THE JOURNAL
OF
POLITICAL ECONOMY

VOLUME 32 *June 1924* NUMBER 3

THE QUANTITY-THEORY OF MONEY

I

If price is the quantity of the standard money for which a commodity will exchange, there are two terms to the price ratio, and two sets of forces affecting price: (1) those touching the standard, and (2) those touching the demand and supply of goods. Assuming the usual functions of money, it is obvious that price-making is related directly to the standard money; and that the various forms of money which act as media of exchange have no effect on the price-making process except as they may change the value of either term in the price ratio, the value of gold, or the value of goods. Of course, the value of no article is fixed solely by demand, ignoring the influence of supply; demand is always at a given price; and supply is offered at a price that in general will cover the competitive expenses of producing the commodity.

The quantity-theorists, however, insist that prices are fixed by the forms through which demand is expressed; by the quantity of money, or credit, offered for goods, as contrasted with the volume of trade; and have no place in their formulas (e.g., $MV + M'V' = P \cdot T$) for the influence of expenses of production on prices. It is essentially a theory of purchasing power. In actual life,

however, a business man knows he must strain every nerve to reduce expenses of production in order to meet constant competition; he is obliged to compare wages with the efficiency of his labor, and to study the cost of coal, freights, materials, rents, taxes, and the rates of interest on borrowed funds. He has witnessed the Bessemer process and countless inventions lower the price of steel to one-third; and noted the cheapening of paper by use of wood pulp. Then he has observed how the lower prices caused by the new processes led to a larger demand; that in the face of a larger demand larger quantities of goods could be produced and marketed at even lower prices; and that in general price precedes demand. Nor has he been able to discover any corresponding decline in the volume of money and credit to account for such a fall of prices; on the contrary, the volume of credit at least has grown with the fall (consequent on larger production at lower costs).

Some of the minor prophets among the quantity-theorists, however, reply to the criticism based on higher or lower costs and higher or lowered prices, as just presented, by saying that it does not affect their theory at all. Regarding the theory as sacrosanct, they insist that the items in expenses of production (wages, coal, materials, buildings, freights, taxes, and rates of interest) are raised or lowered only by the changes in the volume of money and credit as contrasted with the volume of trade. They claim that these production costs are "measured in money"; and, when it is urged that prices are changed by changes in costs, they claim that these costs just as much as the prices of the finished goods are fixed by the quantity of money and credit as before stated. They claim that wages, for instance, go up only by the offer of more money and credit, if the supply of labor remains the same.

Such an extension of the theory only emphasizes its original and erroneous claim that prices are determined only through demand, or purchasing power, allowing nothing for those forces affecting the price ratio which work through supply. It omits the essential point that the price of any of the elements entering into the expenses of production, like everything else, is as much affected by questions of supply as by those of demand. For

instance, it was not a change in the quantity of money, but a strike, that in 1922 raised the wages of coal miners and the price of coal.

II

The essential point at issue is how price-making actually goes on. The quantity-theorists insist it can go on only by an actual exchange of money or credit for goods presented for sale; that "money," or credit (that is, any medium of exchange), is the form and limit of demand, and that all this purchasing power must be expended on the supply of goods in the market. Hence as "money" or credit increases, while the supply of goods remains the same, it is held that all such money or credit must necessarily be expended, and spread over all the supply, so that prices in general must rise; and vice versa, if money and credit decline. On the other hand, the opponents of the quantity-theory point out that the price of an article is the quantity of the standard (now gold) for which it will exchange. To introduce the term "media of exchange" of all kinds instead of the standard metal into the price ratio vitiates the very definition of price and all logical reasoning about the forces that affect prices. Also, as will be later pointed out, the credit forms which serve as media of exchange are consequences of an exchange of goods already priced, and not a cause of prices. Moreover, all freely reproducible goods (those not controlled by monopoly) are affected by competitive conditions of production which fix within narrow limits the price which, as covering outlay, must be asked *before* any actual exchange of the goods for money takes place; and this price, intended to cover expenses of production, is known and relied upon by buyer and seller as setting the general level of the price in bargaining. In reality no seller, except in panic or bankruptcy, throws his goods on the market to fetch what they will irrespective of costs. Therefore, there are fundamental forces on the side of supply and costs which limit the price-fixing quite irrespective of the quantity of the media of exchange. It is not the actual supply on sale at the moment which determines the price, in conjunction with the effective demand of the buyer, but the price at which the supply in the market or any successive units

of the potential supply can be brought to market at a profit. No regard seems to be paid to the fact that, if the demand for an article is much increased, it may often happen that, because a greater quantity is wanted, methods of manufacture could be so standardized that each unit of the goods could be turned out at a lowered cost, resulting in a fall and not in a rise of price (as a result of an increase in demand). The quantity-theory has no place in its philosophy for any such well-known phenomenon.

III

When faced with this inherent difficulty, the quantity-theorist rejoins that, of course, there may be changes in production costs which will change the prices of particular commodities, but that the quantity-theory has to do only with fixing the general price level, on which variations of particular commodities may take place; and that, as the price ratio is a relation between money alone, on one side, and all goods, on the other, a change in the money term takes effect only on the price level of all goods. Hence, according to this reasoning, all causes of changes in particular prices are ruled out, as being covered in by the enveloping forces such as the quantity of money and credit determining the general level of prices. By this method they regard as irrelevant all attempts to show that price levels are directly affected by changes in particular production costs.

On the face of the argument, the proposal to eliminate from price-making all influences modifying expenses of production (wages, materials, taxes, etc.) seems fallacious to every practical business man. Nor is the fallacy far to seek. How is the general price level for all goods, or the index numbers by which it is represented, ever obtained? Only by first taking the quotations of individual commodities, averaging them by day, week, month, or year (computing an arithmetic, geometric, or median average); combining related articles in one group (agricultural, chemical, clothing, etc.); and then uniting the figures, for all the groups into the general price level for all commodities. There is no other way known by which statisticians arrive at a price level. In fact, the very advocates of the quantity-theory constantly use tables of

prices constructed in this way. But if so, then all the elements affecting the prices of particular commodities—every item touching the expenses of production at which the supply is brought to market, as well as every change in demand shown through the offer of money or credit—are brought into the quotations of particular prices out of which the general price level is constructed. The general price level, therefore, is necessarily influenced by production costs.

Nor is this the only fallacy involved in this phase of the quantity-theory. Any and all prices are quoted in terms of the standard of a given country (such as gold in the United States). If such a country has media of exchange other than the standard (like bank notes, government notes, or credit forms such as checks), of course, if they are redeemable in gold, and goods are exchanged by these media, prices are still quoted in the standard. Price is always the quantity of the standard for which an article will exchange. This is pivotal. Suppose, in 1893, we had gone from a gold to a silver standard (when the content of the silver dollar was worth only 50 cents in gold); everyone knows prices would have been at least doubled; bank notes and checks would have followed the standard in which they were redeemable. Here would have been an obvious change in the level of prices which would have had nothing to do with the quantity of money and credit. It would have been due to a change in one term (the standard) of the price ratio. Likewise, there can be a change in the level of prices due to changes in the other term of the price ratio, the expenses of producing goods. It is aside from the point to compare goods with the quantity of the various media of exchange (for they are, as we shall soon see, consequences and not causes of price-making) rather than with the standard itself. Today, in every transaction, gold prices are assumed without discussion; that is, goods are, of course, rated in the standard.

If, however, the quantity-theorist, assuming without proof the truth of his sacrosanct dogma, says that the price level must be fixed only by a comparison of the total quantity of money and credit with the volume of goods, it is equally clear that

no price level ever has been, or ever could be, arrived at in that way. No one knows at any time what the total quantity of money and credit is, nor the total volume of goods offered for sale. If these quantities are unknown, how can a level of prices be fixed? The reason why the volume of the media of exchange and credit used at any time cannot be known until after the event is that it is an outcome of the transactions in goods and varies with the prices exacted by production-costs. The quantity-theory puts the cart before the horse.

IV

The quantity-theorists insist that demand for goods is measured by the volume of money and credit; that, for instance, an increase in this volume, without a corresponding increase in goods, would cause a rise of prices. The point seems to be that demand can be expressed only through money and credit; that this demand of buyers arises independently of an objective supply of goods; that it is a condition-precedent to fixing prices in the market; and that price-fixing is the outcome of the meeting of the two volumes of money and credit, and goods on sale.

To my mind, this theory errs in confusing the real purchasing power entering into demand with the merely secondary and technical mechanism of money and forms of credit through which the purchasing power acts. Real purchasing power arises from the control over saleable goods or property. By sale of goods for money or credit the buyer puts his purchasing power into a form where he can direct it at will to buying other things. No one gets money unless he has goods he can sell; no one gets credit except on goods (or titles to goods) that are changing hands (or coming forward to be sold); he gets credit only on the basis of bankable assets.

The amount of money and credit a man can use depends on the quantity and value of goods and property he controls. The extent of his potential demand for goods in the market is measured by the volume of his saleable and bankable goods, not by the amount of money he has, nor of the credit he is then using. At any given time he is not usually turning all

his purchasing power into money or credit. His demand for other goods depends on the part of his purchasing power which he chooses to turn into the form of money and credit. How much this will be is often affected by conditions of business and the level of production costs of the things he wishes to buy. If costs are high, the figures in which his purchases are expressed will be high. That is, the higher prices and the greater amounts of money and credit he uses may depend on matters originating in production costs. It was not that he raised prices by offering more money and credit, but that the higher costs forced him to pay (in figures) more money and credit derived from his purchasing power in saleable goods. There was an altered exchange relation between his goods and those he wished to buy.

More than this, the theory errs in making the quantity of money and credit a cause instead of a consequence of price-making. All the processes of production and transportation to the market, all the outlays which have been undertaken, form a necessary part of the price-making in any continuing industry. Fluctuations in price there may be, due to temporary changes in demand and supply, but the general level of price must be enough, year in and year out, to cover all production costs. Here we find the main content of the process of price-making. That is, the elements essential to the making of prices in the market are necessarily determined upon before the mechanism of exchange (in the various forms of media of exchange and credit) is called upon to pass the goods from sellers to buyers. The function of money and credit is mainly to record the values of goods already arrived at and at these levels to expedite their exchange (subject, of course, to the higgling of the market and to inevitable adjustments of changes in demand and supply). Such a method applies to the price-making of all freely reproducible goods under competitive conditions. Where monopoly exists, and supply is limited, the price obviously ceases to be restrained by production costs and comes chiefly under the influence of demand. Therefore, instead of the quantity of the media of exchange (whether called money or credit) being a causal force in price-making, the operations fixing competitive prices precede the use of the money and credit.

It is thus impossible that the quantity of the media of exchange should be regarded as fixing the level of prices, when that general level has previously been determined by other causes; the truth is the very opposite of that implied in the quantity-theory. When expenses of production rise, then, as a consequence, the quantity of money and credit used to exchange the goods is necessarily stated in larger figures. This phenomenon was so conspicuous during the world-war that statements of bank credits, the volume of checks, or the figures of exports and imports, were often checked up by tables of concrete units of goods (tons, bushels, etc.) in order to get a correct comparison of the changes in trade.

V

It has been observed that there have been some coincidences between the movement of the price level and of the quantity of money and credit. If the two follow each other closely in all conditions, it might be argued inductively that one is the cause of the other. The analysis just given, however, enables us to give the reasons for this coincidence and hence to test the validity of making one the cause of the other. We have seen how generally the price-making process necessarily precedes the use of media of exchange. At any given time, due to countless adjustments always going on in a dynamic state of industry, a relative ratio of exchange value between the various goods coming to market has been achieved. This ratio is in a constant process of adjustment to dynamic changes. Some rise, some fall, relatively to each other; but a level is forced which will allow to each article a price that will tend to cover production costs (including a producer's return on his capital and management). Thus each seller knows the price which will recoup him for his outlay and keep him in the same relative standing to other producers as regards production costs. He strikes for that price and for as much more as market conditions will give him. Thus guided, he offers his goods at a price. On the other side, the buyer's demand varies with the price offered and the urgency of his need. With all the available knowledge of the demand and supply on each side, a price is agreed upon between buyer and seller.

For instance, a farmer hauls his wheat to a local elevator. Taking into account the intensity of the European demand and the size of the crop at home and abroad, he accepts a price, say, 90 cents a bushel. If he sells 1,000 bushels, he gets a check for $900. That is, whether paid in money or credit, the total amount of it given for his wheat obviously equals the number of bushels multiplied by the price agreed upon. That goes without saying. It could not be otherwise. Then, add together all the sales of wheat; of course, the total quantity of money or checks given equals the price per bushel multiplied by the number of bushels sold. The same thing emerges from all the sales of cotton, coal, steel, shoes, and all other groups. In short, if we had accurate data as to the money and checks used and the prices of all goods, the two sums should be identical. The coincidence is no proof of causes. It is only an identical equation. Demand expressed through the offer of money and credit is only part of the process by which the values of some goods (turned into a medium of exchange) are adjusted to that of other goods.

But would it not sound a bit absurd to say that the quantity of money and credit paid fixed the price of wheat or shoes and that they sold without any regard to the supply and the outlay of the seller? It would not be quite sane to regard the quantity of money and credit used as the cause of the price of cotton or wheat, especially as all admit that their prices are fixed in Central European markets where the quantity of our money and credit could have no influence. And yet that is the logical implication of the theory. Moreover, in another typical case, when a heavy import duty was laid on wool (as in the Tariff Act of 1922) the price of wool was raised correspondingly, so that woolen goods, because of the tax, cost more to all consumers. Could any one in his senses imply that the prices of such goods were determined by the quantity of money and credit? And yet there are large groups of such protected articles whose higher prices enter into and determine *pro tanto* the general level of prices that the quantity-theorists have in mind. In fact, when we consider the whole range of commodities entering into inter-

national trade, whose sales run into the billions, we could not possibly say that their prices were fixed by the quantity of money and credit in circulation, instead of the play of international demand and supply. Or, if anyone should appeal to the quantity-theory as regulating the prices of such goods, it would be necessary to ask whose quantity of money and credit fixes prices, that of the exporting or the importing countries? There are so many groups of forces to which the quantity-theory cannot apply that it is necessarily under suspicion. It is no answer, as we have already explained, to say that the theory explains only the general level of prices and asserts that particular prices are affected by other causes; for the general price level is constructed from particular quotations, not fixed by the quantity of money and credit.

Since the amount of money and credit used to exchange goods necessarily equals their prices, it is passing strange that quantity-theorists should attempt to prove the truth of their dogma by collecting statistics of the quantity of money and credit to show that they vary with the movement of prices, intimating that prices rise or fall because the quantity of money and credit rises or falls. As well say that the quantity of freight cars determines the quantity of goods to be carried. The prices of goods are determined before the media of exchange (money and credit) are called in. Of course, the volume of the media of exchange and the volume of trade coincide; for the former arise out of the actual transactions of the latter. The media of exchange (money in circulation, but chiefly deposit-currency) follow the volume of trade (the quantity of goods multiplied by their price), rising as it rises, falling as it falls. Indeed, in our present monetary development, as very few actual forms of money are used (except in retail dealings), while most of our transactions are settled by forms of credit known as deposit-currency (checks or bills), we have a mechanism of exchange which rises or falls exactly in proportion to the work to be done. To the extent to which deposit-currency is used (which is over 95 per cent in wholesale transactions), forms of money (gold, greenbacks, bank notes) are dispensed with. In fact, business men use the weekly figures of clearings (showing the volume of deposit-currency) to find out

the volume of goods being exchanged. These figures show the volume of goods exchanged without the use of forms of legal money (except for reserves). And yet, by a curious inconsistency, the quantity-theorists use these figures to show the demand for money and a reason why prices are high or low. For instance, if clearings are large (showing a large volume of trade), it is argued that, unless the quantity of money is enlarged, prices must fall. Or, if more gold comes into the country, or if more notes are issued, it is argued that, unless the volume of trade increases *pro tanto*, prices must rise. Such reasoning is footless, because we have in the deposit-currency a medium of exchange which adapts itself automatically to the volume of work to be done. It relieves money from the stress of such a demand. And, as we have seen, checks and bills come into use as a consequence of transactions in goods and after the price-making process has been concluded. Hence, an increase of clearings is no evidence of a force affecting prices. In truth a large mass-production may go with a larger volume of trade carried on at lower prices.

VI

At this point it is well to consider the claim of the quantity-theorists that their dogma is only a statement of the principle of demand and supply and hence irrefutable. One is unwilling, however, to allow them to assign their own a priori meaning to the terms demand and supply in this case. The demand they have in mind is supposedly general demand as against the general supply of goods. To them demand is the offer of not only the standard money (in which prices are expressed), but also of all the various media of exchange, including credit. It is a theory of demand, so to speak, in mid-air, independent of goods. But in general demand and supply, there is no such thing as demand independent of the possession of goods. If all goods be represented by A, B, C, ... X, Y, Z, general demand and supply are reciprocal concepts. The total supply of goods is at once general supply and general demand for each other. Demand can come only from the possession of saleable goods exchanged for money and credit (to avoid barter). All the goods A, B, C, ... X, Y, Z

are reciprocally demand and supply for each other. In general demand and supply, therefore, there is no such thing as a fixed demand independent of goods; there is no independent volume of purchasing power against which a determinate volume of trade is to be compared in order to get the level of prices.

The quantity-theorists have fallen into error probably because price is an exchange ratio between goods in general and one commodity (like gold) used as a standard. Hence an effect on the value of the standard will change its ratio to all goods, so that there can be a general rise or fall of prices. But that is a wholly different thing from the artificial concept of a demand for all goods as indicated by the volume of all media of exchange over against the supply of all goods. For we have already shown that many of the credit media of exchange are a consequence of transactions in goods. Out of the supply of goods and their exchange come the very media which the quantity-theorists regard as an independent demand.

No discussion of particular demand and supply (that is, for single articles) is necessary, because the quantity-theorists hold that here price is only a fluctuation on the general price level set by general demand and supply.

VII

There is difficulty in discussing the quantity theory, because it is not stated in the same way by two of its different supporters. Its modern form has been already assumed by me in including credit with money. But when first stated, especially by Ricardo, credit did not enter into the theory. It concerned money alone. In its original form, with the conditions assumed, it could not be denied. It was assumed that the state alone provided the money; that there was no free coinage; that no goods could be had except by the passage of that particular kind of money; and hence that the money in circulation was necessarily all offered for all goods, so that a change in either term meant a redistribution of the total money over the total of goods. Today, however, there is usually free coinage of the standard money in which prices are expressed. The state cannot fix its quantity, and its value conforms mainly to the exchange value of the bullion out

of which it is coined for anyone who presents it to the mint. Today, moreover, there are various kinds of media of exchange or credit other than coins by which goods are obtainable. Hence, there is no such rigid relation as of old between the quantity of coins and the quantity of goods to be exchanged, and much of the textbook emphasis laid on rapidity of circulation of each coin is obsolete.

When it was stated that prices were determined by the relation between all the money in circulation and the money work to be done (or the volume of trade), the question was inevitably raised, what does the word "money" include? Thence arose a confusion of tongues and theories. To one it meant only the standard, like gold, in which price was expressed; to another, it meant anything accepted as money, bank notes, or checks. Here the reason of the confusion arose from failing to discriminate between money as a standard and forms of money used as media of exchange. The latter comes into play only after the process of price-fixing between goods and the standard has been completed.

Since price is the ratio of exchange between goods and the standard, the only way in which the quantity of money and credit can affect the level of prices is by affecting the value of the standard. The development in long centuries of the various media of exchange has, of course, saved gold from a heavy demand as a medium of exchange which would have fallen upon it, were it the only money. To this extent they have prevented prices from a tendency to fall, as gold would have risen in value. Or, if "money" in the quantity-theory means only gold, then anything which would affect the value of gold itself would *ipso facto* affect the level of prices. If, for instance, a new supply of gold were to be discovered great enough to pull down the value of the whole, $18,000 millions produced since 1492, the level of prices would rise. Such a result would be due, not to a mere increase in the media of exchange, but to the fact that the standard term of the price ratio had, for causes affecting itself, fallen in value relatively to all other goods.

Then, in an attempt to modernize the theory, its advocates included credit with money to cover all the forms through which

purchasing power could be directed. This is its most plausible form, and the one assumed in this discussion. But even thus it is only one-sided and omits the effects of supply and production costs on the level of prices.

Nevertheless, many minds find difficulties in the workings of credit as they affect prices. While it is not possible fully to discuss credit here, it may be said that credit arises whenever there is a transaction in goods or property involving the return of an equivalent in the future. Forms of credit (such as book entries, bills of exchange, promissory notes, or checks) arise from these transactions in order to secure a future repayment. That is, credit arises from, or is based on, transactions in goods. An increase in the exchange of goods inevitably means an increase in the use of credit (usually in the forms of deposit-currency or bills). The transfer of actual gold may be a basis of credit, but there are myriads of other goods than gold whose movement brings forth credit. As soon as any goods are sold and expressed in units of the standard, the form of credit covering the transaction is negotiable at a bank, and is there coined into means of payment (that is, the paper is discounted, creating a deposit account on which checks can be drawn). The mass of bank deposits of a country roughly represent a volume of transactions in goods or property coined into a convenient means of payment. These masses of goods are thus offset against each other by checks and clearing-houses. They are reciprocally exchanged by the forms of credit at prices previously fixed. The forms of credit are not a price-making cause. They constitute a medium of exchange.

Some writers, however, deny that credit is based on transactions in goods, and assert that it is based only on money. In the main this claim appears in connection with bank credit; and the extent to which banks can expand their credit is made to depend on the amount of their money reserves. In this way it is insisted that all the money of a country must be either spent for goods, or deposited in banks (where it is loaned out or used as a basis of credit) whence it is all spent on goods by borrowers. To this it is to be said that bank reserves are kept primarily in order to test the solvency of credit transactions at

any time; but, while legal proportions of cash to demand liabilities exist, banks do not make legitimate loans because they have reserves, but only because good loans are offered. Very often reserves accumulate, when business is depressed, while loans are few. If safe loans are offered, there is practically no limit to the extent to which loans can be made because of lack of reserves, since the possession of sound assets in the loan items is a certain means of obtaining more reserves. This truth is the basis for the method of replenishing reserves for member banks by rediscounting paper at the Federal Reserve banks. Today, therefore, the expansion of our bank credit depends no longer on the amount of cash reserves, but on the possession of sound assets (themselves the outcome of transactions in goods).

VIII

In connection with the inclusion of credit, however, as part of the purchasing power in the quantity-theory, there is one case in which a change in the level of prices seems to be explained directly by the increase in the volume of credit. Without implying the dependence of credit on money, there are cases where the use of credit arising from goods can be perverted until what was normal has become abnormal. So long as goods are coine into means of payment (by discounting the paper arising from their exchange) to a sum no greater than their market value, the process is normal; there is no inflation; commodities are thus exchanged against each other at uninflated prices. Goods are exchanged against each other without deranging prices based on fundamental levels of production costs. But when, by fraud or by error, credit is granted to a sum greater than the market values of the goods, or when fictitious values are used as the basis of loans, the process becomes abnormal. Then inflation enters. False purchasing power appears as demand for goods, and prices rise so long as the deception or errors of judgment are unrecognized. This is the essence of what goes on in overtrading, which lays the foundation for a commercial crisis. Sooner or later a test of the solvency of these credit operations comes, when it is found that an obligation to pay is not based on full value, or on none at all. A single

revelation of such a condition leads to distrust, and if widely extended the collapse comes with the suddenness and severity of an explosion. The false demand being withdrawn (and normal demand being reduced), no one wishing to buy on a falling market, and everyone needing to sell to meet obligations, prices go far below normal. In such conditions, which obliterate the effect of production costs, prices rise and fall because of a rise and fall of abnormal credit. That is, the quantity of false credit is the direct cause of the higher or lower level of prices. This is a case in which the quantity-theory may hold true, but it always brings with it a destructive cataclysm.

This is no place to go into the mysteries of the value of paper money. If kept convertible into gold, an increase of its amount has no more effect on prices than an increase of gold. It has just been shown that, so long as credit is sound, it does not raise the price-level; and so more gold or paper in bank reserves is not a cause of enlarged credit. This is the reason why the present large accumulation of gold in the Federal Reserve banks is no cause of fear, so long as only good assets are accepted. If credit is enlarged legitimately, it is only as a consequence of an increased production and movement of saleable goods. Why then the widely prevailing belief that a large increase of paper money is necessarily followed by a rise of prices? The fallacy here involved is that it is inconvertible paper money that is had in mind. That is, if not redeemable, the paper depreciates, and it may fall according to any rumor that destroys confidence in its value. This could not happen if the paper were convertible, for redemption destroys all suspicion. If the standard of prices falls in value, of course, prices rise, not because of an increase in quantity but because of the depreciation of one term of the price ratio. This would be true, no matter what the quantity issued.

A heavy responsibility rests on the advocates of the quantity-theory. By giving academic support to the belief that an increase in money and credit raises prices, they have given support to innumerable fallacious schemes for relieving debtors by issuing more money. The inevitable consequence is that the advocates of cheap money do not discriminate between convertible and incon-

vertible paper, between a stable or fluctuating standard of prices, nor between normal and abnormal credit, as a means of raising prices. That is what we are witnessing today in the distress of Europe from the resort to inconvertible paper, and in the attacks on the Federal Reserve Board in this country for trying to keep us out of abnormal credit and crises. The sooner the public mind is freed from the fallacies of the quantity-theory, the sooner will we escape the pitfalls set for the confiding and the ignorant by specious monetary and credit schemes.

J. LAURENCE LAUGHLIN

BOSTON, MASSACHUSETTS