

## Chapter XVIII.

### Influence Of The Currency On The Exchanges And On Foreign Trade.

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#### § 1. Variations in the exchange, which originate in the Currency.

In our inquiry into the laws of international trade, we commenced with the principles which determine international exchanges and international values on the hypothesis of barter. We next showed that the introduction of money, as a medium of exchange, makes no difference in the laws of exchanges and of values between country and country, no more than between individual and individual: since the precious metals, under the influence of those same laws, distribute themselves in such proportions among the different countries of the world as to allow the very same exchanges to go on, and at the same values, as would be the case under a system of barter. We lastly considered how the value of money itself is affected by those alterations in the state of trade which arise from alterations either in the demand and supply of commodities or in their cost of production. It remains to consider the alterations in the state of trade which originate not in commodities but in money.

Gold and silver may vary like other things, though they are not so likely to vary as other things in their cost of production. The demand for them in foreign countries may also vary. It may increase by augmented employment of the metals for purposes of art and ornament, or because the increase of production and of transactions has created a greater amount of business to be done by the circulating medium. It may diminish, for the opposite reasons; or, from the extension of the economizing expedients by which the use of metallic money is partially dispensed with. These changes act upon the trade between other countries and the mining countries, and upon the value of the precious metals, according to the general laws of the value of imported commodities: which have been set forth in the previous chapters with sufficient fullness.

What I propose to examine in the present chapter is not those circumstances affecting money which alter the permanent conditions of its value, but the effects produced on international trade by casual or temporary variations in the value of money, which have no connection with any causes affecting its permanent value.

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#### § 2. Effect of a sudden increase of a metallic Currency, or of the sudden creation of Bank-Notes or other substitutes for Money.

Let us suppose in any country a circulating medium purely metallic, and a sudden casual increase made to it; for example, by bringing into circulation hoards of treasure, which had been concealed in a previous period of foreign invasion or internal disorder. The natural effect would be a rise of prices. This would check exports and encourage imports; the imports would exceed the exports, the exchanges would become unfavorable, and a newly acquired stock of money would diffuse itself over all countries with which the supposed country carried on trade, and from them, progressively, through all parts of the commercial world. The money which thus overflowed would spread itself to an equal depth over all commercial countries. For it would go on flowing until the exports and imports again balanced one another; and this (as no change is supposed in the permanent circumstances of international demand) could only be when the money had diffused itself so equally that prices had risen in the same ratio in all countries, so that the alteration of price would be for all practical purposes ineffective, and the exports and imports, though at a higher money valuation, would be exactly the same as they were originally. This diminished value of money throughout the world (at least if the diminution was considerable) would cause a suspension, or at least a diminution, of the annual supply from the mines, since the metal would no longer command a value equivalent to its highest cost of production. The annual waste would, therefore, not be fully made up, and the usual causes of destruction would gradually reduce the aggregate quantity of the precious metals to its former amount; after which their production would recommence on its former scale. The discovery of the treasure would thus produce only temporary effects; namely, a brief disturbance of international trade until the treasure had disseminated itself through the world, and then a temporary depression in the value of the metal below that which corresponds to the cost of

producing or of obtaining it; which depression would gradually be corrected by a temporarily diminished production in the producing countries and importation in the importing countries.

The same effects which would thus arise from the discovery of a treasure accompany the process by which bank-notes, or any of the other substitutes for money, take the place of the precious metals. Suppose(282) that the United States possessed a currency, wholly metallic, of \$200,000,000, and that suddenly \$200,000,000 of bank-notes were sent into circulation. If these were issued by bankers, they would be employed in loans, or in the purchase of securities, and would therefore create a sudden fall in the rate of interest, which would probably send a great part of the \$200,000,000 of gold out of the country as capital, to seek a higher rate of interest elsewhere, before there had been time for any action on prices. But we will suppose that the notes are not issued by bankers, or money-lenders of any kind, but by manufacturers, in the payment of wages and the purchase of materials, or by the Government [as, e.g., greenbacks] in its ordinary expenses, so that the whole amount would be rapidly carried into the markets for commodities. The following would be the natural order of consequences: All prices would rise greatly. Exportation would almost cease; importation would be prodigiously stimulated. A great balance of payments would become due, the exchanges would turn against the United States, to the full extent of the cost of exporting money; and the surplus coin would pour itself rapidly forth, over the various countries of the world, in the order of their proximity, geographically and commercially, to the United States.

A study of Chart No. XIV will show how exactly this description fits the case of our country, when the rise of prices stimulated imports of merchandise (see Chart No. XIII) in 1862, and sent gold out of the country.

The efflux would continue until the currencies of all countries had come to a level; by which I do not mean, until money became of the same value everywhere, but until the differences were only those which existed before, and which corresponded to permanent differences in the cost of obtaining it. When the rise of prices had extended itself in an equal degree to all countries, exports and imports would everywhere revert to what they were at first, would balance one another, and the exchanges would return to par. If such a sum of money as \$200,000,000, when spread over the whole surface of the commercial world, were sufficient to raise the general level in a perceptible degree, the effect would be of no long duration. No alteration having occurred in the general conditions under which the metals were procured, either in the world at large or in any part of it, the reduced value would no longer be remunerating, and the supply from the mines would cease partially or wholly, until the \$200,000,000 were absorbed.(283)

Effects of another kind, however, will have been produced: \$200,000,000, which formerly existed in the unproductive form of metallic money, have been converted into what is, or is capable of becoming, productive capital. This gain is at first made by the United States at the expense of other countries, who have taken her superfluity of this costly and unproductive article off her hands, giving for it an equivalent value in other commodities. By degrees the loss is made up to those countries by diminished influx from the mines, and finally the world has gained a virtual addition of \$200,000,000 to its productive resources. Adam Smith's illustration, though so well known, deserves for its extreme aptness to be once more repeated. He compares the substitution of paper in the room of the precious metals to the construction of a highway through the air, by which the ground now occupied by roads would become available for agriculture. As in that case a portion of the soil, so in this a part of the accumulated wealth of the country, would be relieved from a function in which it was only employed in rendering other soils and capitals productive, and would itself become applicable to production; the office it previously fulfilled being equally well discharged by a medium which costs nothing.

The value saved to the community by thus dispensing with metallic money is a clear gain to those who provide the substitute. They have the use of \$200,000,000 of circulating medium which have cost them only the expense of an engraver's plate. If they employ this accession to their fortunes as productive capital, the produce of the country is increased and the community benefited, as much as by any other capital of equal amount. Whether it is so employed or not depends, in some degree, upon the mode of issuing it. If issued by

the Government, and employed in paying off debt, it would probably become productive capital. The Government, however, may prefer employing this extraordinary resource in its ordinary expenses; may squander it uselessly, or make it a mere temporary substitute for taxation to an equivalent amount; in which last case the amount is saved by the tax-payers at large, who either add it to their capital or spend it as income. When [a part of the] paper currency is supplied, as in our own country, by banking companies, the amount is almost wholly turned into productive capital; for the issuers, being at all times liable to be called upon to refund the value, are under the strongest inducements not to squander it, and the only cases in which it is not forthcoming are cases of fraud or mismanagement. A banker's profession being that of a money-lender, his issue of notes is a simple extension of his ordinary occupation. He lends the amount to farmers, manufacturers, or dealers, who employ it in their several businesses. So employed, it yields, like any other capital, wages of labor, and profits of stock. The profit is shared between the banker, who receives interest, and a succession of borrowers, mostly for short periods, who, after paying the interest, gain a profit in addition, or a convenience equivalent to profit. The capital itself in the long run becomes entirely wages, and, when replaced by the sale of the produce, becomes wages again; thus affording a perpetual fund, of the value of \$200,000,000, for the maintenance of productive labor, and increasing the annual produce of the country by all that can be produced through the means of a capital of that value. To this gain must be added a further saving to the country, of the annual supply of the precious metals necessary for repairing the wear and tear, and other waste, of a metallic currency.

The substitution, therefore, of paper for the precious metals should always be carried as far as is consistent with safety, no greater amount of metallic currency being retained than is necessary to maintain, both in fact and in public belief, the convertibility of the paper.

But since gold wanted for exportation is almost invariably drawn from the reserves of the banks, and is never likely to be taken directly from the circulation while the banks remain solvent, the only advantage which can be obtained from retaining partially a metallic currency for daily purposes is, that the banks may occasionally replenish their reserves from it.

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### § 3. Effect of the increase of an inconvertible paper Currency. Real and nominal exchange.

When metallic money had been entirely superseded and expelled from circulation, by the substitution of an equal amount of bank-notes, any attempt to keep a still further quantity of paper in circulation must, if the notes are convertible [into gold], be a complete failure.

This brings up the whole question at issue between the "Currency Principle" and the "Banking Principle." The latter, maintained by Fullerton, Wilson, Price, and Tooke (in his later writings), held that, if notes were convertible, the value of notes could not differ from the value of the metal into which they were convertible; while the former, advocated by Lord Overstone, G. W. Norman, Colonel Torrens, Tooke (in his earlier writings), and Sir Robert Peel, implied that even a convertible paper was liable to over-issues. This last school brought about the Bank Act of 1844.(284)

[A] new issue would again set in motion the same train of consequences by which the gold coin had already been expelled. The metals would, as before, be required for exportation, and would be for that purpose demanded from the banks, to the full extent of the superfluous notes, which thus could not possibly be retained in circulation. If, indeed, the notes were inconvertible, there would be no such obstacle to the increase in their quantity. An inconvertible paper acts in the same way as a convertible, while there remains any coin for it to supersede; the difference begins to manifest itself when all the coin is driven from circulation (except what may be retained for the convenience of small change), and the issues still go on increasing. When the paper begins to exceed in quantity the metallic currency which it superseded, prices of course rise; things which were worth \$25 in metallic money become worth \$30 in inconvertible paper, or more, as the case may be. But this rise of price will not, as in the cases before examined, stimulate import and discourage export. The imports and exports are determined by the metallic prices of things, not by the paper prices; and it is only

when the paper is exchangeable at pleasure for the metals that paper prices and metallic prices must correspond.

Let us suppose that the United States is the country which has the depreciated paper. Suppose that some American production could be bought, while the currency was still metallic, for \$25, and sold in England for \$27.50, the difference covering the expense and risk, and affording a profit to the merchant. On account of the depreciation, this commodity will now cost in the United States \$30, and can not be sold in England for more than \$27.50, and yet it will be exported as before. Why? Because the \$27.50 which the exporter can get for it in England is not depreciated paper, but gold or silver; and since in the United States bullion has risen in the same proportion with other things--if the merchant brings the gold or silver to the United States, he can sell his \$27.50 [in coin] for \$33 [in paper], and obtain as before 10 per cent for profit and expenses.

It thus appears that a depreciation of the currency does not affect the foreign trade of the country: this is carried on precisely as if the currency maintained its value. But, though the trade is not affected, the exchanges are. When the imports and exports are in equilibrium, the exchange, in a metallic currency, would be at par; a bill on England for the equivalent of \$25 would be worth \$25. But \$25, or the quantity of gold contained in them, having come to be worth in the United States \$30, it follows that a bill on England for \$25 will be worth \$30. When, therefore, the *real* exchange is at par, there will be a *nominal* exchange against the country of as much per cent as the amount of the depreciation. If the currency is depreciated 10, 15, or 20 per cent, then in whatever way the real exchange, arising from the variations of international debts and credits, may vary, the quoted exchange will always differ 10, 15, or 20 per cent from it. However high this nominal premium may be, it has no tendency to send gold out of the country for the purpose of drawing a bill against it and profiting by the premium; because the gold so sent must be procured, not from the banks and at par, as in the case of a convertible currency, but in the market, at an advance of price equal to the premium. In such cases, instead of saying that the exchange is unfavorable, it would be a more correct representation to say that the par has altered, since there is now required a larger quantity of American currency to be equivalent to the same quantity of foreign. The exchanges, however, continue to be computed according to the metallic par. The quoted exchanges, therefore, when there is a depreciated currency, are compounded of two elements or factors: (1) the real exchange, which follows the variations of international payments, and (2) the nominal exchange, which varies with the depreciation of the currency, but which, while there is any depreciation at all, must always be unfavorable. Since the amount of depreciation is exactly measured by the degree in which the market price of bullion exceeds the mint valuation, we have a sure criterion to determine what portion of the quoted exchange, being referable to depreciation, may be struck off as nominal, the result so corrected expressing the real exchange.

The same disturbance of the exchanges and of international trade which is produced by an increased issue of convertible bank-notes is in like manner produced by those extensions of credit which, as was so fully shown in a preceding chapter, have the same effect on prices as an increase of the currency. Whenever circumstances have given such an impulse to the spirit of speculation as to occasion a great increase of purchases on credit, money prices rise, just as much as they would have risen if each person who so buys on credit had bought with money. All the effects, therefore, must be similar. As a consequence of high prices, exportation is checked and importation stimulated; though in fact the increase of importation seldom waits for the rise of prices which is the consequence of speculation, inasmuch as some of the great articles of import are usually among the things in which speculative overtrading first shows itself. There is, therefore, in such periods, usually a great excess of imports over exports; and, when the time comes at which these must be paid for, the exchanges become unfavorable and gold flows out of the country. This efflux of gold takes effect on prices [by withdrawing gold from the reserves of the banks, and so by stopping loans and the use of credit, or purchasing power]: its effect is to make them recoil downward. The recoil once begun, generally becomes a total rout, and the unusual extension of credit is rapidly exchanged for an unusual contraction of it. Accordingly, when credit has been imprudently stretched, and the speculative spirit carried to excess, the turn of the exchanges and consequent pressure on the banks to obtain gold for exportation are generally the proximate cause of the catastrophe.

A glance at Chart No. XIII will give illustration to the situation here described. After the war, and until 1873, while the United States was under the influence of high prices and a speculation which has been seldom equaled in our history, the resulting great excess of imports became very striking. It was an unhealthy and abnormal condition of trade. The sudden reversal of the trade by the crisis in 1873 is equally striking, and, as prices fell, exports began to increase. The effect on international trade of a collapse of credit is thus clearly marked by the lines on the chart.