedia Britannica and the Encarta ignore Gesell.]

were afraid of a declaration of independence of men from the divine contract, and prevented it by sowing the seed of interest in the human family, acting as the principle of "divide and rule."

Gold does not promote general prosperity. It goes on strike and denies its services when it deals with free men. He wants lords and serfs; oppressed, overworked men on one side and parasites on the other. There is an intrinsic contradiction in the desire that gold, by itself, should give rise to a free, proud and truly independent people. Gold money and a truly free life for the people are incompatible. From the very first day of its appearance, gold unleashes primitive, powerful forces, which men grant to it by monetizing it. Thus it establishes the division of humanity into workers on one side and *bons viveurs* on the other.

And according to the very same division of humankind into a sweating, cursing and working class on one side and an exploiting one of *bons viveurs* on the other, there is set up an educational system designed to turn mean, vicious and envious silly fools on one side and criminals on the other, which is what history shows at every step through the millennia. Gold has been promoted to our greatest economic ally, but at the same time it has turned into the archenemy of the human family.

Gold automatically creates the conditions that clash head-on with the establishment of the kingdom of God on earth. Christianity cannot find its feet next to gold. Christianity finds itself at ease with the division of labor, and in full accord with a proud, free and prosperous humanity. But if the division of labor is founded on gold, Christianity must move out. And in fact it has moved out wherever division of labor has been set up, which is today the case in all societies.

Christianity and interest are an evident contradiction. With gold on one side, we have adventurers, usurers, parasites, criminals, prisons, outrages and violence on the other. They are the inseparable concomitants of gold.

Gold offers itself to the division of labor as the price of domestic peace.

"Hail Lycurgus," Pythagoras said two and a half millennia ago, "long live he who banished gold, the root cause of all crime."

From people brought up in a class-ridden State, under lords and serfs, beggars and benefactors, and bazaars of do-gooders; under laws designed more for the protection of the class State, and of the privileges of the rich, under the pretence of serving the common good, we cannot honestly expect a Christian spirit necessary to guarantee domestic and foreign peace. The sense of outrage prevailing among the oppressed, the masses of workers swarming everywhere like ants, and the spirit of tyranny and repression that decisively allows the ruling classes to have the upper hand, automatically creates the conditions that lead to war. But the spirit of peace, domestic as well as foreign, must begin with the governing of the home, and conserved in its immediate sphere of influence not only during Christmas time, among a restricted circle of friends, but from the time of youth onwards. Schiller used to say that the baby should suck the spirit of peace with mother's milk. The way parents treat each other, and siblings one another, is good preparation, for peace or for war. And the same is true of the school, the Church, trade, the Press, public office, popular representation and intercourse with foreign countries.

Prosperity is only possible when both parties are prosperous and carefree. Wealth and poverty are normally opposed conditions; they don't belong to a well-ordered State and are incompatible with domestic as well as with international peace. Peace is but liberty, and only he is free, whose economic position and the fruits of his labor allow him to cover all his needs. Poverty is a chain as much as excess wealth is, and every free man should experience a sense of horror on seeing chains. Wherever he sees such, he must undertake to break them. This is what to work towards peace is. Away with rentiers, away with the proletariat, away with interest!

There will be no peace, either in the home, or in the municipality, or in the State or in the international community, until the last proletarian is buried side by side with the last rentier.

After eliminating rent and interest, everyone will be in a position again to eat the bread earned with the sweat of the brow. Those who rely on the fruits of their labor to eat their daily bread are men of peace. The proof of it is the almost angelic patience with which they put up with parasitism. Always hoping for "justice" to be made to them by peaceful means, they repress the sense of outrage they feel on seeing themselves, time and again, provoked by infinite wrongs and nonsense. But oppression cannot trespass certain limits.

Only work generates the spirit that exudes peace, for in the end such spirit comes from the sense of power and security that fills whoever is aware of being able to look after his own affairs. Such sense of security is the precondition for clear and just ideas. Only he who is powerful, strong and secure is just. Only God is therefore just, because he has power over everything, and sits on his throne completely secure. Lucifer, on the contrary, who has felt the power of the stronger on his own skin, tries to hit left right and centre with all kinds of deception for the whole of a human life. Akin to Lucifer acts he who, living off the work of others through rent and interest, is incapable of satisfying his bodily and spiritual needs by personal work. He has constantly to reckon with the sense of outrage of those who must pay interest, for whom economic security is external to themselves, always in danger and somehow always dependent on foreclosures, privileges and assorted pieces of paper.

Evidently such a person loses the real capacity for thinking objectively according to justice, before all the events that threaten his parasitic existence.

Would that a flea in his ear could convince him of the injustice of his lifestyle once and for all!

Such a weakling (for this is what a rentier must be taken for) sees it natural to make use of all means directed at preserving his privileges. And so he will dub as brute, unworthy and deserving death whoever should attack them. To protect privilege all means are justified. Necessity knows no law. Under stress, he makes use of all means, including war!

Didn't the princes cause innumerable wars, which broke out like bolts from a blue sky, as safety valves for the sense of outrage of their own peoples? And if princes did it, why shouldn't rentiers? War is the most excellent means to dismantle the unions and incite the workers against one another. Why not start a war then to stave off the danger lurking in that direction? What the survival instinct can do is observable in the mutual struggle of the shipwrecked for the lifeboats.

How effective war is to dismantle the unions has been seen with the present war. Even the Workers' International has been dismantled, for all its singing, before the war, "All the wheels stand still, when my arms so will!" Didn't the rentiers notice that? The means is truly effective. The power to unleash war resides in the Press, which is bought, or founded, for this very reason. Those living of rent without working have all the time in their hands to prepare everything and for as long a time as they wish. While everybody else works to exhaustion, the parasites sit on their armchairs and ponder. It is not only rashness, but also hard heartedness. He who has no scruples to crush the well-being of large strata of people under the burden of interest, will have even fewer scruples to incite the same strata of population against each other so as to ensure his position of privilege. The robber barons of the New York Stock Exchange, who caused the financial panic of 1907, with all the horrors and misery that followed, were absolutely sure of themselves that, as soon as it was "worth the candle," war would become part and parcel of their intrigue. What was at stake was their survival, which they wanted to ensure by dismantling the unions.

Men destroy each other by fighting. They prefer a frightening end rather than endless fear. And the possibility of such fear will make them pick a quarrel as soon as the time is ripe for it.

Gold is the root cause of all crime, Pythagoras used to say, and the separation of the human family in groups that fight one another is a crime too. Gold has brought into being the class State, together with the civil wars that break out within them.

And gold is also responsible for provoking war, arming peoples against one another. Let us see how that happens.

The powerful forces unleashed by an abundant influx of gold (i.e. money) in the economy, mark the golden age of business, a boom. This phenomenon did not pass unobserved, so that legislation was passed to favor the inflow and hinder the outflow of gold. Once upon a time the people behind such policy were known as "mercantilists." Today they are known as "protectionists." The hustle and bustle was called "Struggle against an insufficient gold cover."[126]

The blockage of the gold outflow before this war in almost all the European States is the most recent expression of this delusion. The Mercantilists/Protectionists said: To import goods means to export gold, therefore we must hinder imports so as to increase the stability of our gold standard. Exports, on the other hand, means imports of gold, therefore we must promote exports at all costs. We shall attain the first aim by means of tariffs, and the second by means of export subsidies.[127] That's how we lure gold within our borders and hold it fast. Our country prospers as a result of abundant circulation, interest rates drop, and what happens to countries whose gold we wangle, is none of our "Realpolitik" business.

The foregoing is, in a few words, all the sense –or nonsense- of the so-called tariff policy. It is a natural consequence of the fact that gold is not found according to need, or desire. Either it is imported, or sought for as best one can. If gold were to be found, or produced, according to need, the "struggle against an insufficient gold cover" would lose every reason to be. The whole thing is the result of superficial observation of the economic events of the past, for the desired goal has never been attained, since gold does not spread over the earth according to the law of communicating vessels. But this does not make a dent in the above reasoning.

Observe now what happens to the relations between nations as a result of the tariff policy in function of gold troubling the waters.

To begin with, peoples are made to confront one another through the concepts of "exports" versus "imports." The idea of State becomes enriched with new content. There appears the fantastic idea of "national economic zone." Up to then, goods were being sent everywhere. They were not sent "inside" or "outside," as happens today within Germany, Switzerland, or the United States. One sends goods from the canton of Neuenburg to that of Schwyz.

But from Switzerland one does not "send" goods to Germany. One "exports" them. To send stuff from one canton to another there is no need to consult statistics. But if an item has to be "exported," every parcel must be listed in the due statistics.

Thus is politics transferred to the products of labor. Goods are struck with the State seal. We are no longer talking of exchanging products. The seal "Made in

[126] [Frédéric Bastiat (1801-1850) remarked: "Everybody wants to export and nobody wants to import. Very well then, let us send shiploads of exports to the bottom of the sea. Thus everybody exports and nobody imports."]

[127] In Germany such subsidies took the form of discounts on rail and shipping charges for exports.

Germany" requested by England, has its counterpart in the seal "Made in England" requested by Germany.

People are everywhere losing their racial characteristics, therefore let us assign them to boot polish imported from Germany.

There is no point, though, to speak of imports and exports without neatly defining a border. For as long as this is not done, the concept of "State" is rather blurred. Once upon a time neighboring States lived side by side just as today do villages, marches, provinces, cantons, federated states etc. Peoples were distinguishable by language, race, custom and the rest, but States ignored one another. The common observance of the laws and complete freedom of movement united the various peoples; nothing separated them except their princes' quarrels every now and then. The rabble fought and made peace as the case demanded. The border was not a sign of separation of nations. Few knew where it was. It had no real meaning for most.[128] Nobody watched it. Its only value was for the princes and their descendants. In any case some chalk was all you needed to mark it; one could walk across it without lifting one's foot or lowering one's head, and without looking suspiciously around.

During the Middle Ages there was only one border, a religious one, between Christendom and Islam. For the Jews, and for those who were Christians or Muslims as convenience dictated, not even that border existed. They owned the whole world.

Today's States could also ignore each other by getting rid of borders. They would thus promote the evident desire for free movement everywhere. The laws of the various States are so similar, that nobody looks at them before deciding whether he wants to settle here or there.[129] Everyone takes it for granted that the laws will not be that different from home. There are even nations who, to save themselves the bother to make their own legal system, have adopted constitution and laws of the country next door. But if the laws are the same, there need not be such thing as a border. They coalesce into one, like two water drops. What is equal unites, what is unequal divides and marks borders.

There exist also dozens of international agreements, which build bridges of understanding between one State and another, thus eliminating borders at least for what regards the contents of the agreement.

Without custom barriers and the incitement to distorted and wrong views that lead to tariff policies, one would be hard put to distinguish one modern State from another.

The custom barrier upsets everything that unites peoples by nature. By itself, the divisive power of that barrier acts as a counterweight to all the circumstances that tend to unite. It is Customs and Excise that manipulate the economy of mankind, and the economy is what attracts 99% of everyone's thoughts and life efforts.

Every healthy person claims, like Alexander the Great, to own the whole world. He has no use for a small piece of it, limited and fenced in. He doesn't take the world for a zoo, where peoples are forcibly separated from one another by colored palisades. The homeland of every person is the Earth itself in its sweeping orbit around the Sun. But the customs barrier blocks the right to that homeland. This is nonsense, and war.

No sooner does a people claim exclusive control of the land it occupies, and tries to fence it in, even though with the single mercantilist aim of accumulating gold,

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[128] [This is still true for most African tribes.]

[129] [This is not 100% true. The labour legislations of countries do differ. The importing country imports not only goods, but also the legislation of the exporting country. If this is a low-wage country, or worse a slave-wage country, free trade causes the salaries of the importing country to drop. That is the rationale behind protective tariffs.]

than an Alexander the Great wakes up in every person, who starts scheming on how to get back that part of his natural inheritance taken away by force. For his inheritance is the whole Earth, from pole to pole. Everyone considers oneself, consciously or unconsciously, as Crown Prince of the world. And since he cannot have the whole Earth, at least he wants to excise as great a part as possible, and assure it to self and descendants. Thence comes the thought of war of conquest, which is as far away as can be from the head of those who work. But such thought arises immediately, as certain as death, as soon as one, or one's products, bump into a border. Without such border, what sense would a policy of conquest have? Who would benefit from it, and what would one gain by it? If conquest does not aim at plunder or at slaving, its only reasonable purpose is to enlarge the tariff borders.

Everyone tries to enlarge one's tariff zone by force.

Customs, war and conquest are one and the same idea. On getting rid of customs barriers there would be no territory to conquer. The elimination of custom barriers would turn Alexander's dream into reality. Everyone would become the owner of the whole world, glancing down pitifully upon kings and kinglets. When Charlemagne, and later Charles V, subdivided their empires, people did not object. The dismemberment was a measure external to them, which did not affect them directly. But if today a king were to subdivide his territory into many customs zones, the entire people would perceive the operation as harmful, and stop it. Only economic interests prevented the separation of the United States in the War of Secession. Had there been no customs barriers, the North would have been only too happy to get rid of the slave States of the South. In any case there would have been little resistance to Secession, much as when Norway and Sweden separated without much difficulty.[130] Their previous political union had more limited interests in mind, and both territories had different customs zones earlier on than their political separation. It is therefore economic interests that form unitary States.

Such interests are artificially created by customs barriers. If there were no such barriers today, there would be no fear of future barriers either, because without economic borders there would be no economic conflict. The concept of "national economic zone" would be as wide as the world, without possibility of extending it, either by treaty or by conquest. The economic zone would encompass every State, with no more worlds left to encompass.

How nice it would be to get rid of war once and for all. But in order to do so, we should have first the well-grounded hope of abolishing customs barriers in the short term as transgressing international law. Should a single people attempt to re-introduce them, it should know that such an action would be equivalent to a declaration of war on the rest of the world, from which it would have to expect sanctions. But on the one hand accepting the existing customs regime, and on the other to shout "away with armaments!" is utter nonsense, worse in fact than war itself.

There is so much talking about freedom of the sea, and it is certainly a good idea that the seas should be free for navigation. But the freeing of the land is much more important. I think it an absolute mockery that President Wilson should speak so much about freedom of the sea without even mentioning that of the land. No people should have in exclusive the territory on which it lives. The ports of the United States should be opened to the Chinese, and the goods of the whole world should be free to circulate there, and vice versa American goods should be free to circulate everywhere. Our ancestors did not surely discover and colonize America to insulate it from the rest of the world. Everyone should enjoy the whole Earth as a playing field, under the

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[130] [The year was 1905.]

same natural conditions. And whoever best fills a certain corner of it, well and good. Let him increase and multiply there.

We shall arrive at such unconditioned freedom of land and sea as soon as we rid ourselves of the thought that we need gold for the purpose of manufacturing money, and that if we don't find it in sufficient quantity, we must defraud each other with the "struggle against an insufficient gold cover."

This is the end of my criticism of the gold standard. There would be much more to add, but it would be heavy technical going, against this currency of ill-omen. Let those who want to know more read the whole book. Pacifists' activities are good, but it would help them to delve into the economic causes of war, not only between nations, but also the civil war that for the past 3 000 years has been breaking out uninterruptedly here and there.

The first condition is to remove gold and replace it with paper money managed according to scientific principle.[131]

The second is to return land as common property of all peoples as dealt with in Parts I and II of the book.

The arms race consists less of fortresses and ships than in rotten economic conditions. What after all defines armaments? Man is born armed. Even after cutting his nails and filing his teeth he can always strangle the enemy. Weren't harmless hemp ropes the arms of the outraged Paris proletarians?[132] Cain ran to arms with an oak branch. Arms as such do not lead to war. The reason for war runs much deeper. Who truly wants disarmament must first liberate humanity from the gold chains that fetter it. Gold, said Pythagoras two and a half millennia ago, is the root cause of all crimes. And every war is a crime. Anyone who wants peace let him struggle for Free Land and Free Money.

Lot's wife turned back and became a pillar of salt at the horror she saw. The same thing happens today to all those who look back, become petrified, ossified, encrusted, and turn into merchants of death and militarists.

Anyone who delves into the study of human culture cannot but recoil in horror. Atrocities, atrocities and decline. To arms, to arms, put on your armor or else they will kill you! Look at the ruins of Babylon, of Nineveh, of Jerusalem, of Rome! Eternal war sinks its roots into human nature! "Babylon would still exist today, great and marvelous, had she armed herself better!" That's what history appears to say.

But Copernicus and Galileo have shown us how deceptive appearances may be. It has been most unfortunate that appearances should also have deceived those who have delved into history with the intention of understanding its signs. How a false explanation works in certain circumstances, we saw in Rome, when Galileo showed that the Sun does not revolve around the Earth. The Eternal City shook. And yet it was an astronomical question of minor spiritual importance. What a shift would the bases of our thinking and trading undergo on understanding once and for all that the history of mankind does not revolve around Mars but around Mercury![133]

The mercantilist explanation of the downfall of the ancient civilizations will show us, especially if pacifists, new tracks to follow. For man needs history: she is the great teacher, provided one understands her language. A glance backwards becomes a vision. Experience is the best oracle. Everyone can find reasons for personal behavior in what history has to teach. What does the pioneer do in the new environment? First he explores the plant world of the topsoil. Then he investigates the past, and finds

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131 [This desirable measure was taken in two steps: 1931 and 1971 as remarked. What has not taken place yet is the "scientific" management of money.]

132 [The reference is to the Paris Commune of 1871.]

133 [In mythology, Mars was the god of war; Mercury, that of trade, but also of thieves as Gesell remarked earlier.]

remains of military campaigns here and there. How many immigrants chose thoughtlessly to break and plough soft soil near a river meandering quietly across the field, until spotting a local man hanging dry rushes on the branches of trees way above human height! The rushes are for our pioneer what the ruins of Babylon should have been for the founders of our States. They tell him that appearances deceive; the thaw on the heights will turn the enchanting rivulet into a rushing, devastating torrent.

In horror, he will strike camp and run away without looking back, like Lot at Sodom.

He is lost who takes history on no account, unable to read the signs of the times. And more than lost is the one who reads the same signs falsely. This is what we have done. Appearances have deceived us. Our historical crossroads indicated the need for armaments, and these have led us to war. The interpreters of signs have indicated the need for a militaristic spirit for the protection of the State, we have instilled that spirit into the youth, and that spirit has led us to war, from which we free ourselves only if we want.

How different it would have been, had we mistrusted superficial appearances. These only scratch the surface of a culture. We should have tested the ground! How soon would we have found the inscription: "The gold standard is the robber's cavern from which exhales the pestiferous miasma of war, domestic as well as foreign. Gold money disarmed me, so I could not withstand the onrush of the barbarians. Gold called me into existence, so as to allow war, the murderer of kids, to nip their lives in the bud. Long live Lycurgus who banned gold, root cause of all crimes."