Marx's Theory of Money in Historical Perspective

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Abstract

The paper considers two problems related to Marx's theory of money: first, the definition and measurement of the quantity of social labor time represented by a unit of money; second, the application of Marx's commodity-money theory to contemporary monetary institutions based on state-credit money. In theory social labor time and the price expression of exchange value emerge simultaneously, so that no ex ante measure of social labor time is possible. In practice adjustments of social labor time through weighting to account for the characteristics of workers or by relative wages, or the assumption of uniform proportions of concrete labor across sectors can illuminate the determinants of profitability. State-credit moneys are analyzed through Marx's concept of fictitious capital, leading to a critique of the neoclassical view of the value of money as a bubble. The paper concludes with a discussion of the dilemmas involved in the application of Marx's theory of money to contemporary world monetary institutions.

Keywords: Marx's theory of money, social labor time, monetary expression of labor time, labor theory of value

1 Introduction

After being largely neglected by Marxist scholars in the first two-thirds of the twentieth century, with some exceptions such as Rubin (1972), Marx's theory of money has been the subject of a substantial number of books and articles in the last thirty-five years[1]. This work shows that the theory of money is an indispensable part of Marx's theory of value, and among the most original aspects of Marx's economics.

Marx derives the money form of value from the theory of the commodity as a unity of use-value and exchange value, and shows how a particular produced

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[1]Among others de Brunhoff (1976), Foley (1983), Arnon (1984), and Itoh and Lapavitsas (1998).

commodity (such as gold) will emerge as the socially accepted general equivalent, which functions as a measure of value for all other commodities. Since Marx regards labor as the substance of value, the money commodity also expresses abstract social labor in commodity exchange. From this starting point Marx is able to provide a coherent account of the whole range of monetary phenomena known to his period, including the circulation of paper money, the valuation of inconvertible paper money, the circulation of worn specie coins, the laws of circulation connecting the quantity of circulating money to the prices of commodities circulated, hoarding, and, ultimately, the role of money as money capital. This theory also provides a coherent and satisfactory foundation for the theory of interest as a form of surplus value and credit. (See Marx 1992, Part I, Marx 1973, Chapter on Money, and Marx 1970 for Marx's complete development of this theory.)

This paper addresses two issues that are still unresolved in contemporary discussions of Marx's theory. The first is the relation between abstract social labor and money and the measurement of the "value of money" or "monetary expression of labor time" (the abstract social labor time expressed by a unit of money). The second is the problem of adapting Marx's theory of money to contemporary monetary systems in which the debts of the states (expressed as dollars, pounds, euros, or yen, for example) function as the socially accepted general equivalent rather than a produced commodity.

2 Labor and money in Marx's theory of value

In empirical applications of Marxian theory, for example in Sraffian studies using Leontief's input-output data, "labor" is identified with measured labor time, unadjusted hours of employment. This practice is acceptable and even probably inescapable in applied work, but it distorts Marx's full account of the relation between money and abstract social labor.

Marx takes up this issue at length in the *Grundrisse* (Marx, 1973, Chapter on Money). The motivation for Marx's discussion is his critique of the "Ricardian socialists", Bray and Gray, who argued for replacing gold with a labor-based money. The idea was that when someone expended labor effort, he or she should receive a certificate representing that quantity of labor time, which could then be exchanged for a proportional part of the social product. In this scheme labor certificates would take the place of money as the means of circulating commodities and supporting the social division of labor.

Marx objects to the labor-certificate plan on the grounds that it short-circuits an essential function of the commodity system of production. The actual sale of commodities for money tests the validity of the expectation that any particular labor expended is indeed social and necessary labor. It is only after sale that the social and necessary character of the labor expended in producing a commodity is guaranteed. The commodity producer produces the commodity on a speculation that the market will validate the social and necessary character of that labor.

Marx argues that the labor-certificate reform would work only if labor were "immediately" social in production, so that the labor certificate could be a simple acknowledgement that social and necessary labor had been expended. But this would be possible only if the social and necessary character of the labor were guaranteed in production itself, independently from the market sale of the commodity. This guarantee could be achieved only in a system where production itself is socially rather than privately organized. The labor-certificate issuing bank would have to organize production on a social basis to begin with. The apparently innocuous labor-certificate reform would require a complete socialization of production, not just the issue of labor-certificates.

The implication of these observations is that "abstract, social, necessary labor" which is the "substance" of value emerges jointly with the expression of exchange value in the pricing of commodities in terms of money. There is no general ex ante method of measuring the abstract, social, necessary labor expended in producing commodities independent from the whole process of exchange of commodities mediated by money. Marx himself sums this up in the *Contribution to the Critique of Political Economy*:

> ... the different kinds of individual labour represented in these particular use-values, in fact, become labour in general and in this way social labour, only by actually being exchanged for one another in quantities which are proportional to the labour-time contained in them. Social labor-time exists in these commodities in a latent state, so to speak, and becomes evident only in the course of their exchange. The point of departure is not the labour of individuals considered as social labour, but on the contrary, the particular kinds of labour of private individuals, *i.e.*, labour which proves that it is universal social labour only by the supersession of its original character in the exchange process. Universal social labour is consequently not a ready-made prerequisite but an emerging result. Thus a new difficulty arises: on the one hand, commodities must enter the exchange process as materialised universal labour time, on the other hand, the labour-time of individuals becomes materialised universal labour-time only as the result of the exchange process. (Marx, 1970, p. 45)

This point (which has been emphasized by de Vroey 1981 among others) sweeps away the whole range of objections to the "labor theory of value" based on the observation that it is impossible to aggregate many different kinds of labor into a single index of abstract social labor time, just as it is impossible to aggregate apples and oranges. (This objection is developed by von Böhm-Bawerk 1957, Book VI, ch. III.) Marx uses the terms "particular kinds of labour of private individuals" or in *Capital* "concrete labour" to describe the variety of real-world labor. In commodity exchange these concrete labors are equalized through the establishment of prices for the commodities they produce. No ex ante weighting of different types of labor to create a single empirical measure of social labor time is part of Marx's theory of value at this level of abstraction.

The objection of adherents of the rational-empiricist philosophy of science to this statement of the labor theory of value is that it turns the theory into a tautology. Marx himself says:

> Since the exchange-value of commodities is indeed nothing but a mutual relation between various kinds of labour of individuals regarded as equal and universal labour, *i.e.*, nothing but a material expression of a specific social form of labour, it is a tautology to say that labour is the *only* source of exchange-value and accordingly of wealth in so far as this consists of exchange-value. (Marx, 1970, p. 35)

Marx conceptualizes problems through a sequence of more and more concrete determinations (Marx, 1973, Introduction). The problem of recovering social labor time from data on the prices of produced commodities involves working back through these layers of determination.

3 Measurement issues

Is it appropriate to attempt to quantify the relation between social labor time and money given the complex, ex post nature of that relation in theory? Marx himself does give a quantitative significance to the relationship, regularly assuming for the sake of examples that a shilling expresses so many hours of social labor time.

The fundamental motivation behind this measurement is the implicit argument that a socialist mode of production could organize social labor as effectively as capitalism while eliminating the exploitation of labor. The translation of monetary macroeconomic aggregates into social labor time expresses this vision concretely. There are objections to this argument connected with the points Marx raises in his critique of Bray and Gray. Capitalism supports a social division of labor through a historically and institutionally specific mode of production. Any other mode of production would shape a *different* social division of labor. This observation calls into question the relevance of comparing social labor time in capitalism with the social labor time that might emerge under socialism.

Another reason for being interested in the quantitative relationship between money prices and social labor time is the belief that social labor time regulates or determines money value aggregates. The theory of value outlined in the last section does not completely support this idea, since it emphasizes the simultaneous emergence of social labor time and the expression of exchange value in terms of money, a process in which it is impossible to identify one or the other pole as the determining factor. On the other hand, it is reasonable to suppose that the social organization of production evolves on a slower time scale than the formation of money prices, so that there is some insight to be gained from considering the quantitative relationship between money value added measures like Gross (or Net) Domestic Product and social labor time.

These quantitative measures provide insight into limits to the rate of exploitation. The wage share in GDP expresses (ex post) the proportion of "paid" labor time in a capitalist economy. The "monetary expression of labor time" (MELT), the ratio of money value added to total social labor time decomposes into indices of price change and labor productivity:

$$m = \frac{PX}{N} = \frac{PX}{X}\frac{X}{N}$$

where m is the MELT, P is a price index such as the GDP deflator, X is the index of"real" value added corresponding to the price index, and N is social labor time. The importance of labor productivity in capitalist economies lies in the fact that the "real" (use-value) wage plays a key role in the class relations between workers and capitalists.

The measurement of value added raises interesting problems (see for example the discussion in Shaikh and Tonak 1994), but conceptually value added measures are already expressed in money prices. The measurement of social labor time, however, raises more fundamental issues of aggregation because labor time takes qualitatively diverse concrete forms. Exchange value is a one-dimensional quantity, but the commodities themselves as use-values, and the labor that produces the commodities, are qualitatively varied. How does social exchange equate seeming incommensurables?

Marx suggests two complementary approaches to the measurement of social labor time. The first is to "reduce" labor to a common denominator, "uniform, homogeneous, simple labor" (Marx, 1970, p. 30). (In a footnote on p. 31 Marx equates simple labor to unskilled labor.)

> But what is the position with regard to more complicated labour which, being labour of greater intensity and greater specific gravity, rises above the general level? This kind of labour resolves itself into simple labour; it is simple labour raised to a higher power, so that for example one day of skilled labour may equal three days of simple labour. (Marx, 1970, p. 31)

Thus each concrete individual labor should have a skill weight attached to it, and the weighted sum of the individual labors will be the quantitative measure of social labor time. This seems straightforward enough conceptually, but leaves some questions unanswered. For example, Marx seems to regard simple labor as fungible between sectors of production, so that "any average individual" can be shifted from one line of production to another with no change in total social labor time. But some difference in social labor may adhere to the sector of production. If mining is inherently more dangerous than weaving, an hour of mining might produce more value added than an hour of weaving. The exchange process "practically" equates the labor time of miners and weavers, but finding the appropriate weights remains a problem for an econometrician who wants to estimate an index of social labor time. This Marxist econometric problem overlaps with neoclassical labor economics, which also faces the problem of reducing qualitatively diverse labor to a single index.

One approach is to use weights based on the personal characteristics of workers, such as education, age, or experience. The data necessary to find these weights may, however, be hard to come by and common experience suggests that the correlation of formal worker characteristics with productivity may be weak.

A second approach is to use weights proportional to the wages of individual workers. The use of wage weights amounts to the assumption that labor of different qualities is all subject to the same rate of exploitation. This is a tempting approximation for empirical work (though there is a danger of circular reasoning if someone uses wage-weighted measures of labor inputs to test hypotheses about the rate of exploitation of different types of labor).

Marx also outlines a second approach to the measurement of social labor time.

> The labour of an individual can produce exchange-value only if it produces *universal equivalents*, that is to say, only if the individual's labour-time represents universal labour-time or if universal labour-time represents individual labour-time. The effect is the same as if the different individuals had amalgamated their labour-time and allocated different portions of the labour-time at their joint disposal to the various use-values. (Marx, 1970, p. 32)

This approach regards social labor time as a "dose" of all the qualities of labor in fixed proportions. It amounts to the assumption that different qualities of labor are present in the same proportions in all sectors of production, but leaves open the question of whether different qualities of labor are subject to the same rate of exploitation. (The rates of exploitation of different qualities of labor in this framework are indeterminate, since the imputation of value added to the particular kinds of labor in a dose of labors of different qualities is arbitrary.) This method leads to estimating the MELT as the ratio of a measure of value added to the number of employed workers or to unweighted total labor time.

The econometric method of measurement of social labor time is a pragmatic issue. What are we going to use this measure for? If we are interested in measuring the rate of exploitation of labor over time in one country, quality weights of labor may not be relevant. If we are interested in the degree to which international foreign exchange markets equate social labor across different countries, some adjustment for the quality differences in labor between countries is unavoidable. As always in econometric research, data availability and cost are central issues. Where more accurate weighting of different types of labor cannot be achieved with available data or only through time-consuming manipulation of data, a simpler but more robust estimate of social labor time may be the best we can do.

4 Contemporary monetary systems

In Marx's theory of money a produced commodity, for example, gold, becomes the socially accepted general equivalent. The emergence of a general equivalent is a spontaneous, decentralized phenomenon that accompanies the development of the commodity form. Currencies issued by states inherit their value from the money commodity, through the *standard of price*, which defines the state currency unit as a certain quantity of the money commodity. (For example, the U.S. Congress in 1790 defined the dollar as 1/20th of an ounce of gold.) The effective convertibility of the currency (through a full-weight specie coinage or the free exchange of paper money for bullion at the standard of price) ensures that the currency prices of commodities reflect their gold prices.

Marx's theory of money describes a system that was only coming into being at the time that he wrote. When Marx was developing his theory of money in the 1850s, the gold standard was far from securely established. Convertibility of national currencies into gold was fragile (witness the departure of the United States from the gold standard at the onset of the Civil War), and important parts of the world maintained silver standards or bimetallic systems.

While something like the system of world money based on a universal money commodity Marx describes did operate from around 1870 to the outbreak of the First World War in 1914, it deviated from Marx's theoretical picture. The pound sterling played an asymmetric role in the system, which was more a "sterling exchange" standard than a gold standard. International currency adjustments during this period were often accomplished by sterling credit transactions and the manipulation of the British discount rate rather than through movements of gold.

In the twentieth century the evolution of the world monetary system took a turn that Marx did not anticipate, as national currencies severed their convertibility into gold. This institutional change was marked by an increase in the vulnerability of national currencies to chronic inflation, and eventually by an evolution of central banking towards "inflation targeting" with important ramifications for the political economy of world capitalism. The inconvertibility of national currencies into gold, however, made remarkably little difference to the day-to-day functioning of markets and credit. Prices of commodities continued to be set in terms of national currencies, especially the dollar, which appears to function as the measure of value, means of payment, and, to a considerable degree, world money.

The monetary expression of labor time and the analysis of the origin of surplus value in the exploitation of labor can be applied transparently to monetary systems based on inconvertible national currencies. What is left hanging theoretically is the determination of the value of national currencies, particularly the value of the U.S. dollar. In Marx's theory the same forces determine the relative price of the money commodity to other commodities as determine prices generally, namely costs of production and the average profit rate. The gold prices of commodities vary over time, because of uneven technical progress in the production of gold and other commodities, but are determined at any

moment in time. National currencies inherit this determinate value through the standard of price and their convertibility into gold. With the disappearance of this institutional link, however, we seem to be left with no Marxist theory of the commodity value of national currencies, a lacuna that makes itself sorely felt in a world in which struggles over inflation and the value of national currencies play a central political economic role.

While this abstract theoretical issue remains unresolved, the history of world capitalism since the demise of the gold standard presents a pretty clear picture. One element in the evolution of the value of the dollar has been the attempt of commodity-sellers to peg their dollar prices. For example, in the 1960s and 1970s in advanced capitalist countries, labor unions set strategic money wage targets. Oil producers also set dollar price targets. A second element has been the power of central banks to control credit availability, and hence to influence asset prices and production financing. "Permissive" central bank policy in some countries adjusted credit availability to the demands of labor unions and OPEC, tending to erode rates of surplus value when capitalist firms could not pass on higher money wages and energy costs to buyers. In the late 1970s a revolt of rentiers (see Dumenil and Lévy, 2003) forced a more confrontational and combative stance on central banks, in the form of "inflation targeting" policies. Central banks create credit stringency to frustrate the setting of money wages or oil prices at levels incompatible with relatively low rates of inflation. The result has been a fall in inflation, a rise in rates of surplus value, and a shift of surplus value from industrial capital to financial capital. To call this monetary policy "inflation targeting" obscures its effects on the rate of surplus value and the rate of profit; it might more accurately be described as "surplus value targeting" in Marxist terminology.

In less advanced capitalist economies the exchange rate has been the crucial mediating factor between money wage and commodity price setting and central bank policies. In these countries a central issue in foreign exchange rate policy has been the relative impact of exchange rates on the value productivity of labor and the value of labor power.

Theories of this epoch of monetary political economy have been developed extensively in the New Keynesian macroeconomic literature, and also by Sraffians who see central banks as being able to set the rate of profit, and hence the real wage along the real wage-profit curve (see for example in Pivetti 1991 and Panico 1988). These useful insights into monetary institutions, policy, and political economy, however, have not been well-integrated into the Marxian theory of money. In the interests of working to connect these two literatures, the remainder of this paper will be devoted to a discussion of the contemporary monetary institutions within the framework of Marx's theory of money.

5 State credit money

Neoclassical monetary theory represents "fiat" money as a bubble, a worthless token whose value is sustained by belief in its future acceptability. This is

the point of various models of money as an unconsumed good that solves the double-coincidence of wants problem (see, for example Kiyotaki and Wright, 1989). These theories all depart from Marx's theory in regarding money as valued because of scarcity (rather than because it has a production cost).

The relevance of this neoclassical vision to real-world monetary systems is doubtful. The central confusion is the idea that because cash (central bank notes and reserves) is a means of payment, the value of cash arises from the scarcity of means of payment. But there are close substitutes for cash as means of payment (treasury bills, the very secure liabilities of large banks and firms, and the like) which have high interest elasticity of supply. Furthermore, while the *stock* of cash is relatively fixed, its velocity of circulation in relation to the flow of payments is highly variable and in some contexts effectively unbounded (as a look at the velocity of reserves of large New York banks shows). Thus the picture of an inelastic demand for means of payment encountering a relatively fixed supply of cash as an explanation for the value of cash is off the mark.

In formal terms cash is a *liability* of the central bank, and the holders of cash are *lending* to the central bank (or more broadly the state). It is counterintuitive to regard the value of money as being sustained by the central bank's limiting its borrowing, but this is what the scarce cash theory of the value of money seems to imply. Cash is widely accepted as a means of payment, which creates the illusion that cash is a "claim" on resources. But to theorize on this basis is to invert the real relationships involved.

The ability of states (and central banks) to borrow rests on their holdings of offsetting assets. Every government has an asset in the tax liabilities of the public. (For some governments there are other important assets, such as land or natural resource reserves. The stability of the United States' finances owes much to its ownership of vast land reserves, for example.) It is not true that a central bank note is a valueless token which is inconvertible into anything of value. As a liability of the government it can be used to pay taxes.

A better starting point for understanding contemporary monetary systems is the valuation and management of the state debt. The dollar is not a name for scarce cash tokens, but the unit in which the debt of the U.S. government is denominated. Debts of the state are the measure of value and means of purchase and payment.

Marx has a well-worked-out theory of the valuation of government debt as *fictitious capital*. Marx explains (Marx, 1993, Part Five) that interest is a part of surplus value claimed by the owner of money who lends to a producing capitalist. Competition among lenders and borrowers enforces a uniform rate of interest (adjusted for risk and other specific aspects in individual loan contracts). This uniform rate of interest creates the impression that interest is an inherent property of money, and any money holder subjectively incurs an opportunity cost equal to the uniform rate of interest. This appearance inverts the real relation underlying interest flows, the appropriation of surplus value from the exploitation of workers.

Loans to productive capitalists are "real capital"; they are part of the money capital committed to the circuit of capital to finance production. But once

a uniform rate of interest has emerged, any recurring flow of income will be "capitalized" at the rate of interest. For example, the rent of land, which is another part of surplus value, is capitalized into a price of land, even though land cannot be produced. Once equity stock has been issued by a capitalist corporation it represents a claim on dividends, and its value is a capitalization of the anticipated flow of dividends. The value of existing stock traded in this way is largely fictitious capital, and bears only a very loose relation to the value of the corporate assets that it legally represents.

Governments in capitalist societies generate recurring revenue flows through taxation. These flows are capitalized through the issuance of government debt, which promises the holder a flow of interest income (financed out of tax revenue). The resulting value of the government debt corresponds to no real capital investment, and hence is a fictitious capital.

The fact that cash liabilities do not pay explicit interest tends to mislead monetary analysts. There is a tendency to regard the value of cash as arising in a different way from the value of interest-bearing government debt. But the fact that cash liabilities pay no explicit interest is not an inherent property of cash itself. It reflects the policy of governments to contrive a situation in which the *convenience yield* of cash liabilities equals the interest that would have to be paid to sustain their value if they were less liquid. (In contemporary monetary systems the convenience yield of cash government liabilities is bolstered by a variety of legal prohibitions, as well (Sargent and Wallace, 1982). For example, in the United States, the government maintains a legal monopoly of the issuance of demand notes by taxing bank notes issued by private banks.) The value of cash liabilities is a fictitious capital just as much as the value of interest-bearing government debt.

Because the near-substitutes for cash are not perfect substitutes, at least in the short run, central banks have market power over the interest rate differentials between cash liabilities (which pay no explicit interest) and near substitutes like treasury bills, commercial paper, and large certificates of deposit issued by major banks. Monetary policy rests on this power. As the central bank changes the quantity of cash available through open market operations, for example, the convenience yield of cash relative to close substitutes changes. The market registers this change by altering the nominal rate of interest of close cash substitutes. (See Foley 1988 for a more detailed account of this view.)

In contemporary economies, then, a fictitious capital, the liability of the state, rather than a produced commodity, functions as the measure of value.

The loose theoretical end in this argument is what determines the value of the currency units (in terms of social labor or commodities) in which the liabilities of the state are denominated. This problem is common to Marxist and neoclassical monetary theory. The value of state liabilities and assets are uniformly homogeneous in the value of the currency unit. (This point is often made analytically through the thought experiment of a currency reform which simply renames the currency unit.) Any theory of the value of currency boils down to an assumption of some institution that breaks this homogeneity. In Marx's theory the homogeneity is broken by the standard of price, which fixes

the value of the national currency in terms of a produced money commodity.

This perspective raises deep questions about the relation between the state and capital in contemporary capitalist economies. Is it purely a matter of historical accident that the liabilities of the state have come to play the role of measure of value for the world of commodities? After all, there is no real obstacle to the spontaneous re-emergence of gold or petroleum as a de facto measure of value and world money. The current situation suggests a remarkable symbiosis between capital and state, and calls for a unification of the Marxian theories of money and the state.

6 Marx's theory of money in contemporary perspective

Marx theorizes in order to understand. Marx's theory of money is necessary to understand how capitalist economies reproduce themselves. We now appreciate how integral the theory of money is to the structure of Marx's thought. Money is the indispensable link between the commodity and value and the exploitation of labor in a capitalist economy.

There is something disorienting in the realization that a key part of Marx's theory of money, the derivation of a commodity-money, does not correspond to the historical and institutional realities of contemporary capitalism. Is the theory wrong in some fundamental sense? Or is our reading of capitalist reality defective?

One response to this dilemma is to affirm the *logical* coherence of Marx's argument by saying that money "must" be a commodity. But Marx's method does not have the axiomatic character this line of argument presupposes. When Marx shows how money as an independent expression of exchange value is "inherent" in the commodity form he argues from what actually has happened in history. The idea that what actually has happened has a privileged position in a system of thought is a major theme of Hegel. For Hegel the "necessity" of what actually occurs embraces but goes beyond the purely logical necessity of deduction. Hegel identifies deductive inference with the limited realm of "understanding", which uncritically accepts the elements it observes as undifferentiated unities. Hegelian necessity is deeply bound up with the actual evolution of history and institutions, and acknowledges that pure thought, in aspiring to reproduce history, inevitably fails to anticipate historical evolution accurately. The rational-empiricist adherents of the realm of understanding condemn Hegelian analysis because it offers no self-guarantee of correctly anticipating future developments. While rational-empiricist arguments appear to contain this kind of self-validation (since if the laws governing the system and the elements constituting it do indeed remain invariant, it is possible to work out the evolution of the system), rational-empiricism has no better track record of anticipating the evolution of complex systems than Marx or Hegel.

We should therefore not be surprised to find that monetary institutions have

evolved away from or beyond Marx's commodity-money theory.

The observation that Marx's logical derivation of the universal equivalent commodity is sound runs directly up against the plain fact that neither gold nor petroleum nor any other produced commodity actually serves as a socially accepted general equivalent in today's capitalist world. It might seem possible to "save" the commodity money theory by a variety of theoretical maneuvers, but in the end I fear little insight will flow from this program. For example, it might theoretically be possible to regard current world monetary institutions as a "suspended" commodity-money system, in which the standard of price has become inoperative "temporarily" (but perhaps indefinitely). Certain legal and institutional facts support this view. The U.S. still values its gold reserves at a standard of price rather than at market prices on paper, and the reluctance of national governments to sell their gold reserves suggest that they regard gold as more than just another commodity. But it is difficult to argue for the actual influence of a suspended standard of price on real economic and financial relationships. (This view also faces the problem of explaining why the implicit gold prices of commodities fell so drastically after the U.S. suspended the convertibility of the dollar into gold in 1971.)

In this situation it is tempting to think that we can correct Marx's theory to make it address current institutional reality. This effort often takes the form of a *reinterpretation* of Marx's theory, rather than an extension or modification of it. I suspect that it will be difficult to bring Marx's theory of money in line with contemporary monetary institutions through reinterpretation alone. The temptation to follow the outline of Marx's theory of money but to make some significant conceptual substitution at a critical point to accommodate real world institutions is great. But Marx's thought closely integrates form and substance, and therefore resists the alteration of individual points of substance within an unaltered formal framework. A better path would be to treat contemporary monetary systems through an elaboration of Marx's theory, just as Marx's theory of credit is an elaboration of his theory of money.

The real challenge of monetary theory at the present time is to understand the innerness of world monetary institutions and the way they express class relations on a world scale rather than to "fit" those institutions into the analytical categories we have received from Marx. To carry out this program we must transcend the specifics of Marx's theory of money without abandoning his methods of discovery.

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