

**MONEY AS ‘UNIVERSAL EQUIVALENT’ AND ITS ORIGIN IN
COMMODITY EXCHANGE**

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1. Introduction

The debate between Zelizer (2000) and Fine and Lapavitsas (2000) in the pages of Economy and Society refers to the conceptualisation of money. Zelizer rejects the theorising of money by neoclassical economics (and some sociology), and claims that the concept of ‘money in general’ is invalid. Fine and Lapavitsas also criticise the neoclassical treatment of money but argue, from a Marxist perspective, that ‘money in general’ remains essential for social science. Intervening, Ingham (2001) finds both sides confused and in need of ‘untangling’. It is worth stressing that, despite appearing to be equally critical of both sides, Ingham (2001: 305) ‘strongly agrees’ with Fine and Lapavitsas on the main issue in contention, and defends the importance of a theory of ‘money in general’. However, he sharply criticises Fine and Lapavitsas for drawing on Marx’s work, which he considers incapable of supporting a theory of ‘money in general’. Complicating things further, Ingham (2001: 305) also declares himself ‘at odds with Fine and Lapavitsas’s interpretation of Marx’s conception of money’. For Ingham, in short, Fine and Lapavitsas are right to stress the importance of ‘money in general’ but wrong to rely on Marx, whom they misinterpret to boot.

Responding to these charges is awkward since, on the one hand, Ingham concurs with the main thrust of Fine and Lapavitsas and, on the other, there is little to be gained from contesting what Marx ‘really said’ on the issue of money. It is a striking aspect of Ingham’s intervention, moreover, that he dismisses Fine and Lapavitsas’s Marxist analysis of money without getting to grips with it. His true aim is to present an ‘alternative’ theory of ‘money in general’, associated with the German Historical School and post-Keynesianism. According to Ingham, neglect of this ‘alternative’ theory led Fine and Lapavitsas, as well as Zelizer, to focus excessively on commodity money, while ignoring credit money and disregarding the social relations inherent to money as ‘promise to pay’. Responding to the charge of neglect is also awkward, since one of the disputants has extensively discussed the ‘alternative’ theory, in places even mentioned in the original exchanges (Lapavitsas and Saad-Filho 2000, Itoh and Lapavitsas 1999, ch. 2, 10). To take the discussion forward, consequently, this article concentrates on three positive aspects of Ingham’s intervention: raising the issue of credit money, pondering the connection between markets and money’s emergence, and claiming that ‘money in general’ is ‘constituted by social relations’ (Ingham, 2001: 305, original emphasis). The debate has benefited by Ingham broaching these issues, but not by the way he has dealt with them.

The paper is organised as follows. Section 2 briefly considers credit money, and shows that the Marxist and post-Keynesian treatments of the issue share a common heritage. Ingham’s attempt to portray post-Keynesianism as an opposing current to Marxist monetary thought is without foundation. Section 3 turns to the relationship between markets and money, contrasting Ingham’s ‘alternative’ view (i.e. that money originates ‘outside’ the market) with the neoclassical view (i.e. that money originates in market trading). It is shown that both have weaknesses deriving from excessive focus on a single function of money - unit of account for the former, means of exchange for the latter. Section 4 then considers the social relations encapsulated by money, elaborating the Marxist analysis of money and value that informed the original paper by Fine and Lapavitsas. ‘Money in general’ - or ‘the universal equivalent’ - is shown to originate in economic relations among commodity owners,

but also non-economic relations, summed by social custom. In this light, the functions and forms of money (including credit money) flow from money being the 'universal equivalent'. Section 5 concludes.

2. Marxist monetary theory and credit money

For Ingham, Marx has little to say on credit money. Marx 'seems to understand' the peculiar character of credit money and its relative independence from commodity exchange, but only in relation to pre-capitalist formations (Ingham 2001: 315). Apparently, Marx's view of capitalist credit instruments was 'quite conventional' for his era: he saw them as 'substitutes' for hard cash (Ingham 2001: 315, original emphasis). Thus, Ingham places Marx in the same camp as orthodox monetary theory, in sharp contrast to contemporary post-Keynesian treatments of credit money. Unfortunately for Ingham, these are mistaken claims, as can be seen through a brief digression on the history of monetary thought.

The classical core of monetary theory was developed during the first half of the nineteenth century in the course of the Bullion and the Banking-Currency controversies. The former broke out after the Restriction of 1797, i.e. during the suspension of obligatory convertibility of the banknotes of the Bank of England into gold. The latter took place four decades later and focused on the Bank Act of 1844, which imposed quantitative controls on the banknotes of the Bank of England and other banks.¹ The theoretical distinction between commodity money and paper money (mostly banknote credit money) played a key role in both controversies. Credit money had proliferated since the last quarter of the eighteenth century: endorsed bills of exchange, book transfers, deposits, and above all, privately issued banknotes. Contrary to Ingham's claims, there was no 'conventional' view of these forms of money, certainly no 'convention' of treating them as substitutes for hard cash. Participants in the controversies were generally agreed that it was desirable for credit money to be convertible into commodity money (gold). But to advocate free convertibility into gold is not automatically to treat money as a substitute for gold. It is entirely plausible to treat credit money as qualitatively different from commodity money, while favouring its free convertibility into gold for reasons of monetary stability.

More specifically, the Currency School treated commodity money (gold and silver) and credit money (banknotes) as comprising an undifferentiated mass of circulating money. They also advocated administrative control over the total quantity of circulating money to prevent balance of payments fluctuations and monetary instability. Currency school writers took their cue from Ricardo (1810) who, during the earlier Bullion controversy, treated the banknotes of the Bank of England as mere replacements for gold, and favoured quantitative controls. In contrast, the Banking School maintained that commodity money (and state-issued fiat money, such as the Assignats of the French Revolution) differed profoundly from banknote credit money (Tooke 1844, ch. III). The difference was captured by Fullarton's (1845, 66-67) famous 'Law of the Reflux', stating that credit money is created through provision of credit, hence it is also destroyed when debts are repaid. While credit money flows back to its issuer to settle the debts that created it, commodity money (and state-issued

fiat money) does not. The 'Law' has a direct bearing on the Quantity Theory of Money, adhered to by both Ricardo and the Currency School, and strongly rejected by the Banking School. For, if the quantity of credit money varied according to the advance and repayment of credit, it would also probably vary according to the requirements of the economy (in modern parlance, it would be 'endogenous'). If, on the other hand, credit money was merely a substitute for commodity money pumped into circulation by the banks, its quantity would probably be arbitrarily determined ('exogenous'). Consequently, for the Banking School changes in the quantity of credit money generally followed changes in prices, while for the Currency School changes in the quantity of credit money probably induced changes in prices.

Marx came fully to political economy in London in the 1850, i.e. immediately after the peak of the Banking-Currency controversy. It would have been extraordinary had he shown a lack of interest, and indeed he wrote extensively and admiringly of the Banking School, reserving some of his worst bile for the Currency School (1859, 1894, 1939). Marx (1859: 174) also studied the Bullion controversy and rejected Ricardo's Quantity Theory of Money on the grounds that it ignored all functions of money other than means of exchange. Given the nature of the controversies, Marx was obliged to analyse credit money, and his writings on the issue bear no relation to Ingham's caricature. It is clear that Marx (1859: 116) considers credit money to be more advanced than commodity money, as well as following different 'laws'. Credit money is also different from fiat 'paper' money, the former 'taking root' in the function of means of payment, while the latter in the function of means of exchange (Marx 1867: 224) For Marx, the chief characteristic of credit money is its creation through the advance of credit; hence the movement of credit money in capitalist circulation is partly determined by interlocking credit relations (Lapavitsas 1991, 1994). The qualitative difference between credit money and commodity (or fiat) money is summed up in the 'cyclical' path of the former in circulation, in contrast to the shapeless path of the latter (Marx 1859: 102, 1867: 210). The 'cyclical' movement of credit money results from debt repayment - a conclusion transparently similar to the 'Law of the Reflux'.² Finally, for Marx, the quantity of money in circulation (including commodity money) is 'endogenously' determined as a result of money hoarding, credit advance, and debt settlement. These processes spring from the accumulation of capital, making it possible for the quantity of money to change in accordance with alterations in the price level (Lapavitsas 1996, 2000).

In the great divide in monetary theory between the Quantity Theory (Bullionists and Currency School) and the Anti-Quantity Theory (Anti-Bullionists and Banking School) Marx belongs to the latter camp (Lapavitsas 1994). Indeed, the complexity and sophistication of his views on money make Marx one of the most accomplished writers of that current. His monetary work, far from being a collection of outdated comments, is still useful for the critique of Monetarism, the heir of Bullionism and the Currency Principle. Marx's work is certainly relevant for post-Keynesians, who are among the most vocal descendants of the Banking School in Britain. It is astonishing that Ingham (2001: 316) could claim that the Marxist approach to credit money belongs to the same camp as orthodox theory, presumably in opposition to post-Keynesianism:

These issues cannot be pursued here, but it should be noted that both Marxism and orthodox economic theory have tended to ignore the distinctiveness of capitalist banking's creation of money through the act of bank lending.

This statement is plainly incorrect and betrays a lack of appreciation of the Marxist analysis of credit money.³ The affinity between Marxism and post-Keynesianism on credit money (without wishing to denigrate their differences) is acknowledged even by leading post-Keynesian monetary theorists (Lavoie and Secareccia 2001). Nevertheless, there are also profound differences between Marxism and post-Keynesianism regarding the relationship between money and commodity exchange, which have implications for the theoretical treatment of 'money in general'. These are made clear below, after briefly considering the broader theoretical tradition on the issue of money and markets.

3. Market trading, money, and Ingham's 'alternative' theory

There are two fundamental theoretical approaches to money's relation to market trading. The first, typical of classical and neoclassical economics, stresses the function of means of exchange and postulates that markets and money are intrinsically related. The second, its roots predating classical political economy, denies that markets spontaneously give rise to money and focuses on the function of value measurement (money as unit of account). They have been referred to as, respectively, the catallactic and the acatallactic theory of money's origin (Mises, 1934). Ingham strongly advocates the latter, but underestimates its theoretical and empirical weaknesses. To demonstrate this point, and to prepare the ground for the Marxist discussion of money's origin in subsequent sections, the two approaches are briefly contrasted below.⁴

Money as means of exchange

For classical political economy, commerce is a natural, timeless and universal human activity. The locus classicus of this view is Smith (1776, 17) who suggested that 'to truck, barter, and exchange one thing for another' is a fundamental disposition of human beings. Moreover, for Smith, commerce gradually progresses from primitive barter, undertaken by 'savages' in the primeval jungle, to capitalist monetary exchange. In this vein, the emergence of money as means of exchange raises the productivity of labour and increases 'the wealth of nations'. But Smith does not offer an account of the process through which barter leads to the emergence of a means of exchange, thus transforming itself into monetary exchange. He is content to identify the problems that arise in barter because commodities are perishable, heterogeneous, imperfectly divisible, and so on (Smith, 1776, vol. I, ch. V). A 'prudent' trader could solve them by carrying a commodity that is generally acceptable to all, i.e. able to function as means of exchange. But neither Smith, nor the other classical political economists tackled the problem of how a generally acceptable commodity comes into existence. On what grounds can commodity owners expect others to accept a given commodity despite not wanting to consume it directly? Without answering this question, the view that money emerges as means of exchange in the course of barter lacks credibility.

Unlike classical political economy, neoclassical economics tackled directly the problem of money's emergence. Menger (1871, 1892) provided the most powerful answer, and his analysis is properly understood in the context of the *Methodenstreit* in the Germanic world. On one side of that debate stood the German Historical School, essentially denying the possibility of all theoretical thought in economics. On the other, the Austrian neoclassicals, led by Menger, insisted on abstract theoretical analysis that drew on formal rationality and absolute subjectivism. Consequently, Menger aimed at showing that money emerges as a means of exchange through spontaneous market processes instigated by rational economic decisions. In contrast, the German Historical School opted for explanations of money's emergence that relied on the actions of the state, or other non-economic forces.

For Menger, commodity exchange among 'economising' individuals is timeless and universal – the fundamental component of all economic activity. Barter occurs spontaneously among 'individuals' and gives rise to the problems that Jevons (1875) called the 'double coincidence of want'. Menger's (1871: 248, 1892: 243) analysis of money's emergence rests on the theoretical innovation of commodity 'saleableness' or 'marketability', i.e. the 'facility' afforded by commodities to their owners in obtaining their required economic price. Menger assumes that some commodities simply are more 'marketable' than others, and postulates a mechanism through which the importance of 'marketability' is recognised by market participants. He also assumes that there are gifted individuals who can grasp the advantages conferred by highly 'marketable' commodities, even when not desired for direct consumption. Specifically, highly 'marketable' commodities make it easier eventually to acquire the desired commodities through further exchanges (Menger, 1892: 248-249, and 1871: 210-261). Perception of this advantage spreads among market participants partly because of non-economic factors. In the course of exchange, the benefits accruing to the gifted few become evident to the many, who begin to emulate them. Repeated exchanges create habits, and give rise to generalised customary acceptance of highly 'marketable' commodities. This social custom is self-reinforcing, since 'marketability' becomes stronger the more a commodity is demanded in exchange (White, 1984, 703). Eventually the most 'marketable' commodity becomes universally accepted as means of exchange, thus solving the problems of barter and emerging as money.

Menger's analysis of money's emergence has had a growing impact on mainstream economic theory since the early 1980s. General equilibrium, the dominant theoretical model of contemporary neoclassicism, typically assumes perfect information, no transactions costs and a full range of contingent markets. Consequently, it leaves no room for money: why would rational traders employ a means of exchange, if they operated in such an environment? ⁵ Several attempts have been made to address this weakness of general equilibrium modelling, but none has been particularly successful. ⁶ In recent years, general equilibrium theorists have turned to confronting the problem of money's emergence along Menger's lines. ⁷ Kiyotaki and Wright (1989, 1991) have developed a model of money as means of exchange on the assumption that commodities are differentially 'marketable'. Crucially, they also assume the existence of a generally held belief (a 'social custom') that one commodity possesses superior 'marketability'. Given these assumptions, game-theoretic analysis can show that equilibrium strategies exist for commodity

owners, which involve accepting a highly ‘marketable’ commodity in order to benefit from its high ‘marketability’. The more that traders accept the ‘marketable’ commodity, the stronger its marketability is rendered, until it eventually becomes a generally accepted means of exchange. Put differently, a social belief in the high ‘marketability’ of a commodity, which prevails due to unexplained ‘social custom’, becomes validated in the course of that commodity being used as means of exchange.

Menger’s explanation of money’s emergence is a masterpiece of neoclassical economic theory, but also has deficiencies, two of which are especially important for our purposes. The first is that it rests on the assumption of commodity ‘marketability’, a property that is not recognised by classical political economy. ‘Marketability’ is not a physical feature of commodities, and must result because commodities are traded in markets – it makes no sense outside markets. But instead of specifying the market processes and relations that allow commodities to acquire such an unusual property, Menger concentrates on explaining its magnitude, for instance, through the volume and intensity of demand for particular commodities. Yet, it is the provenance and not the magnitude of ‘marketability’ that has to be explained, especially in view of Menger’s subsequent derivation of money as the most ‘marketable’ of commodities. To put it starkly, if in Menger’s account the term ‘marketability’ was simply replaced with ‘moneyness’, neither his definitions nor the structure of his argument would be fundamentally affected. Money would then appear to be the commodity that possessed the highest ‘moneyness’. The second deficiency relates to Menger’s use of non-economic factors in order to show that the benefits of ‘marketability’ spread from the gifted few to the many. It is important to note in this connection that, even for neoclassical theory, money is not simply the result of individual economising decisions but also of social relations of custom, habit and emulation. However, instead of merely (and handily) postulating the existence of custom, theory must also delve into the social conditions that underpin commodity exchange and sustain social custom. Neoclassical theory is ill equipped for this purpose, since it treats commodity exchange as a timeless interaction of individual human beings. The problem that Menger set for himself was to show that, in the elemental state of barter, the decisions of rational market participants would lead to spontaneous emergence of money as means of exchange. This is already a narrow view of commodity exchange, precluding deeper analysis of both money and the social relations inherent to it.

Money as measure of value (unit of account)

The theoretical tradition that associates money with measure of value (or unit of account) predates the high point of classical political economy. Steuart (1767, vol. II, bk. III, ch. 1, 2), the late mercantilist, systematically differentiated between ‘money of account’ (an arbitrary scale of value measurement) and ‘material money’ (money in actual use). For Steuart, ‘money of account’ establishes an abstract accounting system of prices (it is an abstract ‘numeraire’) while ‘material money’ generates practical approximations of abstract prices. The distinction drawn by Ingham (2001: 310) between a ‘monetary’ (‘abstract’) duck and a ‘commodity’ (concrete) duck, in any ‘duck standard’ of value, strongly echoes Steuart, though probably not deliberately. For Steuart, since ‘material money’ is an approximation of the ‘money of account’, the former need not have the same nomenclature as the latter. Moreover, the actual

prices established by ‘material money’ need not coincide with the ideal prices established by the ‘money of account’. In short, for Steuart, money is a social convention in two respects: first, it is an abstract unit that establishes ideal prices for commodities, and second, it is a practical means of exchange that approximates these ideal prices as closely as possible. In postulating this distinction, Steuart gave theoretical form to the mythical mercantilist stories of the *macoute*, i.e. an imaginary gold bar presumably used by the natives of West Africa to measure commodity value. Marx was generally influenced by Steuart’s monetary theory, but on this issue he differed profoundly, for reasons that are made clear in the rest of this article.⁸

Defining money as abstract unit of account seems a broader approach than identifying money with means of exchange, particularly as it appears to favour analysis of the social conventions accompanying money’s use. The stress on social conventions is even stronger when the state is taken to be the inventor of the abstract scale of value accounting. The German Historical School treated money in such terms, most famously in the work of Knapp (1905). Knapp’s ‘chartalism’ or ‘nominalism’ postulates that ‘money is a creature of law’ (*ibid.* 1), that is, an arbitrary quantification of purchasing power, a quantitatively specific material claim on wealth. Knapp’s arguments influenced Keynes (1930: 3) who suggested that money was originally an abstract unit of account for prices, debts, and contractual obligations, as Ingham (2001: 306, also 1996, 1998) notes. Keynes also implied that money as abstract unit of account is of hoary antiquity, as proven by the ‘baked bricks’ of ancient Mesopotamia. The broader implications of this approach to money have also been clear to anthropologists keen to deny the neoclassical (and classical) association of money with barter. There is a substantial anthropological literature that rejects the mainstream economic view of barter as a primitive stage of commodity exchange that is inevitably replaced by advanced monetary commerce.⁹ The conclusion typically drawn is that the economic (i.e. the neoclassical) analysis of the origin of money is not soundly based, and the origin of money should be sought away from commerce.

Post-Keynesians have also been influenced by this approach to money, especially in critique of general equilibrium theory. For Davidson (1972, 1989, 1990) economic activity is characterised by the essential impossibility of knowing the future (deep uncertainty), while decisions taken now weigh upon actions taken in the future. To confront these fundamental realities of human economic activity, society has devised money and money contracts.¹⁰ Thus, money is the bridge connecting the present with the unknowable future. Money appears to play a far more exalted social role than means of exchange, its roots lying deeper than solving the problems of barter. This view of money chimes well with the rejection by other social scientists of the mainstream economic conception of barter.¹¹ Moreover, for some post-Keynesians, especially Wray (1990, 2000), who is repeatedly quoted by Ingham (2001: 308-310), the emergence of money is associated with the prior emergence of credit. Thus, the elemental economic relations among transacting parties do not involve the immediate exchange of equivalents, but are based on the practice of ‘advance value now - return it later’. These credit practices are made possible by money acting as abstract unit of account (rendering obligations numerically precise), as well as settling residual balances among parties. For Wray (1990: 13), ‘money in general’ appears to be credit-money, i.e. debit and credit entries that allow transactions to proceed. In important respects, therefore, the post-Keynesian treatment of money’s origin has developed as the mirror image of neoclassical analysis. On the

one hand, neoclassical economics focuses on means of exchange, postulates an elemental state of barter, and treats money as mere facilitator of the important business of exchanging commodities. On the other, post-Keynesian economics focuses on unit of account, presumes that abstract units of value have existed in the mists of history, and treats money as a cornerstone of all social endeavour.

Seeking the origin of money outside the process of commodity exchange creates significant problems, four of which are particularly poignant. The first is the empirical substantiation of money having existed as pure, abstract unit of account. It is important to be clear about what has to be shown. Units of account can often be different from means of exchange as, for instance, when prices are denominated in pesos but commodities are paid for in dollars (or luncheon vouchers). Different forms of money can be, in practice, more suitable for different functions. Moreover, introducing a new means of exchange while another continues to function as unit of account, is also quite a common historical experience. What must be demonstrated, rather, is that there have been units of account that never were means of exchange. Despite Ingham's (2001: 310, see also 2000) assertions about 'telling evidence', it is not clear that this has ever been the case. On the contrary, the typical unit of account is also (or it has been in the course of its existence) a means of exchange.¹² The Babylonian tablets in Keynes's writings do not refer unambiguously to abstract units of account that never were means of exchange, as Einzig (1947: 367) confirms, despite his sympathy for this approach. Rejection of the neoclassical myth of barter should not lead to reviving the myth of the *macoute*.

The second problem is to identify a social process, other than commodity exchange, through which disparate things become commensurate (money functioning as unit of account). There are no obvious social mechanisms that can assign a common numerical scale to disparate things with equal coherence and plausibility as commerce. This is clear in Grierson's (1977) numismatic work, strongly acclaimed by Ingham (2001: 310, also 1996). For Grierson, money cannot emerge as unit of account in market trading because there are no natural units of commodity value, and commodities are extremely varied physically. Seeking an alternative process of commensuration, Grierson suggests the practice of *wergeld*, that is, monetary compensation for social and individual wrongs.¹³ He postulates that tribal public assemblies made injuries commensurate, and determined compensation on the basis of assuaging anger and making good the loss of reputation (*ibid.* 20-1). Money thus emerges as the unit of account deployed in *wergeld*. For Grierson, the social procedure of making injuries commensurate appears to present fewer logical difficulties than making disparate commodities commensurate. Yet, this is plain assertion. 'Injuries' compensated through *wergeld* were physical, moral, and social. These were not any less varied qualitatively than commodities, especially in ancient tribal communities in which the variety of commodities was likely to have been small.

The third problem is that this approach to money's emergence detaches the value of money from the value of commodities: money is considered as a quantitative claim on wealth determined arbitrarily by the state, or by other non-economic bodies. Yet, if the value of money was treated as determined by processes lying beyond economic theory, the theoretical statements that could be made about (aggregate) commodity prices would be limited. Considering that inflation and deflation are, by definition, changes in the value of money, this would be a poor outcome for monetary

theory.¹⁴ Whatever the explanation of money's origin, it is important that it should offer theoretical insight into the determination of (aggregate) commodity prices. This purpose is better served when the origin of money is theoretically associated with commodity exchange.

Finally, the fourth problem lies with the link that Ingham (2001: 312) draws between, on the one hand, money as unit of account and, on the other, credit relations among market participants. There is no necessary theoretical connection between the two: money as abstract numeraire also operates in ordinary commercial transactions involving the immediate exchange of equivalents. To introduce credit transactions (which rely on promises, credibility, obligation, repayment, and enforcement) is to complicate the analysis without reason. Worse, it is far from obvious that the primary function of money in credit transactions is to be the abstract unit of account. Money as means of payment is equally fundamental to credit transactions - unless the outlandish assumption is made that all credit obligations are finally cancelled against each other. Moreover, to function as means of payment, money must also be able to preserve purchasing power and deliver it at will, i.e. it must also function as hoard element. In short, the role of money in credit transactions is far more complex than simply to set prices. Finally, insinuating that credit money has anything to do with money's emergence is confusion pure and simple. 'Money in general' should not be confused with credit money, which is a particular form of money that thrives under capitalist conditions. Credit money emerges out of credit transactions as the liability of its issuer; when the assets of the issuer mature, credit money returns (or is cancelled). Commodity money, which long predates credit money, is no one's liability and bears no necessary relation to credit processes. The character of 'money in general' also applies to credit money, as is shown below, but this should not obfuscate the theoretical and historical primacy of commodity money.

To recap, both approaches to money's origin confront theoretical problems that spring from their inordinate focus on the functions of money. The Marxist approach presented below constitutes a critique of both. It concentrates on what money is, rather than what money does, thus avoiding the difficulties faced by the other two.

4. Money 'as constituted by social relations' and the labour theory of value

According to Ingham (2001: 314, see also 1998, 1999) the labour theory of value is the Achilles heel of Marx's work on money:

[M]arx's theory of money is flawed – like those of other classical economists – because it is grounded in the labour theory of value ... There is no determinate link between money and commodities.

Nonetheless, Ingham (2001: 315) also thinks that Fine and Lapavistas have abused the 'classical' labour theory of value:

However, in Fine and Lapavistas's interpretation of Marx, we are not offered the classical labour theory of value nor a reference to any of the recent efforts

to reconcile classic Marxism with the reality of credit-money ... Rather, they present an essentially Hegelian formulation of the origins of money.

It is not clear what Ingham considers the 'classical' (presumably 'classical Marxist') labour theory of value. But even if it were, there would be little point in debating whether Fine and Lapavistas diverged from it, since Ingham rejects the labour theory of value altogether. The aim of this section, consequently, is to show that the labour theory of value remains a vital source of insights for the theory of money. The discussion draws on the work of Fine and Harris (1979) and Weeks (1981) as well as Japanese Marxism of the Uno tradition, especially Itoh (1976, 1981, 1988). It is shown that money is indeed 'constituted by social relations', though not the relations of 'credit-debt' that Ingham (2001: 312, 1996, 1998) suggests.¹⁵ In this light, the functions and forms of money flow from social relations that surround money.

'Form' and 'substance' of value

The distinction between form and substance of value is vitally important for the theoretical derivation of money. Commodities possess the form of value, that is, they always exhibit quantitative equivalences with each other; they have 'exchange value'. Yet, the property of exchange value is not static but develops as commodity exchange takes place. Marx's (1867) discussion of the 'forms of value' in volume I of Capital can be usefully read as a summation of the development of exchange value. Briefly, when commodity transactions occur 'accidentally', exchange value is rudimentary in the sense that arbitrary or intransitive equivalences could prevail. When trade is 'expanded', and still more when it is 'general', exchange value becomes more developed, i.e. quantitative ratios lose some arbitrariness and intransitivity. When commodity transactions reach the 'money' stage, exchange values become consistent and mutually compatible money prices among commodities. The evolution of the 'form of value' is neither a recapping of the historical development of commodity exchange, nor a theory of the emergence of advanced markets. Rather, it represents the unfolding of relations among commodity owners in the course of trade. It is a logical exposition of the social tendencies inherent to commodity exchange.

Marx's discussion of the 'forms of value' in Capital is based on the assumption that the mode of production is already capitalist.¹⁶ For commodities produced by capital, Marx's theory of value claims that they contain definite amounts of a common, undifferentiated 'substance of value' (abstract human labour). If commodities indeed contained such as 'substance', the quantitative equivalences among them would necessarily be consistent and transitive. Thus, the stage of developed exchange value could appear as the mundane result of theoretically assigning to commodities a common 'substance'. However, the link between 'substance' and 'form' of value is much more than a mere syllogism: for commodities produced by capital, there are social and economic processes that anchor the 'form' on the 'substance' of value. They include the movement of workers indifferently between jobs, and the homogenisation of work effort as workers are subjected to capitalist exploitation at the workplace.¹⁷ They also include constant buying and selling by capitalist producers that eliminate discrepancies among commodity prices, since discrepancies offer the opportunity of risk-free money profits through commodity arbitrage. Exploitation at the point of production and regular commercial

disposal of output, taken together, impose compliance of the 'form' with the 'substance' of value. If, for instance, a commodity's relative price exceeded what would be warranted by value 'substance', the profitability of its sector would be above average. Capital would enter the sector, attracting workers and other resources, increasing the commodity's supply and lowering its price. Entry would continue until value 'form' (money price) became compatible with value 'substance' (abstract labour) and profitability returned to average. The reverse would occur if relative price fell below the level justified by value 'substance'. The 'form' of value complies with its 'substance' ultimately because of processes created by capital's perennial search for money profit.¹⁸ This is a vital reason for Fine and Lapavitsas's insistence that capital-labour relations constitute a defining aspect of capitalism, which Ingham (2001: 316) dismisses offhand as 'mistaken orthodoxy'.

However, in the capitalist mode of production, there is also widespread detachment of the 'form' from the 'substance' of value, even their complete divorce. Activities and things appear as commodities, despite being inherently unrelated to produced commodities: real estate, shares, insurance instruments - also bribes, fines, and favours - are traded as commodities purely because they give entitlements to future money payments, or have money payments attached them. These traded objects do not contain the 'substance' of value. Nevertheless, their prices have regularity and transitivity resulting from repeated transactions, and from economic mechanisms (such as discounting of future payments) unrelated to the generation of abstract labour. At the same time, their prices also heavily reflect influences that are non-economic and arbitrary (psychological, political, institutional). This point is also important for the analysis of commodities and markets in non-capitalist societies. The 'substance of value' is largely absent in non-capitalist societies, since wage labour is not pivotal to economic activity, and since the bulk of the social product is not distributed through a network of markets. Commodities certainly exhibit the 'form of value', but without systematically connection with the deeper reality of production. If exchange values shed their arbitrariness and acquired transitivity as money prices, that would be purely due to market relations of demand and supply, backed by the habits associated with repeated transactions. Consequently, the 'form of value' in non-capitalist societies strongly reflects non-economic influences, including custom, morality, kinship, hierarchy and power.

The detachment of the 'form' from the 'substance' of value is fundamental to the theoretical derivation of money. The social and economic functions of money are fully developed under capitalist conditions, but there is no necessary link between the emergence of money and the 'substance' of value as social reality. The roots of money are to be found in the evolution of the 'form' of value, and they are not inevitably related to abstract human labour. With this in mind, Marx's analysis of the development of exchange value - despite some weaknesses, discussed below - could provide the building blocs for a logical demonstration of money's emergence in commodity exchange. Contrary to Ingham's (2001: 315) claim, the demonstration is not 'Hegelian', i.e. positing money as the outcome of the self-induced evolution of some abstract category. Rather, it is materialist, since money is shown to be the outcome of social relations among commodity owners.¹⁹

Fundamental to the derivation is the assumption that commodity owners approach each other as essentially 'foreign' individuals: they are concerned with

obtaining an equivalent for what they bring to market, unaffected by ties of kinship, custom, tradition, or morality. Consequently, if two 'foreign' commodity owners met at random ('accidentally'), an opening gambit has to occur between them, making trading relations possible. The key innovation of the approach proposed here is that this opening gambit is the offer by one of the owners to sell the commodity possessed, thereby requesting exchange with the other.²⁰ The binary opposition 'relative-equivalent', proposed by Marx (1867: 139) in his analysis of the 'form' of value, can then be interpreted as follows: the 'active' or 'relative' is the commodity owner who makes the offer to sell, immediately putting the other in the position of 'passive' or 'equivalent'. It follows that the 'accidental' relationship between the two commodity owners has definite character and direction. The 'relative' declares the exchange value of own commodity to be represented by a quantity of the commodity possessed by the 'equivalent'. The 'equivalent' finds that the commodity held can be exchanged directly with that in the possession of the 'relative', i.e. can buy it. This property of the 'equivalent' derives purely from the request for exchange made by the 'relative'. In other words, the ability to buy is entirely derivative of the spontaneous offer to sell. Money represents the concentration of the ability to buy in one commodity, arising purely due to spontaneous offers to sell made by all other commodity owners.

The monopolisation of the ability to buy occurs in successive (logical) stages, i.e. as 'accidental' exchange becomes 'expanded', then 'general' and, finally, 'monetary'. The 'expanded' stage follows naturally from the 'accidental': each commodity owner could in principle make offers of sale to any and all others, leading to one 'relative' - boundless 'equivalents'. Provided that commodity owners make frequent and regular visits to the market, the owners of the 'equivalents' find that their commodities have acquired a degree of buying ability, if only toward the single 'relative'. However, such spreading of the ability to buy is the opposite of its monopolisation by money. The 'general' stage, on the other hand, contains boundless 'relatives' and one 'equivalent' - all commodity owners (but one) make regular and frequent offers of sale toward a single commodity. The single commodity is the 'universal equivalent', or money. The question is: how does the 'general' stage come to pass? Marx (1867: 157) suggests that the 'general' is implicitly contained in the 'expanded' stage, since the former is the reverse of the latter. This argument is formally correct, but says little about the economic and social processes that underlie the 'general' form of value. Moreover, the formal reversal of the 'expanded' form could be undertaken for all commodities, thus generating as many 'universal equivalents' as there are commodities. The latter difficulty is symptomatic of the inherent symmetry among commodities as traded things. There is no a priori (formal) reason why one among them should possess the ability to buy more fully than the others. Yet, the emergence of money amounts to extreme asymmetry: one commodity is permanently placed on the side of the 'equivalent' and all others on the side of the 'relative'. For such universal asymmetry to prevail, extra-economic phenomena are necessary, including social custom.

Insights into the role of social custom in the emergence of money can be obtained from another part of Marx's (1867: 182-3) analysis of commodity exchange:

The universal equivalent form comes and goes with the momentary social contacts that call it into existence. It is transiently attached to this or that commodity in alternation. But with the development of exchange it fixes itself

firmly and exclusively onto particular kinds of commodity, i.e. it crystallizes out into the money-form ... The money form comes to be attached either to the most important articles of exchange from outside, which are in fact the primitive and spontaneous form of manifestation of the exchange-value of local products, or to the object of utility which forms the chief element of indigenous alienable wealth, for example cattle.

Thus, Marx argues that historical and traditional factors are vital for the emergence of money, especially those factors relevant to commodities that foreigners bring to a community, or commodities that a community can most easily trade. That is the context in which Fine and Lapavistas referred to Marx's (e.g. 1867, 182, and 1939, 223, and 1894, 447-448) claim that commodity exchange historically arises not within communities but where communities come into contact with each other. Ingham (2001: 316) dismisses this view as based on 'long since superseded history', but misunderstands its analytical importance, and grossly overestimates the historical validity of his preferred 'alternative' view. Our initial assumption was that commodity owners are 'foreign' to each other, i.e. they aim primarily at obtaining an equivalent, not constrained by kinship, moral obligation, hierarchy, and so on. This is a natural assumption for capitalist commodity owners, who produce in competition with each other, motivated by money profit alone. Yet, it is not obviously applicable to non-capitalist societies, in which economic activity is 'embedded' in a web of power, prestige, kinship and custom. However, where non-capitalist communities and societies engage in trade with each other, it could be plausibly argued that 'foreignness' prevails among commodity owners. A historical analogue is provided by the commercial exchanges that Grierson (1903) called 'silent trade', taking his cue from Herodotus's (1954: 307) description of Carthaginian trading in North Africa:

'On reaching this country, they unload their goods, arrange them tidily along the beach, and then, returning to their boats, raise a smoke. Seeing the smoke, the natives come down to the beach, place on the ground a certain quantity of gold in exchange for the goods, and go off again to a distance ... There is perfect honesty on both sides; the Carthaginians never touch the gold until it equals in value what they have offered for sale, and the natives never touch the goods until the gold has been taken away.'

In Herodotus's description, 'foreignness' among commodity owners engenders suspicion, fear of the 'other', and difficulty of communication. Making an offer of sale, thus assuming the position of the 'relative, allows for establishment of trading relations and opens the way for development of the form of value.

The social custom necessary for money's emergence is likely to materialise within chains of transactions that occur traditionally among 'foreigners' and involve specific commodities. The 'general' form of value could emerge within such chains, if a frequently traded commodity by chance attracted several requests of exchange, thus becoming a transient 'universal equivalent'. This could occur for more than one commodity within a chain of transactions. However, once a 'universal equivalent' emerged even temporarily, its asymmetry relative to other commodities would be gradually exacerbated. Its temporarily enhanced ability to buy would constitute an additional (market-related) use value, which Marx (1867: 184) calls a 'formal' use value. The commodity would be likely to attract further requests for exchange because

of its 'formal' use value, thus strengthening its ability to buy and leading to more requests for exchange. Nevertheless, for the 'money' stage to emerge properly, i.e. for the complete and stable monopolisation of the position of the 'universal equivalent' by one commodity, extra-economic factors are again necessary. The physical properties of commodities matter in this respect, since durability, homogeneity, divisibility and portability are desirable properties for the monopolist of buying ability. This is the reason for the historical importance of gold and silver as money commodities. Social custom is also important since gold and silver have been traditionally associated with wealth display. After reaching the position of money, the practice of using the single commodity would itself become a social norm. Commodity owners would automatically offer their commodities in exchange for money, expecting money to be received for theirs. The practice of other commodity owners would continually validate their expectations.

Deriving money in these terms provides an immediate rebuttal of Ingham's (2001: 316) charge that Fine and Lapavistas 'persist with the theoretically and historically inaccurate view that money originates in trade because it is itself a commodity'. In view of the preceding demonstration, it is apparent that Fine and Lapavistas never made (not could they have made) this claim. It is, moreover, incorrect to claim that, for Marx, money is 'essentially' a commodity (Ingham 1998, 2000). Money is the 'universal equivalent', the monopolist of buying ability (or the independent form of value) that arises due to social relations among 'foreign' commodity owners. The 'universal equivalent' can assume a variety of forms: commodity, fiat paper, banknotes, bank deposits, money trust account, etc. In all its forms, the 'universal equivalent' monopolises the ability to buy (and represent value), this being the thread that ties all forms of money together. This result stands in sharp contrast to Ingham's (2001: 306) mistaken attempt to lump credit money together with commodity (and fiat) money as 'promises to pay'. But commodity money is not a promise to pay - it is the final payment itself. Ingham (2001: 307, original emphasis) is wrong to assert that there are 'generic social relations of the system of promises to pay' that apply to all forms of money. Credit money is indeed a promise to pay, but that also constitutes its qualitative difference from commodity (and fiat) money. The common aspect of all forms of money is not some (fictitious) 'promise' represented by them - rather, it is their ability to buy. To establish this result, though, it is necessary to analyse money as a phenomenon of commodity exchange, precisely the approach that Ingham advises against. Finally, what money does follows from what money is: there is strict logical order to the functions of the 'universal equivalent'. In this light, the forms taken by money depend on the functions performed by money. The dominant form assumed by money in particular instances, or historical periods, depends on the dominant function performed.²¹

Briefly put, the first function of the 'universal equivalent' is to measure value. When the holder of money consents to a commodity owner's offer to sell, the value of the commodity is measured for the market as a whole. Simultaneously, money functions as means of exchange. In other words, the functioning of money as measure of value cannot be separated from its functioning as means of exchange, when both functions are treated as actual economic processes. Economists can certainly measure value on a piece of paper by using money as an abstract unit of account, but this exercise would not correspond with a real social or economic process. The social practice of value measurement involves commodity owners requesting money for

their commodities and then advancing it in payment. There are no social mechanisms in capitalist society through which commodity value is expressed in money terms independently of the act of commodities being offered for sale. Given that value measurement is not an abstract mental process, it matters not at all whether money is a commodity and possesses value as abstract labour. There is no reason why non-commodity forms of money, such as fiat paper money or credit money, could not function as both measure of value and means of exchange in individual commodity transactions. On the other hand, in a capitalist economy the money commodity necessarily possesses the ‘substance of value’, thus directly affecting the measurement of the aggregate value of commodities (rendering it into a total price, or price level). Specifically, the value of the money commodity acts as anchor, and provides a degree of stability for the price level. Precisely how the anchoring of the aggregate price level operates is not relevant for our purposes, but depends on how the money commodity is used in the economy, especially within the credit system (Lapavitsas 2000). Social convention is important in this respect but only in the simple sense of dictating the standard unit of price itself (whether money was a commodity or not). Money as the standard of price is a refinement of its function as measure of value, which can easily lead to confusion. Thus, if a new standard denomination of money prevailed through social practice, standing numerically at twice the old, commodity prices would be necessarily doubled. However, the doubling of prices would have nothing to do with money being an abstract unit of account, thereby measuring commodity value into ideal prices. Instead, it would be a dumb and automatic result of changing the social convention of the standard unit of price.

The ‘universal equivalent’ also functions as means of hoarding, means of payment, and ‘world money’ (or means of international payments), flowing from the unique monopoly that money possesses over the ability to buy. As hoarding element, money can assume a variety of forms, but it is apparent that commodity money has inherent advantages. Indeed, the role of gold in the monetary system of advanced capitalism, mostly confined to the vast reserves of the central banks, can be thought of as a hoard of last resort. Money’s buying power also allows it to separate purchase from sale and, at a further remove, to divorce the advance of a commodity from payment for it (commercial debt). Money makes possible the easy transfer of buying power among capitalists and others, thus commanding the payment of interest (monetary debt). These credit relations are premised on the ability of money to pay, as is evidenced by the actual use of money in debt settlement and the (often desperate) demand for money when credit systems are in distress. When it functions as means of payment, money tends to assume the form of credit money. Credit practices, especially the lending operations of banks, generate a great variety of forms of credit money, i.e. of promises to pay that perform the functions of money. Credit money behaves differently from other forms of money, as mentioned in section 2 of this article, but remains the ‘universal equivalent’. The spread of credit relations under capitalist conditions makes credit money the characteristic form of capitalist money.

5. Conclusion

The complex arguments of the derivation of money as ‘universal equivalent’ cannot be meaningfully summarised in a few lines. Perhaps the most useful

conclusion is to emphasise two aspects of the derivation, which are directly relevant to Ingham's 'sociological' critique. The first is that money was shown to emerge because of the social relations among commodity owners. 'Foreignness' shapes the private relations between commodity owners in 'accidental' exchange, keeping non-economic considerations out of account. Only private means are available to commodity owners in order to express the exchange value of their commodities and give shape (unwittingly) to the ability to buy. When many 'foreign' commodity owners interact frequently and regularly, the ability to buy becomes a stable social norm that is focused on a single commodity. In this light, money is ultimately an outcome of the 'foreignness' among commodity owners. Put differently, when large numbers of 'foreigners' meet regularly and frequently for purposes of trade, a social nexus becomes necessary among them. The nexus is a thing with a universal ability to buy, which is created through the spontaneous and collective action of the 'foreigners'. Admittedly, money is a very peculiar nexus among human beings, but then commodity owners are also extraordinarily estranged human beings. Money is the glue that holds them together, the social medium through which they express their volition.

The second aspect is that money's unique position as monopolist of the ability to buy (simultaneously representing value) derives exclusively from the collective requests of commodity owners for exchange with money, rather than with other commodities, possibly desired for consumption. The 'formal' use value of money is a social norm that is based exclusively on market practice. Contrary to neoclassical theory, there was no attempt to show that monetary exchange results from the simple insertion of a convenient trading device into barter. No implicit assumption was made that the 'primitive' state of barter is replaced with the 'civilised' state of monetary exchange. Instead, money was shown to emerge spontaneously out of the social and economic relations between 'foreign' commodity owners. By the same token, monetary exchange is qualitatively different from barter because it involves the universal request to exchange with the money commodity. In recent years, anthropological work has pointed out that barter can persist in non-capitalist communities.²² From the perspective adopted in this paper, if complete 'foreignness' did not prevail among commodity owners, the norm of using money would be weakened. Consequently, it is conceivable that, in non-capitalist communities, the direct exchange of commodities could continually emerge and co-exist with monetary exchange.

REFERENCES

- Davidson P. 1972. Money and the Real World, London and Basingstoke: Macmillan.
- Davidson P. 1989. 'Keynes and Money', in Keynes, Money and Monetarism, Hill, R. (ed), London: Macmillan.
- Davidson P. 1990. 'Why Money Matters: Lessons from a Half-century of Monetary Theory', in Money and Employment, collected writings of Paul Davidson, London and Basingstoke: Macmillan.
- Douglas M. 1958. 'Raffia Cloth Distribution in the Lele Economy', Africa, 28, 109-122, also published in G. Dalton, (ed), Tribal and Peasant Economies, 1967, New York: The Natural History Press.
- Douglas M. 1967. 'Primitive Rationing', in R. Firth, (ed), Themes in Economic Anthropology, London: Tavistock Publications.
- Dow S. 1984. 'Methodology and the Analysis of a Monetary Economy', Economies et Societes, 18, Monnaie et Production 1, reprinted in Money and the Economic Process, 1993, Aldershot and Brookfield: Edward Elgar.
- Einzig, P. 1949. Primitive Money, London: Eyre and Spottiswood.
- Fine, B. and Harris, L. 1979. Rereading Capital, New York: Columbia University Press.
- Fine B. and Lapavitsas C. 2000, 'Markets and Money in Social Science: What Role for Economics?', Economy and Society, 29 (3), 357-382.
- Fullarton J. 1845. (1959). On the Regulation of Currencies, 2nd edition, London: LSE Reprint Series.
- Grierson, Hamilton, P.J. 1903. The Silent Trade: A Contribution to the Early History of Human Intercourse, Edinburgh: William Green & Sons.
- Grierson, P. 1977. The Origin of Money, London: Athlone Press and University of London.
- Hahn F. 1965. 'On Some Problems of Proving the Existence of an Equilibrium in a Monetary Economy', in Hahn F. and Brechling F., (eds) The Theory of Interest Rates, pp. 126-135, London: Macmillan.
- Hahn F. 1971. 'Equilibrium with Transactions Costs', Econometrica, 39, 417-439.
- Hahn F. 1973. 'On Transactions Costs, Inessential Sequence Economies and Money', Review of Economic Studies, 40, 449-461.
- Hahn F. 1982. Money and Inflation, Oxford: Blackwell.

- Hart K. 1986. 'Heads or Tails? Two Sides of the Coin', Man, 21, 637-656.
- Hart K. 2002. Money in an Unequal World: Keith Hart and his Memory Bank, London: Texere, originally published as The Memory Bank, 2001, London: Profile.
- Heihnsohn G. and Steiger O. 1983. 'Private Property, Debts and Interest, Or: The Origin of Money and the Rise and Fall of Monetary Economies' Studi Economici, 21, 3-56.
- 1989. 'The Veil of Barter: The Solution to the Task of Obtaining Representations of an Economy in which Money is Essential', in Inflation and Income Distribution in Capitalist Crisis, Kregel, J. (ed), Basingstoke: Macmillan.
- Herodotus. 1954. The Histories, translated by A. de Selincourt, Harmondsworth: Penguin.
- Hilferding, R. 1910. (1981). Finance Capital, London: Routledge & Kegan Paul.
- Humphrey C. 1985. 'Barter and Economic Disintegration', Man, 20, 48-72.
- Humphrey C. 1992. 'Fair Dealing, Just Rewards: The Ethics of Barter in North-East Nepal', in C. Humphrey and S. Hugh-Jones, (eds.), Barter, exchange and value. An anthropological approach, CUP: Cambridge.
- Humphrey, C. and Hugh-Jones, S. 1992. 'Introduction: Barter, Exchange and Value' in C. Humphrey and S. Hugh-Jones, (eds.), Barter, exchange and value. An anthropological approach, CUP: Cambridge.
- Ingham G. 1996. 'Money is a Social Relation', Review of Social Economy, vol. LIV, 4, 507-529.
- Ingham G. 1998. 'On the Underdevelopment of the "Sociology of Money"', Acta Sociologica, 41 (1), 3-18.
- Ingham G. 1999. 'Capital, Money and Banking: A critique of Recent Historical Sociology', British Journal of Sociology, 50 (1), 76-96.
- Ingham G. 2000. "'Babylonian Madness": on the Historical and Sociological Origins of Money', in Smithin J. (ed), What is Money?, Routledge: London and New York.
- Ingham G. 2001. Fundamentals of a Theory of Money: Untangling Fine, Lapavitsas and Zelizer, 30 (3), 304-323.
- Itoh M. 1976. 'A Study of Marx's Theory of Value', Science and Society, 40(3), 307-343.

- Itoh M. 1981. The Theory of Value and Capital, (in Japanese), Tokyo: Tokyo University Press.
- Itoh M. 1988. The Basic Theory of Capitalism, London: Macmillan.
- Itoh M and Lapavitsas C. 1999. Political Economy of Money and Finance, London: Macmillan.
- Iwai K. 1988. 'The Evolution of Money - A Search Theoretic Foundation of Monetary Economics', CARESS Working Paper 88-03, University of Pennsylvania.
- Jevons W.S. (1875). Money and the Mechanism of Exchange, London: Appleton.
- Jones R. 1976. 'The Origin and Development of Media of Exchange', Journal of Political Economy, 84, 757-776.
- Kiyotaki N. and Wright R. 1989. 'On Money as a Medium of Exchange'. Journal of Political Economy, 97, 927-954.
- Kiyotaki N. and Wright R. 1991. 'A Contribution to the Pure Theory of Money', Journal of Economic Theory, 53, 215-235.
- Knapp, G. 1905. (1924). The State Theory of Money, London: Macmillan
- Lapavitsas C. 1991. 'The Theory of Credit Money: A Structural Analysis', Science and Society, 55 (3), 291-322
- Lapavitsas C. 1994. 'The Banking School and the Monetary Thought of Karl Marx', Cambridge Journal of Economics, 18 (5), 447-461.
- Lapavitsas C. 1996. 'The Classical Adjustment Mechanism of International Balances: Marx's Critique', Contributions to Political Economy 15, 63-79,
- Lapavitsas C. 2000. 'Money and the Analysis of Capitalism: The Significance of Commodity Money', Review of Radical Political Economics, 32 (4), 631-656.
- Lapavitsas C. 2002. 'The Emergence of Money in Commodity Exchange, Or Money as Monoplist of the Ability to Buy', SOAS Discussion Paper, mimeo.
- Lapavitsas C. 2003. Social Foundations of Markets, Money and Credit, London: Routledge.
- Lapavitsas C. and Saad-Filho A. 2000, 'The Supply of Credit Money and Capital Accumulation: A Critical View of Post-Keynesianism', Research in Political Economy, 18, 309-333.
- Lavoie M. and Seccareccia M. 2001. 'Post-Keynesian and Marxist Economics: Twins or Distant Cousins?', Paper Presented at the Progressive Economics Forum,

- Canadian Economics Association, May-June 2001, MacGill University, Montreal.
- Marx K. 1859. (1970). Contribution to a Critique of Political Economy, Progress: Moscow.
- Marx K. 1867 (1976). Capital, vol. I, London: Penguin/NLR.
- Marx K. 1894 (1981). Capital, vol. III, London: Penguin/NLR.
- Marx K. 1939. (1973). Grundrisse, London: Penguin/NLR.
- Menger K. 1871. (1981). Principles of Economics, New York & London: New York University Press.
- Menger K. 1892. 'On the Origin of Money', Economic Journal, 2, pp. 239-255.
- Milios, J. Dimoulis, D. and Economakis, G. 2002. Karl Marx and the Classics, Burlington: Ashgate.
- Mises von L. 1934. (1953). The Theory of Money and Credit, Appendix A: 'On the Classification of Monetary Theories', London: Cape.
- Niehans J. 1969. 'Money in a Static Theory of Optimal Payment Arrangements', Journal of Money, Credit and Banking, 1, 706-726.
- Niehans J. 1978. The Theory of Money, Baltimore: Johns Hopkins University Press.
- Oh S. (1989). 'A Theory of a Generally Acceptable Medium of Exchange and Barter', Journal of Monetary Economics, 23, 101-119.
- Orlove, B. 1986. 'Barter and Cash Sale on Lake Titicaca: A Test of Competing Approaches', Current Anthropology, 27(2), 85-106.
- Ostroy J. and Starr R. 1990. 'The Transactions Role of Money', in Friedman B. and Hahn F., (eds) Handbook of Monetary Economics, Amsterdam: Elsevier Science Publishers.
- Ricardo D. 1810. (1951). The High Price of Bullion, in The Works and Correspondence of David Ricardo, Sraffa P. and Dobb M. (eds)., London:MacMillan/ Cambridge University Press.
- Rosdolsky R. 1977. The Making of Marx's Capital, London: Pluto Press.
- Saad-Filho A. 2002. The Value of Marx, Routledge: London.
- Sahlins M. 1974. Stone Age Economics, Tavistock Publications: London.
- Smith A. 1776 (1904). The Wealth of Nations, E. Cannan (ed), vol. I, II, London: Methuen.

- Steuart, J. 1767. (1995). An Inquiry into the Principles of Political Economy, vol. I, II, III, IV, in Works, Political, Metaphysical, and Chronological, of the Late Sir James Steuart, vol. I, II, III, IV, V, VI, Routledge: London.
- Tooke T. 1844 (1959). An Inquiry into the Currency Principle, London: LSE Reprint Series.
- Uno K. 1950-2. (1980) Principles of Political Economy, translated by T. Sekine from the 1964 edition, Brighton: Harvesten.
- Weeks, J. 1981. Capital and Exploitation, London: Edward Arnold.
- White L. (1984). 'Competitive Payments Systems and the Unit of Account', American Economic Review, 74 (4), 699-712.
- Wray R. 1990. Money and Credit in Capitalist Economies, Aldershot and Brookfield: Edward Elgar.
- Wray R. 2000. 'Modern Money', in Smithin J. (ed), What is Money?, Routledge: London and New York.
- Zelizer V. 2000. 'Fine Tuning the Zelizer View', Economy and Society, 29 (3), 383-389.

NOTES

¹ The controversies are discussed in detail in Itoh and Lapavitsas (1990, ch. 1).

² Rosdolsky (1977: 144, n 11) notes that in the *Grundrisse* Marx is fully aware of tendency of credit money to return to its point of issue.

³ Ingham's (eg, 1998) views on Marxism and credit money are heavily tinted by Anglo-Saxon Marxism, whose major weakness has always been monetary theory. Why Anglo-Saxon Marxism should be weak in this field is an interesting topic in itself, but it should not be treated as a general feature of Marxist political economy. The Japanese and German traditions have always been far more aware of the importance of credit money for Marx, including the link with the Banking School, as even casual reading of Hilferding (1910) and Uno (1950-2) shows.

⁴ See also Lapavitsas (2003, ch. 3, 6).

⁵ See Hahn (1965, 1982).

⁶ Hahn (1971, 1973) for instance, suggested that money transfers purchasing power from one period to the next, while Niehans (1969, 1978) developed models in which money reduces the costs of multilateral trading among commodity owners. Ostroy and Starr (1990) survey and discuss the voluminous literature up to end of the 1980s.

⁷ Early contributions were Jones (1976), Iwai (1988) and Oh (1989).

⁸ See also (Itoh and Lapavitsas, 1999, ch. 1).

⁹ Very selectively, see Douglas (1958 and 1967), Sahlins (1974) and Hart (1986, 2002).

¹⁰ See also Dow (1984).

¹¹ This is evident in Wray's (1990) discussion of money's origin, which relies on Heihnsohn and Steiger (1983, 1989).

¹² Marx (1859: 79-81) was fully aware of the significance of this point. In rejecting Stuart's views on money as ideal unit of account, he stresses that the units deployed by the Bank of Amsterdam (the presumably ideal *florin banco*) were 'in fact only the name of account for Spanish doubloons'. That is, on investigation, it turned out to be a means of exchange.

¹³ Along lines suggested by the German Historical School, see Knapp (1905).

¹⁴ As Mises' (1934) pointed out in his critique of 'acatallactic' doctrines.

¹⁵ This approach to value and money is more fully discussed in Lapavitsas (2003, ch. 1, 3).

¹⁶ This view is not generally accepted within Marxist political economy, though contemporary work strongly supports it, see Saad-Filho (2002) and Milios *et. al.* (2002).

¹⁷ See Saad-Filho (2002, ch. 5).

¹⁸ 'Compatibility' and 'compliance' of price with value content are the operative words here. The labour theory of value is not immediately a theory of price, as the extensive debate on the 'transformation problem' has established, see Fine, Lapavitsas, and Saad-Filho, 2004.

¹⁹ In several places in Marx's work, for instance (1859: 42-46 and 1939: 142-145), the emergence of money is also linked with the 'substance' of value. Marx argues that money emerges because the value of commodities (homogeneous, perfectly divisible and simple) contradicts their use value (heterogeneous, imperfectly divisible and complex). The contradiction leads to a breakdown of exchange, which is resolved by money representing value generally for all commodities. This argument is reminiscent of Smith, and suffers from similar weaknesses. A general representative of value might indeed resolve the contradiction between commodity value and use value, but this reveals nothing of the process through which a general representative of value emerges. See also Lapavitsas (2003, ch. 3).

²⁰ Discussed in detail in Lapavitsas (2002) and (2003, ch. 3).

²¹ It is misleading for Ingham (1998) to claim that Marx followed 'mainstream' theory and defined money on the basis of its functions. There is an obvious elision in Ingham using the term 'veil' to describe Marx's approach to money. Classical theory saw money as a veil on 'real' economic activity, but Marx certainly did not suffer from this illusion. It is pure confusion to imply that Marx's search for deeper relations under the epiphenomena of money is analogous to the classical 'veil'. See Lapavitsas (1991, 2000).

²² Selectively, Humphrey (1985, 1992), Orlove (1986), and Humphrey and Hugh-Jones (1992).