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ON MARX'S THEORY OF MONEY

The Theory of Money and the Theory of Value

The most important point to emerge from Marx's theory of money is the idea that money is a form of value. The difficulty with this idea is that we are more familiar with money itself than with value in other forms. But value does appear in forms other than money. For example, the balance sheet of a capitalist firm estimates the value of goods in process and of fixed capital which has not yet been depreciated, as well as the value of inventories of finished commodities awaiting sale. Each of these aggregations of commodities has a value, usually expressed as the equivalent of a certain amount of money, but it is clear that neither goods in process nor fixed capital is money. Marx views the value of commodities in this sense as analytically prior to money; money can be explained according to Marx only on the basis of an understanding of the value of commodities.

Marx follows Smith in regarding value as the property of exchangeability of commodities. In a society where exchange is common, products come to have a dual character as use values and as values. They have two powers: first, to satisfy particular human needs and wants; and second, to exchange for other products. This second power can be thought of quantitatively, as an amount of exchangeability or command over other commodities. The classical economists viewed value as a real, though socially determined, entity, with its own laws of conservation and motion. Value in this sense bears the same relation to commodities as mass bears to physical objects.

It is not surprising that in societies where exchange is widespread value takes on an independent form as money, as an expression of general exchangeability. Value is a central social reality for people; they constantly think and talk about it directly or indirectly; they want some way to transfer it directly among themselves, separate from particular commodities. This is, I think, what we mean by "money." It is the social expression of value separated from the concrete particularity of any use value.

With this emergence of money as the social expression of value, money stands, in opposition to commodities, as the abstract always stands in opposition to the particular. We will see value in two forms: as particular commodities, and as money. It is crucial to recognize that this development is latent in the commodity form itself. Insofar as commodity relations are well developed, so that exchange of products is common and people are forced willy nilly to consider the value of products separately from their use values,

the money form of value will also be present. There is no reason to think of the commodity form emerging historically before the money form. To the degree that we see the first, we will see the second, or reasons why the emergence of money is suppressed in the concrete situation. What we see historically are very different stages of development of commodity relations, corresponding to different degrees of development of social production and to different forms of money.

These differences in levels of development may give the illusion of an historical emergence of money separate from, and subsequent to, the emergence of commodities. But in such cases what is at issue is the particular form of money, or the way in which value manifests itself in the particular society. Even transactions which are apparently barter transactions, in that the equivalents exchanged are both concrete commodities, may best be analyzed as degenerate monetary transactions, in which the parties estimate the abstract value of their respective products, and finding them equal, or nearly equal, are able to avoid transferring money itself.

Marx regards value, the general power of exchangeability that resides in commodities, as an expression of the labor expended in the production of the commodities. If we use the word "labor" for the more accurate phrase, "abstract, socially necessary, simple labor," this theory suggests that the value in aggregate collections of commodities is proportional to the quantity of labor expended in their production.(1) This proportion is very important to the theory of money, because it implies that each unit of money value can be regarded as expressing a certain amount of labor time. In this paper I call this ratio the "value of money," the amount of social labor time expressed on average by a unit of money. (This idea should not be confused with the concept of the "value of the money commodity", which is the labor time embodied in a unit of a particular commodity that may be functioning as money.) The value of money is not the inverse of the wage rate in a capitalist system of production; it is the ratio of the total labor time expended to the total value added in the commodities produced. The average wage rate is the ratio of aggregate wages, which are only a part of the value added, to the total labor time.

Because money comes to stand in opposition to particular commodities, we can conceive of a difference between value and price. Price is the amount of money that a commodity commands in a particular situation. Value is the amount of labor time embodied in a particular commodity. There are numerous reasons why, in any given exchange, a commodity might exchange for an amount of money representing either a larger or smaller amount of labor time than is actually embodied in the commodity. One of the parties to the exchange may have an advantage over the other in possessing better information or facing little competition; an absolute shortage or glut of the commodity being exchanged, and

so on. In such circumstances, if we maintain the concept of value separate from price, we would say that the exchange was unequal in terms of the values changing hands. One agent winds up with more value than he or she started with, the other with less.

The integrity of the idea of value, however, requires us to think of exchange as a process which conserves value. This means that although one trader may gain and another lose in exchange, no value is either created or destroyed. The sum of the values they begin with is the same as the sum they end up with; what one gains the other loses. This law of the conservation of value is of the utmost importance in grasping Marx's use of the theory of value in analyzing capitalist production.

When we apply the idea of value separate from price to transactions involving money, the concept of the value of money, the ratio of total labor time to total value added, plays a central role. Only with this convention for defining the value of money will we be able consistently to maintain the ideas that money is a form of value; that value is conserved in exchange; and that the expenditure of labor creates value (Foley 1982, pp. 37-47).

These understandings have powerful consequences for our conception of the labor theory of value. They imply that the value referred to by the labor theory of value is ordinary money value which we use to buy and sell commodities, and which is accounted for in the balance sheets and income statements of capitalist firms. In the aggregate, for the total system of production (which of course exists only as an asymptotic abstract notion), these balance sheets and income statements exactly measure value in the sense of the labor theory of value. For any particular capital or group of capitals (a firm, sector, industry, or nation) the value flows measured in money terms may deviate from true value flows because of unequal exchanges in which value is either transferred to or drained out of the sector in question. Thus the notion of value is an operational and measurable concept if we specify the degree to which we believe unequal exchange is an important factor in the situation and the concrete circumstances that permit the inequality of exchange.

In this way the theory of money leads us to an understanding of the object of knowledge of Marx's theory of capitalism: the ordinary money values flowing through capitalist firms and measured on their balance sheets and income statements. Each of the subsidiary categories of Marx's analysis, the value of labor power, variable capital, surplus value, constant capital, and so on, has a strict and measurable correlate in the real motions of money in the capitalist economy. This is, in my view, the most important point in understanding Marx's theory of money. Money is a form of value, in fact the only pure form of value we ever see, since every commodity exchanges under special circumstances that tend to push its price above or below its value. This aspect of the theory of

money allows us to recognize Marx's theory in the reality we experience.

The function of money as expressing labor time is common to all commodity-producing societies, but different arrangements perform this function in each society. The functions of money, and the theoretical problems they pose -- such as explaining the divisions of value in capitalist production, or the determinants of the value of money -- are independent of the particular monetary institutions of a society. Some clear account of these institutions is required in the analysis of any particular commodity producing system, but one account will nor serve for all such systems.

Here we encounter a problem in Marx's discussion of money which needs careful criticism and rethinking. Marx often speaks as if there were only one set of social arrangements which can perform the functions of money. This has confused theoretical debate because it conflates the problem of understanding the general functions of money as a form of value with the problem of analyzing particular forms of money.

Marx's General Equivalent Theory

Marx analyzes a particular form of money, the case where a commodity becomes the "general equivalent," the common method of expressing the value of all commodities. Marx usually calls this commodity "gold" for short, though it may be any produced commodity. What is problematic in this situation is that gold is simultaneously a concrete commodity with its own conditions of production and non-monetary use value, and the expression of value separate from particular commodities. In the case of gold the universal dual nature of commodities, as use values on the one hand and value on the other, becomes even more complex. Gold is a use-value, and a particular commodity value, but also serves as the general equivalent expression of value.

This is the puzzle Marx sets himself to resolve in his discussions of the money form in the first pages of Capital, and in his Contribution to the Critique of Political Economy. How can gold simultaneously be a concrete commodity and the form of money? Marx resolves this paradox with the theory of the general equivalent commodity. All the other commodities exclude one, (gold) from their number, forcing it to take on the role of measuring and expressing each of their values in its own quantity. It is as if one material substance, say, iron, were forced to become the universal measure of weight.

This comparison of value to weight is illuminating: it shows the kind of substance the classical economists and Marx thought value to be -- an abstract property common to all objects, but never existing independently - and the puzzles that arise in trying to measure value. Like weight, value is inherently quantitative, but

can be measured only by relative comparisons. The last step of the analogy, however, should alert us to a possible problem. In fact, no single substance such as iron comes to be identified with weight as such; as a matter of social convention people may use iron weights to settle disagreements about the weight of particular objects, but the idea of weight is not identified with the iron itself.

In a money commodity system, it is crucial to distinguish between the "value of money" as the labor time equivalent of the monetary unit, and the "value of the money commodity." The latter is the amount of social labor time contained in a unit of the money commodity, say, an ounce of gold. Marx argues as if the value of the money commodity actually determines the value of money, once a society has settled on a "standard of price," the amount of the money commodity which it will call a unit of money. For instance, the standard of price of the U.S. dollar from 1791 to 1933 was one twentieth of an ounce of gold. If the gold exchanges for other commodities in proportion to its labor value (i.e., there is equal exchange between gold and other commodities), then the value of money will be the value of the amount of gold contained in the standard of price. If it takes twenty hours of labor time to produce one ounce of gold, and one dollar is one twentieth of an ounce of gold, the value of money will be one hour per dollar.

Gold, however, may not exchange against other commodities in proportion to their embodied labor times. The production of gold may involve a higher or lower than average organic composition of capital, so that the equalization of the profit rate in gold production to the profit rate in other sectors requires that gold exchange for more or less than its labor value. There may be other elements of monopoly or unequal exchange in gold production. Under these circumstances the value of gold will not be equal to the value of money.

It is unfortunate that the general equivalent theory suggests that the value of money is always determined by the conditions of production of the money commodity. In the development of Marxist theory the problem of the determination of the value of money separate from the value of the money commodity has not attracted much attention. Most Marxist theorists assume that the problem of the value of money has been settled by the general equivalent theory and the idea of the standard of price. They see no substantial difference between the value of money and the value of the money commodity.

From one point of view the general equivalent theory amounts to identifying the value of money in the functional sense which I described above (the ratio of labor time to value added for the system of commodity production as a whole) with the relative price of the general equivalent commodity, which is determined by its price of production relative to the prices of production of other

commodities. This identification is treated by Marx as uncontradictory; he devotes almost no space to a systematic discussion of possible contradictions between these two conceptions of the value of money.

The value of money plays a central role in Marx's exposition of the relations of capitalist production. He begins an example by saying: "Assume the habitual working day as12 hours, the daily value of labour-power as 3s, the expression in money of a value that embodies 6 hours of labor..." (Marx 1967, p. 539), or, even more strikingly, "Suppose moreover, six hours of average labour to be also realized in a quantity of gold equal to 3s..." (Marx 1968, p. 211). To speak this way, Marx must have a conception of the value of money as the ratio of labor time to value added that permits him to translate labor time into monetary units. When he makes remarks like the second one he goes further and identifies this value of money with the labor time embodied in a certain quantity of gold. One result of Marx's adoption of the general equivalent theory, then, is that the value of money plays no central role in his analysis of the dynamics of capitalist production. It is a necessary link in the expression of the relations of capitalist production in terms of money, but it itself is viewed as unproblematically determined by production conditions in the gold mining industry. Thus the value of money never becomes the center of Marx's critical attention.

Two Revisions of Marx's Theory of Money

I would like to suggest two possible revisions of Marx's theory of money. They both maintain what I think is the core of that theory, the idea that money is a form of value.

We could, as a first line of thought, argue that Marx failed to analyze systematically a contradiction inherent in his system. There are two determinations of the value of money in Marx The first shows money in its aspect as the expression of abstract labor. In this determination the value of money is the amount of abstract labor time represented by a unit of money: so many hours of labor per dollar, for instance. As we have seen, we can measure this value of money by dividing the value added in the system in money terms into the labor time expended. But there is a second notion of the value of money as the value (or price of production) of the money commodity. It is because the money commodity is itself a value, Marx argues, that it can perform the function of measuring the value of other commodities. How can these two conceptions of the value of money be reconciled? What social institutions mediate between them?

Marx's discussion of this issue in the second chapter of the Contribution suggests that the value of money depends ultimately on the conditions of exchange between gold and other commodities at the point of production of gold. Thus arbitrage, minting, and

melting of gold coin for export seem to be the mechanisms Marx has in mind for maintaining the relation between the value of the money commodity and the value of money. It is important to recognize that this arbitrage is costly, and works only up to a point in any commodity-producing society; there is always some margin within which the value of money can vary in relation to the value of the money commodity. Thus there is always some further question as to the exact determination of the value of money.

We could revise Marx's theory by arguing that what has happened in the twentieth century is that the links between money in different countries and between money and gold have become looser and looser, so that the space within which the value of money can move before it is called to order by the value of gold is very large. To carry out this theoretical development one would have to examine systematically the processes through which the values of currencies were in fact regulated under the gold standard, so that the mediations which Marx leaves somewhat vague would become clear. Then one would have to show in what specific ways these links still exist, though in attenuated form, and how they express themselves in the real motion of the system, through pressure on state policy, through the market, or by other means.

I am tempted as well by another path, which is more radical in its approach to Marx's theory. If we think of money as a form of value, the fundamental contradiction in the theory of money is the difficulty people have in actually transferring and holding something as abstract as value itself. What agents want, once value is well established as a social phenomenon, is value itself, but how can they get it? The most immediate method of transferring value would be through promises. When two agents agree on a price in a transaction, the buyer could promise the seller the of promises works perfectly well as long as agents commit through promises only value which they actually control. At some later time the promise is cleared by another transaction in which the original buyer takes on the role of a seller. Thus it might seem that the simplest social solution to the problem of transferring value would be to posit and circulate value and through promises.

There are, however, some contradictions in this method. Agents, through an excess of optimism, or later bad luck, or (though I hesitate to raise this ugly possibility) through consciously and fraudulently manipulating the system to their personal advantage, might issue promises to pay value which they cannot or will not meet. The first mediation of this contradiction would be for trading agents to use third party promises to transfer value. This has the advantage to the seller of establishing the presumption that the buyer did deliver something of value at some time to the third party or to another party. It has further advantages if the third party has better "credit," being in a position in which failure to meet its promises is more costly and the holder of a promise has a better

chance of enforcing the promise. In this way a chain of promises of higher and higher social validation is created, which could give rise to one theory of banking. At each level of transactions the promises to pay of a third party circulate as money value. Those third parties themselves need higher level third parties to clear the payments among themselves, and so on.

What could stand at the end of this chain of promises of higher and higher social validity? One possibility, representing failure of the logic of the system, is that agents can find no acceptable way to transfer value by promises and are reduced to transferring it in the form of a concrete commodity. This is a last resort, since the whole idea of the exchange process was to move from concrete commodities to money value; accepting a concrete commodity in the end is a second best. Of course this type of failure might in reality be very common and the rules for managing it might become very well-codified, requiring that the payment be made in a particular commodity (say, gold) and regulating exactly the fineness and the standards of weight that would apply. Gold then appears to be analytically the last step in the understanding of money, and the use of gold as payment to be a very imperfect, last-resort mediation of the problem of transferring value.

Alternatively, the State might stand at the apex of the chain of promises of higher and higher social validity. State credit, rather than gold, then would be the ultimate means of payment for private transactors. This second theoretical path inverts Marx's order of argument. In Marx's conception, gold is the truly present money, and forms of credit are only substitutes (or supplements, as Jacques Derrida would say [1976, pp. 141ff]), which stand in for gold and must vanish in the ultimate moment of payment. Following the second theoretical path, we would view credit as analytically the first form of money, and gold only as an ultimate mediation brought forcibly into play when exchange reaches a point of crisis, either in the relations of two agents or in the system as a whole. The question of what role, if any, gold plays in a monetary system would remain open to examination in concrete instances.

Whichever of these two paths we follow, we are left with the problem of understanding what dynamic laws govern the value of money. If gold is the general equivalent, but the value of money can vary within quite wide boundaries given the value of gold, then we will want to know what governs where within those boundaries the value of money settles. If gold appears only as a last resort within a system of promises to pay value, then we particularly need to know what processes govern the motion of the value of money itself.

The answer to these questions, in the case of well-developed capitalist systems of production, lies in the analysis of the

reproduction and accumulation of capital itself. The value of money varies as the prices of produced commodities rise and fall. Pricing of commodities, in turn, is one of the central strategic decisions of capitalist firms.

The overall value of money in a capitalist system of production depends, of course, not on the decisions of any one capitalist firm, but on the average of the decisions that all of them make concerning pricing. This average pricing decision is fundamentally influenced by the ease or difficulty capital on average has in selling its commodities. A natural measure of this difficulty is the time of turnover of commodity capital, the length of tine on average that finished commodities must wait to be sold. If this turnover time is large, capitals are having a hard time selling commodities, and we would expect prices to rise moderately or to fall. If this turnover time is quite short, capital will see very little obstacle to raising prices and thus lowering the value of money.

From this point of view the problem of the value of money is linked closely to the dynamics of production and accumulation in a capitalist system, and to the factors which produce booms and crises. The value of money is determined in the first instance by the particular historical path of accumulation capital has followed; periods of high demand will lead to a fall in the value of money through capitalist fires increasing prices, while crises will tend to put downward pressure on the value of money. If such changes in the value of money come into contradiction with vestigial links between a money commodity and the monetary system, this type of explanation must be modified to take account of the specific action of those links. In the late twentieth century the system has usually adapted by weakening even further the links between money and the vestigial money commodity

Some Applications of the Theory

Let us look at the way Marx's theory of money functions to provide explanations of important monetary phenomena. We can begin with the general equivalent theory, and look at the monetary problems of nineteenth century capitalism. In this case, gold functions as the general equivalent commodity, and quantities of gold express abstract labor time. Marx shows (In the third chapter of Volume I of Capital, and In the Critique of Political Economy) that the general equivalent theory is capable of resolving all the major problems of monetary theory that were being debated In mid-nineteenth century economics.

First, Marx argues, the value of gold is determined by Its conditions of production, just like the value of any other commodity. (If we wish, we could say equally accurately "by its price of production.") One whole class of monetary phenomena consists merely of the appearance of reliable substitutes for gold, reliable In the sense that

a well-accepted social process exists for turning the substitute into gold at a guaranteed rate of exchange. All these cases Marx analyzes by referring to the value of gold as the ultimate regulator of the value of its substitutes -- banknotes, small coins of silver and copper, and so on. The quantity of these substitutes plays no role in determining their value as long as their convertibility into gold is assured; they must move up and down in value with gold. The issuance of these substitutes Is regulated by the possibility of convertibility, since an overissue will return to the issuer in the form of a demand to redeem the substitute in gold.

Nineteenth-century monetary theorists sometimes confused the problem of the value of money with that of the standard of price, the names that are adopted for specific quantities of gold. Marx treats this as purely a matter of social convention regulated by the state. A "pound" or "franc" is, at any one moment, a certain quantity of gold. A change in the standard of price through the debasement of the currency will have no effect on the value of gold or the value of money as such; its only real effect will be to redistribute value away from those agents who continue for some time to accept the debased coins at their old gold value.

The only disturbing factor in this transparent account is a somewhat murky discussion of the problem of the circulation of old, worn coins, whose gold content falls significantly short of their face value. Here I find Marx confusing, because he does not give a clear account of what institutional mechanisms bind the conventional standard of price to a certain quantity of gold. A group of worn coins whose face value is $10 will exchange at a discount against gold proportional to their loss of substance. But if, as was often the case, they circulate and are generally accepted at face value do we want to call this de facto debasement? Or does this question point to the existence of an important set of mediations between the value of money and the value of gold? I think the latter is the case.

In fact, the relations between gold and currency values were, under gold standard institutions, regulated in two ways: by the minting of new coinage at the stated price (so many dollars from so many ounces of gold), and by the melting of coin into bullion for export. The minting of gold is functionally equivalent to its import. These activities took place only if the market exchange ratios between national moneys and gold were sufficiently favorable in one direction or the other. This raises a serious problem, however, for the theory that currency is nothing more than the representative of a certain quantity of gold. There were always some limits within which the "dollar" or the "pound" could fluctuate in value relative to gold. What laws governed these movements? The general equivalent theory in the form Marx presents it does not explicitly answer this question.

A second group of questions which troubled

early-nineteenth-century monetary theorists concerns the laws which govern the depreciation, usually in times of war. of inconvertible paper money issued by the state. Examples of this phenomenon Include the depreciations of the greenback dollar in the United States during the Civil War, and of the paper pound issued by the British during the Napoleonic wars. Ricardo and later quantity theorists used this phenomenon of depreciation as a strong argument for their thesis that the value of money depends on its quantity. For these writers the depreciation of paper money was just a particular example of the tendency for any form of money to depreciate when its quantity becomes larger relative to the needs of circulation.

Marx's discussion of this question is very clear and convincing. Paper money issued without convertibility by the state, he argues, will circulate in place of gold, in the first instance, just as if it were convertible. If, however, so much is issued that agents find they have idle balances of paper piling up, they will try to exchange the paper for the general equivalent, gold. Thus a market discount of the paper against gold will spring up in the absence of convertibility at a guaranteed rate of exchange. Then, Marx argues, gold continues to serve as general equivalent and to regulate and express the prices of commodities as it always does. The prices of commodities in terms of paper money are determined directly by the discount of paper against gold in the market. (This simple account may be altered by speculation for or against the paper issued by the State.)

This was, for example. the method of pricing which characterized the last stages of the German hyperinflation of 1922-26. Prices were set in terms of gold marks or pounds or guilder, currencies which retained a close relation to gold values, and paper mark prices were calculated by multiplying gold prices by the current market rate of exchange between marks and gold currencies established in foreign exchange markets (BrescianiTurroni 1968). The point here is that the depreciation of over-issued paper does not reflect a general rise in all commodity prices as the result of excess demand in all markets, as the quantity theory story would indicate, but a specific decline in the value of the paper money relative to the general equivalent in the market between them.

This is a satisfactory account of the depreciation of paper money but it is important to realize how heavily it depends on the continued functioning of gold as general equivalent. Once we posit the existence of a produced general equivalent whose value is regulated by its conditions of production, the problems of understanding the behavior of substitutes for the general equivalent become relatively easy to resolve, at least at a theoretical level.

When we move to considering twentieth-century monetary

phenomena, however, we run into considerable difficulties with the general equivalent theory. The most obvious source of these difficulties Is the institutional disappearance of the gold standard in advanced capitalist society in the twentieth century. During the First World War most major capitalist countries abandoned the gold standard under the pressures of war finance. After the War most countries attempted to return to some form of the standard, mostly with troublesome results. The British returned at the pre-war parity and found themselves faced with the necessity of a long and painful deflation; the Germans only managed to return after a catastrophic inflation.

In the early nineteen-thirties the Depression forced most countries back off the standard. The United States stayed formally on the gold standard, but adopted a policy of suppressing the monetary functions of gold, making it illegal for private citizens to hold gold except in the form of jewelry or rare coins, and forcing citizens to return their gold to the government. The effect of this turmoil was to loosen the link between gold and the money typically used by agents in everyday transactions as measure of value and means of payment. It was no longer very easy for a market discount to open up between national currencies and gold; many agents were legally forbidden to engage in such transactions and government agencies and central banks involved themselves constantly In manipulations of those markets.

After the Second World War the dollar became for a time the clearly favored money of the world, maintaining only weak links to gold, which were quickly abandoned whenever they came under any considerable strain. In the late nineteen-sixties liberal economists in the government of the United States argued that the dollar, not gold, was in fact the monetary standard of the world, and that the links between the dollar and gold were supporting the monetary role of gold, rather than the other way around. Except in a few backward corners and sectors of the world economy there was no evidence that gold pricing played any substantial role in exchange. Since the collapse in 1971 of the system of fixed exchange rates and the freeing of the market price of gold, gold prices have been extremely volatile. The gold market has exhibited the characteristics of a speculative asset market. It is difficult to believe that gold has been functioning as the general equivalent commodity in the world economy over the last thirty-five to fifty years, with prices in national currencies arising from the market discount between those currencies and gold.

Either of the two proposed revisions of Marx's theory of money could deal with these twentieth-century problems. The first proposal would argue that the links between gold and money have become so loose that in practice they almost never affect the value of money established by the pricing decisions of capitalist firms. The second proposal would suggest that the system of payment by

credit has been perfected in the twentieth century by the elimination of gold as the apex of the pyramid of promises to pay. The state instead occupies that position, and is thus in a better position to mediate the contradictions of capital accumulation through the disposition of its own credit, since it does not have to fear external pressure through demands to convert national money into gold.

In both versions the value of money is free to move to meet the needs of capital accumulation. In both, money still is a form of value, and still functions to express the abstract labor expended to produce commodities.

Toward A Modern Marxist Theory of Money

A combination of institutional and theoretical developments has left Marxist economic theory in considerable embarrassment. Since the Second World War a major and increasingly prevalent form of capitalist crisis has been inflation, which everyone concedes has something to do with the value of money. How can Marxists arrive at a coherent account of inflation? If we stick with the general equivalent theory we are faced first with the problem of convincing serious people that the value of gold has much to do with the level of money prices In the United States, Europe or most of the rest of the capitalist world. If we negotiate that difficulty, it is hard to avoid sliding down the slope of the following argument: the dollar and other national currencies are paper money issued by the state without convertibility. Therefore their value is determined by their discount against gold, which in turn depends on the quantity of their issue. Inflation appears to be a result of the State's issuing paper money in excess of the needs of circulation.

But this is exactly the stance of the quantity theorists and monetary conservatives. It is also a step backward analytically because it ignores the complexity and subtlety of modern financial institutions. Do we want to argue, for example, that the only role of the dollar in the U.S. economy is as a circulating means of payment? But the alternative explanation of inflation among Marxists has been to blame it on oligopoly and monopoly -- also a favorite notion among populist liberal economists of the trust-busting tradition. Whether or not this alternative explanation is closer to the truth, it abandons the general equivalent theory altogether.

These problems are closely bound up with the nature of the general equivalent theory and with the disappearance of any discussion of the significance of the value of money, and changes in the value of money, for the reproduction and accumulation of capital within the framework of that theory. On the basis of the revisions of Marx's theory suggested here, however, we can at least sketch an analytical approach to modern monetary problems which remains

true to the core insight of Marx's theory, and does not simply reproduce the simplifications of modern monetarism.

First, the value of money is determined historically by the pricing decisions of capitalist firms themselves. At any moment a unit of money expresses a certain amount of abstract social labor. If the sale of commodities is very easy for firms, they will raise prices and the value of money will decline. If the sale of commodities is difficult, the value of money will decline less rapidly. Those factors that influence the value of money must do so through changing the conditions of realization of commodities on average.

Second, given the value of money, the monetary and credit mechanisms face the problem of financing the flow of commodity purchases and sales at that level of the value of money. In modern capitalist economies this problem is solved primarily by the expansion and contraction of credit. In the first instance this expansion of credit is inherent in the private transactions of capitalist firms, since they depend on private credit to finance most transactions. Specific regulation of certain sectors of the credit markets, like the reserve requirements imposed in the United States on commercial banks, serve to determine the relative share of the total credit transactions that pass through those sectors, and the price the banks, for instance, can charge for their services in facilitating credit.

This line of analysis suggests that the source of the chronic inflation of the 1970s should be sought first of all in the changed dynamics of capitalist production and accumulation in advanced capitalist economies. The dramatic consequences of the inflation for credit markets and for the distribution of wealth and income have to be seen as secondary byproducts of these changes in the dynamics of capitalist production.

From a theoretical point of view the usefulness of Marx's theory of money lies in its ordering of the problems of monetary theory. The problem of the value of money is seen to be prior to the question of the quantity of circulating medium. In a commodity money system the problem of the value of money appears to have a good approximate solution in the idea that the value of money is determined by the value of the money commodity. With this determination we can remove the value of money from center stage in the analysis. We can be confident that money flows and monetary relations do no more than faithfully reflect the underlying social relations of production. When the monetary system evolves out of its close dependence on a commodity money, things become more complicated because the value of money is free to move to mediate other contradictions in capitalist production. This freedom, however, does not change the order of the theoretical analysis. The value of money is still prior to the problem of the quantity of money, and a recognition of that ordering is the key to a

satisfactory modern theory of money.

Notes

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1. For a detailed discussion of the labor theory of value see Rubin (1972).

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