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Fundamentals of a Theory of Money

There is no denying that views on money are as difficult to describe as shifting clouds.

Schumpeter 1994 [1954]: 289

We may now draw together those elements from the critiques that will form the general framework to be used and elaborated in the analysis of some empirical and historical questions in Part II. The three inter-related questions posed in the Introduction are addressed: What is money? How is money produced? How does money obtain, retain or lose its value?

What is Money?

Taken no further, the textbook list of money's functions does not provide a satisfactory specification of money's properties. Apart from the unresolved questions regarding the relationships between the different functions and their relative importance, other 'things' can perform some of them. Many commodities act as media of exchange – for example, cigarettes – and there are many better stores of value than even the most stable money. Moreover, the focus on money, as a *medium of exchange*, results in a category error in which specific forms of money are mistaken for the generic quality of 'moneyness'. This has produced confusion *vis-à-vis* a number of

closely related issues – for example, the distinction between money and credit; the so-called dematerialization of money; the advent of electronic money and the supposed ‘end of money’; and the debate on new monetary spaces, such as the eurozone (see the discussions in Part II, chapter 9). In particular, the orthodox conception of money as a medium of exchange, as it appears in optimum currency area theory, has confused the debate on the problem of establishing viable money in the ‘transition’ economies of the former Soviet bloc, especially Russia.¹

Furthermore, this approach strongly implies a teleological, functionalist explanation of both money’s origins and its continued existence. It is held that money evolved to overcome costly inefficiency in market exchange for both individuals and the system as a whole. Money clearly does have efficient consequences, but unless they can be shown to have been in the minds of the earliest users of money, they cannot be taken to be causes of origin. As we shall see, the historical record does not support these conjectures. Moreover, it is also obvious that mere knowledge of money’s advantages is not sufficient to bring about a viable monetary system or to guarantee its persistence. Money has definite social and political conditions of existence; it is an ‘institutional fact’ with ‘constitutive rules’ (Searle 1995: 13). How money is able to perform its functions is to be explained as the result of social and political processes.

The test of ‘moneyness’ depends on the satisfaction of both of two conditions. These describe the specific functions that are assigned socially and politically in a process whereby money becomes an ‘institutional fact’ (Searle 1995). Money is uniquely specified as a *measure of abstract value* (money of account) (Keynes 1930; Grierson 1977; Hicks 1989; Hoover 1996); and as a *means of storing and transporting* this abstract value (for means of final payment or settlement of debt) (Knapp 1973 [1924]). All the other functions – medium of exchange, for example – may be subsumed under these two attributes (Hicks 1989). (Convenient media of exchange, such as cigarettes in prison, can exist quite independently without becoming money.) Money of account is logically anterior to any form of money that bears the abstract value (Keynes 1930; Grierson 1977; Hoover 1996). ‘Moneyness’ is *assigned* by the money of account, not by the form of money. ‘Materiality’ and the ‘tangibility’ or ‘portability’ of forms should not be confused with the abstract quality of money. ‘Forms’ need not be tangible, but may exist ‘materially’ merely as book entries or magnetic traces in the computer networks that represent the credit relations that comprise the monetary system (see Searle 1995).

Money has a purchasing power that exists independently of the goods it can buy – ‘the value of things in *pure abstraction*’ (Simmel 1978 [1907]: 165). *Ultimately*, the consumers’ good is the only final means of payment of the ‘claim’ that is stored in money’s purchasing power (Schumpeter 1994 [1954]: 321). But this is not to say that money is *reducible* to the value of goods in any but the hypothetical circumstances described by mainstream economic theory’s long-run ‘end state’. This formulation omits all that is important in the actual routine operation of money economies. The *prospective* value of money is a *means* for producing price lists for goods that would otherwise have myriad barter exchange ratios. In Weber’s terms, the ‘substantive’ value of money (purchasing power) at any moment in time is the result of the economic ‘battle of man with man’ in which money is a weapon (Weber 1978: 92–3). It is not a ‘neutral veil’, or a ‘harmless voucher’ (Weber 1978: 79). Any balance of money and goods is an expression of a temporary balance of economic power; it does not represent the achievement of the long-run equilibrium described by economic theory.

The fact that ‘moneyness’ is conferred by money of account becomes clearer with consideration of both the *multiplicity* and *dissociation* of money ‘things’. The measure (money of account), means of payment for the unilateral discharge of debt, and any media of exchange need not be integrated in a single form – as in coinage. Even as late as the nineteenth century, the pound sterling was represented by a range of media – gold sovereigns, myriad bank notes, inland bills of exchange, local copper coinage. ‘[T]he pound as an abstraction was constituted precisely by its capacity to assume these heterogeneous forms’ (Rowlinson 1999: 64–5). Today many media coexist: cash, plastic cards, cheques, magnetic traces in computer disks and so on.

‘Monetary space’ is defined by money of account in terms of which debts are contracted and discharged and all transactions are conducted. Monetary space need not be ‘national space’, but unless it is located in something other than economic transactions, monetary space tends to be unstable. Monetary space is not reducible to the actual transactional or market space as it is in, say, optimum currency area theory (see chapter 1). Rather, monetary space is the site, or field, of *potential* transactions that may be conducted under specific monetary conditions – that is to say, monetary space is sovereign space (on economic fields, see Fligstein 2001: 15–16).

The *means of storing* and *transporting* this *abstract value* consist in the *social organization* of the monetary system. It is only by these means that money is able to embody the abstraction of value, by lifting it not only out of any particular material object or commodity,

but also out of any anchorage in the particular time and space of any actual transaction. A money transaction differs from barter in that the burden of trust is removed from the participants in the actual transaction and placed on a third party – the issuer of money.² How this institutional fact is accomplished involves our second question of how money is produced (see next section). Here we need note only how this emphasis differs from the orthodox economic *theoretical* understanding of money, which has difficulty in accounting for the movement of abstract value through real time. By contrast, Keynes saw clearly the importance of money as a social technology for connecting present and future. '[O]ur desire to hold money as a store of wealth is a barometer of the degree of our distrust of our own calculations and conventions concerning the future . . . The possession of actual money lulls our disquietude' (Keynes 1973: 116–17).

Furthermore, it is this property of money that creates the ironic contradiction that was at the centre of Keynes's economic analysis. Money makes the 'monetary production economy' (capitalism) possible; but if everyone were to lull their disquietude in this way, investment and demand in the monetary production economy would disappear – that is to say, liquidity is not an option for 'the community as a whole' (Keynes 1973 [1936]: 155). Conversely, when 'animal spirits' revive, the need to hold wealth in the form of money diminishes, and consumers and investors spend. Money can never be neutral (see the discussion of debt deflation in Part II, chapter 9).

All money is constituted by credit–debt relations – that is, social relations. First, as Schumpeter noted, the holder of money is owed goods; money is a claim on the social product. Second, as we shall see in the following section, money is a credit for the user because it is a debt (liability) for the issuer. (Issuers promise to accept back their own money in payment of a debt.) Thus, the holder of money is both owed goods and has the means of discharging any debt contracted in money of account that exists to be discharged in that monetary space. Money cannot be created without the simultaneous creation of debt. For money to *be* money presupposes the existence of a debt measured in money of account elsewhere in the social system and, most importantly, in the debt created by the issuer's promises to accept back its money in settlement. In other words, the money debt is *assignable* – or transferable, or negotiable. Whilst all money is credit, it is not true to say that all credit is money, as some credit-money theorists imply (see the discussion of Minsky in Bell 2000).

The origins of modern capitalism may be traced to the expansion of assignable privately issued debts from the sixteenth century onwards (Part II, chapter 6). But it must be stressed that in the beginning the

assignability of these private debts was limited to commercial networks and remained based in personal trust – as it had been in second-century BC Babylon (see Part II, chapter 5). As we shall see, general assignability is produced by monetary space that is not reducible to such market networks. Conceptualization of money in terms of generalized credit relations moves attention away from money and goods to the social relations between debtors and creditors in the process of price formation (that is to say, to our third question – the value of money).

Exchange with money is structurally different from barter, not only in the relation between user and issuer, but also in that transactions with money have *two* levels, as opposed to the one-dimensional exchange of goods. Money is exchanged *for* goods; it is also the abstract value *by* which goods are priced and exchanged. Goods and money ‘change hands’, but the money is also cancelling the *debt* incurred for the goods priced in the money of account in abstract value. A sale does not involve an exchange for ‘some intermediate commodity called the “medium of exchange”’, as it would do if money were no more than ‘efficient’ barter. Rather, a sale is the exchange of a commodity for a ‘credit’ which, in accordance with the ‘primitive law of commerce’, represents the ‘debt’ in the next purchase (Innes 1913: 393).

In advancing their argument, some credit theorists have referred to money as ‘circulating debt’ (on Schumpeter’s formulation, see Earley 1994: 337).³ However, this traditional metaphor, taken from the commonly used seventeenth-century analogy with blood, is inappropriate (Cencini 1988: 74). Rather, money consists in vast dense networks of overlapping and interconnected multilateral credit–debit relationships which are mediated by the issuers in a process referred to by Tooke in the early nineteenth century as ‘efflux and reflux’. This is more obvious in the case of the ‘clearing’ of debits and credits in a bank giro, where money-stuff does not actually ‘flow’ around or through the accounts. The conception is even clearer in the case of credit cards. On one level, they are media of exchange, but on another they are the means of contracting a three-cornered relation of credit and debt between the buyer, seller and card-issuing bank. Coins and notes should also be seen in this light, and might be referred to as ‘portable debt’ (Gardiner 1993: 224). Coins were never simply distributed by the monarch as a ‘public good’, as is sometimes implied in economic explanations. They were issued in payment of a specific royal debt. Their acceptability was guaranteed by their assignability, which was, in turn, conferred by re-acceptance in payment of a (tax) debt owed to the monarch. The coin is simply reusable credit in myriad credit and debit relations. This reusability has been conceptualized as ‘velocity’ in

orthodox economic theory, but this is misleading. It is not so much a matter of the same ‘money’ circulating serially, as the creation of credit–debit relations denominated in a money of account for which there is an ultimate means of final settlement. Schumpeter’s quip bears repetition: unlike a commodity, money can have ‘a velocity so great that it enables a thing to be in different places at the same time’ (Schumpeter 1994 [1954]: 320).⁴

How is Money Produced?

Money is ‘one of those normative ideas that obey the norms that they themselves represent’ (Simmel 1978 [1907]: 122). Unlike economic theory’s functionalist account, this conception is saved from tautology by the fact that money is seen to obey its own norms because the functions have to be continuously assigned in a social process of ‘collective intentionality’ (Searle 1995: 32–4, 52–4). Money is a promise, and the production of a promise involves trust. The importance of trust is increasingly recognized in orthodox economic theory (Dasgupta 1988). Significantly, however, it is treated here in exactly the same way as money itself, and, consequently, the logical circularities, noted in chapter 1, are compounded. Trust is seen as a lubricant that reduces friction in economic transactions that would none the less take place without it. But typically, trust is explained in these accounts as the result of a *knowledge* of trustworthiness – that is to say, trust is reduced to confidence, based on probability, that a known behaviour will continue (see Dasgupta 1988). In other words, in this conflation, trust is held to be based on the very thing it is supposed to replace – objective knowledge. Furthermore, as I have stressed, the question of trust in money is not a matter of co-traders’ *personal* trust, as it is understood in micro-economics’ dyadic exchange models. On the contrary, money’s significance lies in the fact that it resolves this problem precisely in large anonymous markets where interpersonal trust *cannot* be generated. Money is *assignable* trust. In the face of real-world radical uncertainty, self-fulfilling long-term trust is rooted in a social and political legitimacy whereby potentially personally untrustworthy strangers are able to participate in complex multilateral relationships. Historically, this has been the work of states.

However, the social relations that constitute money are not based entirely on the existence of some overarching trust, as many sociological treatments imply. The assignability of the monetary promise also involves a more transparent guarantee in the *three-cornered interdependence* between the issuer of money and the users of money, and

between the users. Fundamentally, as we have noted, this takes the form of a promise that the money, or ‘credit’, will be accepted back by the issuer in settlement of its own debt. ‘The holder of a coin . . . has the absolute right to pay any debt due to the government by tendering that coin . . . , and it is this right and nothing else which gives them their value’ (Innes 1914: 161). Furthermore, even under a gold standard, it is not the *commodity* but the government’s *obligation* that produces the *money*. In the first place, the price of gold is fixed by the government, ‘but redemption of paper issues in gold coin is not redemption at all, but merely the exchange of one form of obligation for another of *an identical nature*’ (Innes 1914: 165, emphasis added).

The monarch’s coin will pay taxes, and the return of the bank’s note will repay a loan to that bank. Money is always issued as a debt, or liability, which conversely creates a credit, simultaneously granted to buyers of goods and services. As we shall see in Part II, different modes for producing money entail different additional or complementary kinds of promises – fixing the prices and exchange rates of the different precious metals to the money of account, or accomplished delivery of a credible promise to observe an inflation target. Ultimately, however, it is the *existence of a debt that gives the money value*. The complementary promise embodied in the precious metal is related to the existence of either a promise that the gold will be ‘bought’ by the monetary authorities, or by the market price. In the first instance, as Innes pointed out in the above quotation, it is the promise itself that confers the value. In the case of market price, the bullion is weighed and becomes a commodity whose price is separated from its denominated value as coin.

This distinction is typically conflated in the commodity and metallist theories of money. To be sure, there is a connection; but it is less direct than assumed, and does not follow the ‘law’ of commodity exchange. In the metallist theory, it is argued that the purchasing power of money is related to the metallic content of the coins – hence the insistence on a direct link between debasement and inflation. With less metallic content, more coins will be demanded for any commodity. However, there is little evidence of a *direct linear relationship*. In the first place, it is difficult routinely accurately to assess the fineness and weight of precious metal coinage. This is precisely the role of states (Goodhart 1998), and precisely the role that they have been able to exploit. Second, the tax rate is the major determinant of the use of the coins. If it is acceptable as a means of tax payment, the metallic content is irrelevant (Knapp 1973 [1924]; Innes 1913). Rather, it is in the use of coins as *stores of value* that the reduction of the metallic content causes a problem. First, if the market price of the metal

exceeds the nominal value of the coins by a significant amount over a lengthy period of time, they are consequently melted down for bullion (Gresham's Law). Second, this problem is exacerbated in a bimetallic standard in which one coin becomes seriously undervalued as money, ceases to be a good store of value, and is effectively demonetized in a break with the nominal money of account. It is at this juncture that confidence in the monetary system breaks down and there is a rush out of money, as a store of value, and into other commodities, usually with an inflationary result. This would appear to have occurred, for example, in fourth-century AD Rome and again in mid-sixteenth-century England (see Part II, chapters 5 and 6).

Establishing the promise requires 'authority', which ultimately rests on coercion. Crimes and offences against the institution of money constitute a subversion of the assignment of its functions. Default, especially on tax debts, counterfeiting and so on elicit punishment. In short, the monopolistic imposition of a money of account, and a refusal to accept any other than the approved credit tokens of the issuer, go hand in hand with monopolization of physical force. In nineteenth-century colonial Africa, taxation backed by severe punishment for non-payment was used to coerce subjugated populations into wage labour. Tax would be pitched at a level that elicited the required amount of work. In Kenya during the 1920s, average taxation was almost 75 per cent of annual wages (Wray 1998: 57–61). It is significant that the Belgian Congo was one of the few countries not to introduce colonial money and, rather, to continue to rely on forced rather than 'free' wage labour (Helleiner 2003: 174).

But monetary sovereignty is rarely complete. As we shall see, coinages circulated promiscuously across ill-defined and insecure jurisdictions in late medieval Europe; local money was issued as late as the mid-nineteenth century in Europe; and capitalist networks have always developed their own 'private' media and means of payment – 'near money' such as 'certificates of deposit'. In many societies, 'local exchange trading schemes' (LETS) have recently produced their own media to facilitate exchange within those groups that through unemployment do not have access to the dominant money. Furthermore, not all common media of exchange are fully acceptable throughout the space that is defined by a dominant money of account – for example, cheques or credit cards, bankers' drafts and so on. Typically, however, these restricted monetary networks and circuits are organized in *hierarchy* that is structured by the degree of acceptability in terms of the fungibility of these restricted 'moneys' with those of the most powerful and legitimate issuer. This is almost always the state's money, which 'answers the description' given by its declared money

of account. Again, it must be stressed that this is a question of sovereignty. For example, all attempts to create a modern currency under central bank control in early twenty-first-century Afghanistan are compromised by the ability of local warlords to print their own money for the payment of their soldiers and the collection of local tribute.

Money consists in vast networks of debtor–creditor relationships between issuers and users, and the seemingly obvious point that monetary systems involve the continuous contracting and discharging of debts must not be overlooked. Routinely, money is produced by the maintenance of the integrity of systems of payment. These vary according to the different modes of monetary production, as outlined below. Three elements are important. Debtors must be, first, willing and, second, able to pay. Third, there needs to be effective organization for the transfer of debts and credits. As we shall see, this is especially important in a ‘pure’ credit system in which money consists exclusively in the promise to pay. Confidence is required on both sides of the money relation. First, the supply and demand of credit-money creation is mediated by the norms of creditworthiness and morality of indebtedness. Money creation is founded on the bank’s assessment of the debtor’s ability to repay. Credit is ‘rationed’ according to socially constructed criteria, and the normative framing of bankruptcy attempts to distinguish between rogues and genuine losers in the competitive process (see Part II, chapters 6 and 7). Second, the issuers’ creditors (depositors) – that is, the holders’ of the issuers’ liability – must have confidence in the issuers’ viability. Consideration of this aspect draws attention to the fact that in a pure credit system, it is the actual operation of the payments system – ‘efflux and reflux’ – that constitutes money. For example, it would appear that electronic book-keeping and transfers have significantly increased the incidence of fraudulent withdrawals from deposits. Efforts to deal with the problem are inhibited by the banks’ unwillingness fully to acknowledge that one exists. To do so would lead to a loss of confidence. Banks are unwilling to disclose evidence to the authorities, and prefer simply to write off such losses as bad loans (*Financial Times*, 3 March, 2003, p. 21). In some economies fraudulent disruption of the payments system in this way virtually paralyses the monetary system and seriously affects the functioning of the economy – for example, in Nigeria and Russia. These considerations draw attention to the fact that the economic ties that are constituted by the vast network of credits and debts fundamentally comprise a ‘moral’ network that depends on the keeping of promises.

Different *modes of the production of money* may be identified. These consist in *social relations* between issuers, between issuer and users and

between users and in the *technological means* available for the storage and transportation of abstract value – from clay tablets to coins, pen and paper, magnetic traces and so on. The following ideal types identify four successive, but overlapping, modes of monetary production. The question of the social origins of the ‘concept’ of money (money of account) and the debate on ‘primitive money’ will be dealt with in Part II, chapter 5, together with a more detailed examination of significant changes in these ‘modes’:

- 1 Money accounting according to a standard of value, without transferable tokens (earliest known case: Mesopotamia, third millennium BC)
- 2 Precious metal coinage systems (Asia Minor, c. 700 BC to early twentieth century AD)
- 3 Dual system of precious metal coinage and credit-money (fifteenth to early twentieth century)
- 4 The pure capitalist credit-money system (mid-twentieth century onwards)

The different modes for the production of money entail, as we shall see, typical struggles which are also involved in establishing the value of money. For example, in capitalism, a central conflict is between the debtor classes, who demand ‘soft credit’, and the creditors, who want safe ‘hard money’.

Finally, we must address the question of what *kind* of social and political relationships the various agencies of issuers and users are involved in when they produce the money. Are they the result of mutual co-operation intentionally designed to bring about greater efficiency and individual cost reduction, as outlined by orthodox economic theory? Obviously, the recognition of collective advantage plays a part in the creation of money. But, as Weber remarked, the public treasury ‘does not simply apply the rules of a monetary system which somehow seem to it ideal, but its acts are determined by its own financial interests and those of important economic groups’ (Weber 1978: 172). Money is produced in a struggle for power, and I shall argue that the *value* of money is also a direct result of struggle.

In anticipation of the more detailed analysis in Part II, we may briefly consider two illustrations of the general approach. First, medieval coinage systems were based on precious metals standards in which precious metals, denominated in the sovereign’s money of account, were accepted as final payment. These were the result of a struggle over control of the mines and the supply of bullion, the actual manufacturing process of striking and minting by ‘moneymen’, and the sovereign’s control of the money of account through the power to tax. A further significant struggle developed between the merchants,

who used private credit for their wholesale transactions, and kings, who considered this to be a breach of their monetary sovereignty. As we shall see in Part II, different outcomes of this conflict had far-reaching effects on capitalist development, whereby the production of money was eventually shared between two agencies – banks and the state.

Second, the production of money in modern capitalism involves a struggle between the state and its creditors (buyers of government stock) and (debtors) taxpayers. As shall see in Part II, chapter 6, this was a central political struggle in eighteenth-century England, and its outcome had a fundamentally important effect on the money supply (Ingham 1999; Ferguson 2001). In their investigation of the possibilities for non-inflationary full employment, modern neo-chartalist economists have addressed the questions of which *actually* finances state expenditure – taxes or bonds; and, as it is the ultimate source of all money, whether the state needs its citizens' tax money at all (Wray 1998, 2000; Bell 2000).⁵ However, this narrow concern with the economic or accountancy question of what actually pays for what misses the *sociological* significance of the struggles between debtors, creditors, taxpayers and government bond-holders. In Weberian terms, the question of sound and unsound finance in relation to any normatively defined ratios of taxation and borrowing cannot be separated from the economic 'battle of man with man' (Weber 1978: 93; see also p. 79). On one level, the neo-chartalists are correct to say that the state doesn't actually need the taxpayers' money and that it is the taxpayers who need the state's money to meet their tax debt. However, the tax question cannot be seen only in these bookkeeping terms. Bookkeeping, like money, is not neutral. In capitalism, taxation is also a part of the settlement with the state's creditors – the rentiers, whose dividends are *believed* to be secured by taxes. Concepts of 'sound finance' comprise the 'fiscal norms' that govern struggles surrounding this exchange of goods, services and money between the state and the major economic interest groups. And, fundamentally, these settlements in capitalist societies consist in relations of credit and debt. It is precisely this kind of fiscal settlement that has proved so difficult to establish, as we shall see, in some otherwise economically advantaged states – such as Argentina.

Finally, it should be noted that the production of money is accompanied by an attempt ideologically to 'naturalize' the social relation of money. Social institutions and conventions based on no more than either an equilibrium of competing interests or a consensual agreement are fragile; they require a stronger foundation (Douglas 1986). 'There needs to be an analogy by which the formal structure of a crucial set of

social relations is found in the physical world, or in the super-natural world, or in eternity, anywhere, so long as it is not seen as a socially contrived arrangement' (Douglas 1986: 48). Until the twentieth century, the ideological naturalization of money was achieved, and its social construction concealed, by the commodity form of money in the gold standard and the commodity-exchange theory of orthodox economics. With the abandonment of gold, however, the fiction of universal, immutable, natural money became increasingly difficult to sustain. None the less, as we shall see, the rhetoric of a natural economic process persists in the modern economic theory that underpins current monetary policy's efforts to maintain a working fiction of a monetary invariant through time so that 'debt contracts (the ultimate locus of value creation . . .) may be written in terms of the unit at different dates' (Mirowski 1991: 579). These questions will be pursued in Part II.

The Value of Money

This is the quintessential economic question. Since separating from the other social and historical sciences in the early twentieth century, theoretical economics has insisted that the only acceptable explanation of value must be in terms of value in exchange. The intensity of the disputes and the extreme positions taken during the *Methodenstreit* were an indication of just how important the question was for economics' explanatory framework.⁶ If the methodology of supply and demand, marginal utility, etc. could not explain the value of money, what could it explain? It was argued in chapter 1 that these narrow economic answers to the question are illogical and incomplete. If, as I have contended, money is more than either a commodity with exchange-value or a mere symbolic representation of existing commodity values, then, the answer to the question of its value must be sought, at least in part, from outside orthodox economic theory. Once constructed as an institutional fact, money is, of course, traded as a commodity; but, as we shall see, the creation of its 'valuableness' cannot be entirely divorced from its substantive value. In various ways, the uncertain prospective value of money influences its present value.

What follows does not claim to do any more than present elements of an alternative approach that departs from orthodox economics in two fundamental ways. First, at the most general level, the idea that there exists an optimum supply and value of money that is ultimately determined by the propensities of the 'real' economy is rejected.

Rather, as the social relations for the production of money and of commodities must be seen as comprising two distinct, relatively autonomous sectors, the value of money is the enacted outcome of social and political conflicts between the main interests in the economy. As argued above, money's value is the result of the struggle for economic existence – that is to say, for example, stable money expresses a stable balance of power. '[S]o long as it *is* money' (Weber 1978: 79), its value will depend on a conflict of interests; it is these, 'rather than the "ideas" of the economic administration that will rule the world' (Weber 1978: 184). Secondly, money's value is in part determined by its own conditions of existence in the relatively autonomous monetary system – that is, how it is produced. Its quality and quantity of pure abstraction reside in its 'social organization and . . . supra-subjective norms' (Simmel 1978 [1907]: 210).

As we have seen, the Keynesian and post-Keynesian 'cost-push' and 'demand-pull' theory of inflation implies a reversal of the quantity theory equation's causal sequence. That is to say, groups struggle to monetize their positions of power by raising their prices (see Fischer 1996: 200–3, 232–4, especially the reference to Slawson's work in the 1930s). These claims may then be met, as the post-Keynesian 'horizontalists' argue, by the endogenous creation of credit-money in the banking system. The role of the distribution of power in the generation and control of inflation is seen clearly in wartime. Exigencies in general, and the level of state demand in particular, shift the balance of power between the state and various economic groups. Notwithstanding appeals to patriotism, this presents an opportunity to exploit 'bottle-necks' by means of an inflationary 'mark-up' of the price of goods, services and labour. During World War II, the control of inflation in Britain was, arguably, as much the result of the politically negotiated 'industrial concordat' on incomes and profits, and the direct control of key prices, as it was of the economic and administrative skills of Keynes and the Treasury (Skidelsky 2000: ch. 8). The hyperinflation of the 1970s produced a promising sociology of inflation along these lines, based on the theory of 'distributional conflicts', but it waned with its subject-matter (Hirsch and Goldthorpe 1978; see especially Maier 1978; for a more recent general non-economic model, see Fischer 1996). As yet, the growing deflationary pressures in the early twenty-first century have not elicited a similar response. But I would suggest, for example, that an answer to the economic puzzle of Japan's protracted recession and deflation since 1990 requires an approach that goes beyond mainstream economic analysis and policy prescription (see Part II, chapter 8).

Changes in the balance of power between capital and labour, and between producers and consumers, affects the purchasing power of money; but arguably the pivotal struggle is between creditors and debtors. Historically, the struggle between creditors and debtors may be the most significant class struggle (Ferguson 2001). Late twentieth-century capitalism saw a significant conflict over the 'real' rate of interest (nominal rate minus the rate of inflation) which was expressed at the ideological level between Keynesianism and monetarism (Smithin 1996; see also Part II, chapter 8). Creditors seek to safeguard their positions by the minimization of risk through default or the erosion of the value of the debt through inflation. Schumpeter rightly designated the money market as the headquarters of capitalism, and as we shall see in Part II, chapter 7, the market for state securities represents its inner sanctum. Here the offers of long-term rates of interest on government bonds are weighed against the likelihood of inflation to produce a key rate of interest that affects investment behaviour in general, and the central bank's prime rate in particular. In addition to the central bank's linchpin rate of interest, the supply and demand of credit-money creation is also mediated by norms of creditworthiness and indebtedness, as we have noted. First, credit is rationed by lenders according to socially constructed criteria. Secondly, willingness to incur debt, and thereby to create credit-money, increased considerably during the twentieth century, after early capitalism's emphasis on thrift. Successful capitalist economies, such as the USA, have largely abandoned the strict moral condemnation of debt and bankruptcy, and have relaxed the law accordingly. Since the rulers of fourth-century BC Sumer periodically employed a 'clean slate' policy, to restart the economy after it had ground to halt under a burden of debt (Hudson 2003), it has been a prime aim of monetary policy to steer a course between such debt deflation and inflation.

The idea that money comprises a distinct and autonomous sector of the economy – that is to say, one which is constituted by its own social structure of norms, rules and power relations – is empirically obvious. As we shall see, this is now implicitly recognized, to some extent, in the economic analysis of the way in which central banks are involved in the creation and management of inflation expectations. However, this is not incorporated *systematically* into the basic tenets of economic theory, because it is not considered relevant to the question of money's fundamental value, which, it is held, resides in the long-run equilibrium between quantities of money and goods. But this somewhat contradictory position cannot be sustained. In the first place, all money has a fiduciary character. In the absence of the perfect information that is assumed in the economic model, the monetary author-

ity's legitimacy and credibility will influence the value of money, because willingness to hold money, which in part determines its value, is in part based on estimations of its *future* value. Under a metallic standard, credibility was founded on the government's promise to maintain the fixed price of precious metal. In the era of pure credit-money, the credibility resides in governments' and central banks' transparent maintenance of sound money practice (see chapter 7).

More obviously, within a sovereign monetary space, issuers of money have the authority to change the value of money by manipulating the money of account. Indeed, as we shall see in Part II, this has been one of the main means by which money's value has changed. Altering the exchange rate between the coinage and the nominal money of account and standard of value was a common way of increasing taxation in medieval Europe and adjusting the relations between debtors and creditors. By 'crying down' the coinage, more coins would have to be paid to meet the demand (Innes 1913: 399; Wray 2003). In open capitalist economies under a floating exchange regime, the attempt to manipulate a currency's external exchange rate is a more prevalent means of altering the domestic value (purchasing power) of money. This may be pursued by the central banks' buying and selling on the foreign exchange markets, or by base interest rate changes to attract or deter buyers of currency. In this regard, the value of money is affected by its status as a commodity, and, consequently, it can largely be explained in terms of supply and demand. However, even here the explanation of the levels of supply and demand clearly has to go outside the orthodox framework, because the process of the production of money has an impact on estimations of its future value. Foreign exchange markets speculate on the basis of interpretations of the impact of government and central bank macro-economic policy on the value of money (on exchange rate politics, see Kirshner 1995).

The conception of money as a social relation, rather than a thing that circulates with velocity, also directs attention to the fact that its value depends on a fundamental core, or 'critical mass', of continuous (re)payments – that is, an efflux-reflux of debits and credits. Money is created and destroyed through indebtedness and repayment, as in the double-entry balance sheet. Counter-intuitively, it has been frequently observed, money would disappear if everyone repaid his or her debts (see Part II, chapter 7, n. 6). The production of 'new' money involves the creation of new debt that is as yet unmatched by a credit reflux. Thus, the scarcity (or abundance) of money is a function of the willingness to contract new debt – in particular, the willingness of the issuers of the ultimate means of payment. It is widely acknowledged

that a faster growth on one side of the overall complex balance sheet that comprises the monetary system is associated with changes in the value of money. For example, money appreciates in value in debt deflation when economic agents stop borrowing (creating money) and spending in order to restore manageable balance sheets – as in the 1930s depression and in Japan today. Conversely, the expansion of debt is widely held to lead to a depreciation of the purchasing power of money (inflation); but, as we shall see, this need not be the case (see Part II, chapter 8).

From an empirical standpoint, the role of the state as an economic agent is central to the maintenance of this critical mass of the efflux and reflux of money. When economic theorists railed against the idea that a state's 'legal tender' laws could establish the value of money, they misunderstood the consequences of the 'factual' existence of the state as the single largest economic agency.⁷ The state not only establishes the valuableness of money by its declaration of what it will accept in payment of taxation; it also determines its substantive value by influencing what must be done in the economy in order to earn the income to pay the tax. 'A dollar of money is a dollar . . . because of the dollar of tax imposed to redeem it' (Innes 1914: 152). On the other hand, the state's purchases further circumscribe what is to be done to acquire the state's credits to pay the tax debt. As modern states are by far the biggest creditors and debtors within their own monetary spaces, it is inevitable that they will continue to exert the most important influence on the supply and substantive value of money. (Ultra-liberal economic orthodoxy might advocate a drastic reduction of the state's role, but it is impossible to see how this might be brought about.) This is recognized, of course, in orthodox macro-economic theory and policy making in the form of counter cyclical taxation and spending measures to stabilize the economy. Again, however, this should not be seen as a matter of mechanical relationships between levels of state expenditure, revenue and inflation/deflation as expressed in orthodox monetary theory. The balance of power and the *theoretical* understanding of the hypothetical impact of fiscal and monetary policy always *mediate* the impact of a given level of expenditure.⁸ In this regard, economic theory plays a performative role – that is to say, it is part of the process whereby the balance of power in any monetary regime is established (as the doctrinal shift to monetarism during the late twentieth century demonstrated so clearly). And, as we have noted, this 'performativity' is also ideological, in its attempt to produce the working fiction of stable money (see Mirowski 1991 above).

A coherent and comprehensive answer to this question of the determination of the purchasing power of money scarcely exists. As we saw

in chapter 1, monetarism's attempt to establish determinate quantitative short-run relations between money and goods failed utterly. None the less, orthodox economics persists with its theory of the 'real' economy, and, by focusing on the long-run neutrality of money, it is disabled from making any theoretical advances. As we shall see in Part II, chapter 7, the practice of modern monetary policy is increasingly divorced from any foundation in economic theory. Building on earlier developments that were arrested by economics' hegemony, I have sketched the tentative outline of an alternative conception of the problem and the means for its solution.