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The Production of Capitalist Credit-Money

[T]he banker is not so much primarily a middleman in the commodity 'purchasing power' as a producer of this commodity.

Schumpeter 1934: 74

It is well enough that the people of the nation do not understand our banking and monetary system for, if they did, I believe that there would be a revolution before tomorrow morning.

Henry Ford Sr., quoted in Greider 1987: 55

[T]he overriding problem of all market-oriented societies is to find some means to maintain the working fiction of a monetary invariant so that debt contracts (the ultimate locus of value creation ...) may be written in terms of the unit at different dates.

Mirowski 1991: 579

[Greenspan] said, but as an ordinary matter, the Fed would function most efficiently by fulfilling the expectations it had created.

Mayer 2001: 225

The capitalist monetary system's distinctiveness is that it contains a social mechanism by which privately contracted debtor-creditor relations – for example, bank loans, credit card contracts – are routinely monetized. Private debt in its various forms (cheques, credit cards, promissory notes and so on) are converted into the most sought-after

'promise to pay' at the top of the hierarchy of promises. This the state's issue of money that is accepted in payment of taxes and final settlements. This transformation of privately contracted debts into money is achieved by complex linkages between the banking and financial system and the state and, in turn, between the state and its own creditors (bond-holders) and debtors (taxpayers). These relations are mediated by a central bank when it accommodates the banking system's private promises to pay by accepting – that is, buying – them with sovereign money. (As we noted in the previous chapter, the critical development in England was the discounting of the provincial bills of exchange by the Bank of England.) The various forms of private debt are thereby monetized – that is to say, exchanged for sovereign promises to pay that are fully transferable/acceptable anywhere within the monetary space defined by the money of account. These arrangements organize debt into a hierarchy according to criteria of risk of default – that is to say, a stratification order of debt/credit topped by the most sought-after credit – usually, but not always, a sovereign state's promise to pay. This stratification ranking occurs at every level and is organized according to differential rates of interest. The rate at which the central bank lends to the banking system as a whole is the 'base' rate. The dependent rates offered by the banking and financial system are calculated in accordance with an assessment of credit risk and profitability. For example, consumption loans to 'high-risk' borrowers may be several times greater than the basic rate. As we shall see, non-monetized forms of private credit ('near money') may achieve a limited degree of transferability – for example, endorsed cheques circulate in many economies.

The complex and constantly changing system is, as we have seen, the subject of quite divergent academic economic analyses. These tend to be driven more by theory than by a concern with the ethnography of credit-money creation – that is to say, how it actually happens. In this regard, financial journalists and, sometimes, the participants themselves are the better guides. However, as all sociologists and anthropologists should know, this method has obvious limitations. They would not be surprised to learn that one of the most knowledgeable financial writers in the USA thinks that the Federal Reserve's staff now do not have a very clear understanding of what they are doing, or even what they think that they are doing. Ironically, it would seem that as the monetary authorities have striven, in recent times, to make the system more transparent and subject to formal rules of operation, it has become less intelligible (Mayer 2001). With these caveats and difficulties in mind, the following is an attempt to set out an 'ideal type' of the social structure of monetary production in capitalist economies.

By the late nineteenth century, precious metal coinage had long since ceased to be the main *form* of money within the leading economies. Notes were convertible, as in principle were the book entries in bank accounts by which most of capitalism's business was routinely done. But the ratio of gold reserves to these other forms of money (including base metal coins) fell at a rapid rate. The guarantee was wearing thin. At the international level shortages of gold became increasingly acute (de Cecco 1974). Indeed, it is widely accepted that the gold standard did not, and could not, operate in the manner described in the orthodox commodity-money theory's specie-flow mechanism, enunciated by Hume in the eighteenth century.¹ In the first place, international transactions were denominated in sterling, and therefore it is more accurate to refer to a gold-sterling standard (Williams 1968; Ingham 1994). Second, the media of exchange and payment took the form of sterling credits produced by the City of London merchant-bankers. Like the domestic system, the international gold standard was able to operate with 'amazingly small reserves' (Bloomfield 1959: 26). None the less, the holding of reserves and the level of co-ordination required for the payments system to operate at both domestic and global levels greatly enhanced the power of central banks and the centralization and integration of monetary systems of the leading economies (Ingham 1984; Helleiner 1999). A 'pure' credit theory of money began to be considered at this time; but even the more astute writers – such as Simmel and Wicksell – did not think that the 'pure' functions of money could be performed without a precious metal guarantee (see chapters 1 and 3). However, the credibility of money is now based *exclusively* on the credibility of promises to pay. The institutional fact of money is now no more than this credibility, as it is established by the rules and conventions that frame and legitimize the acts of borrowing and lending by all the agents in the monetary system.

The Social Structure of Capitalist Credit-Money

In a 'pure' credit-money system in which private debts are monetized, the question of the production of money may be considered in terms of demand and supply for credit. But the approach taken here differs in a number of important respects from the treatment in orthodox economics. First, supply and demand cannot be seen as independent variables in which one side determines the other – as in the endogenous-exogenous money debate. As emphasized in Part I, money is not a mere commodity that is amenable to this form of analysis. For

example, as we shall see, the state's demand for money – that is, its debt – is at one and the same time the basic source of the system's supply of money. Second, both the supply and demand for money are controlled and regulated according to criteria of creditworthiness – that is, they are socially constructed.

The private sector endogenous demand for money

By the late twentieth century, it had become clear to the monetary authorities of all major capitalist economies that central banks have very little choice, *in the short term*, but to supply funds to enable the commercial banks to balance their books and to augment their reserves after they have met the demand for loans. Apart from any other considerations, not to accede to these requests would jeopardize the liquidity of the payments system. This was recognized by the Radcliffe Report in the UK in 1959 (Smithin 2003: 44, 96), but it took the failure of monetarism for it to be officially endorsed. '[M]onetary policy can never, at least in a world where money includes deposits with private sector banks, be simply a question of the authorities deciding on the quantity of money it will allow to circulate in the economy' (Bank of England 1993). However, as we shall see, the appearance of central bank control is carefully managed, but actual control is limited to the imposition of a base rate of interest that is considered to be commensurate with stable money prices.

Within this constraint, access to the credit-money that fuels the capitalist economy is determined by an assessment of creditworthiness, by what is considered to be an appropriate rate of interest, and by as much exploitation as the level of competition in the credit market allows. Loans by the banking system are priced in accordance with a profit-maximizing strategy that includes a calculation of the degree of risk of default. First, risk is taken to increase with the length of the term of the loan; second, it is considered to vary with the purpose of the loan – investment, especially if collateral is provided, is less risky than loans for consumption; and third, the borrowers' ability to repay – creditworthiness – is assessed. Apart from the higher levels of capitalist finance, credit rating is now a formal and almost completely depersonalized procedure, based on computer database information provided by the borrower and the credit rating agencies.² Credit rating and the production of a stratification order of risk are a clear example of what economic theory sees as 'market failure' – that is to say, where price and, in particular, a single price will not clear the market by bringing supply and demand into equilibrium. A single interest rate considered high enough to cover all risks of default

would also deter low-risk, creditworthy potential borrowers. Moreover, no rate would be high enough to deter the reckless, desperate and untrustworthy. Consequently, credit is 'rationed' (Stiglitz and Weiss 1981).

Thus, there are marked inherent structural inequalities in the credit market – clear examples of 'Matthew effects' such that 'for everyone that hath shall be given . . . ; but from him that hath not shall be taken away even what he hath' (the following is based on Ingham 2000b). In the upper levels of the capitalist system, credit relations may involve a significant degree of *lender* dependency. As the adage has it: if you owe the bank £5,000, you are in trouble, but if the sum is £50 m, the bank is in trouble. Frequently, such high levels of indebtedness and default need to be written off in order to preserve the payments system itself. In 1998, the US 'hedge fund' Long-Term Capital Management collapsed with debts to the banks of over \$100 bn. It was rescued, at the behest of the US Federal Reserve, by a Wall Street consortium. Things are different at the other end of the scale. In Britain, about 25 per cent of the adult population does not have a bank account or access to credit in the formal financial system. They fall prey to loan sharks' exorbitant annual rates of interest of over 250 per cent on loans of cash and physical coercion in their door-to-door collections. Workers and recipients of welfare payments have to use 'cash centres' or 'cash converters' to cash their cheques, and are typically charged an 'introduction fee' and up to 10 per cent of the value of the cheque. In the late 1990s 10 per cent of the UK population cashed more than £1.5 bn in more than 1,000 such 'centres'.³

In general terms, we may refer to three very general types of credit relation or class position in relation to the 'social relations for the production' of money. The top level is constituted by the basic capitalist practice of borrowing in order to make more money. A middle level largely involves borrowing for consumption. (The degree of prudence will vary as Dickens's Mr Micawber noted and warned.) At the time of writing, the populations of many advanced capitalist economies continue to add to their already historically unprecedented levels of household indebtedness. The bottom level remains outside the credit-money-producing circuit and uses cash and quasi-barter (see also the discussion of local exchange trading schemes (LETS) in chapter 9).

In many of the advanced economies, cash is a marginal form of money, used in the criminal and informal economies, amongst other things, to avoid participation in the fundamental monetary relation – taxation. For obvious reasons, it is difficult to produce accurate estimates of the sizes of informal economies, and they vary consider-

ably (see the discussion of Argentina in chapter 8). However, the weeks leading up to the introduction of the euro in January 2002 led to the hurried disposal of large hoards of various national currencies. The movement out of deutschmarks into US dollars by East Europeans is thought to have had a significant impact on foreign exchange rates. By December 2001, the increased level of cash payments for luxury goods in Spain and Italy, for example, indicated that their 'black' economies were between 20 and 30 per cent of GDP (*Financial Times*, 13 December 2001, p. 10). The widespread circulation of *foreign cash* generally indicates a state's weakness and inability to impose an effective taxation system that will ensure the use of its money.⁴

The banking system and the supply of money by the 'multiplier'

During the 1920s, it was beginning to be realized that the banking system's pyramid of debts was itself a means of producing new money.⁵ Banks accept deposits on which they pay interest, and these debts (*liabilities* to their creditors) form a *basis* for lending. However, banks also extend loans unmatched by incoming deposits. These create deposits against which cheques may be drawn and are debts owed to the bank (*assets*). These debts become money and find their way, as deposits, into other banks in the system. Banking practice has developed through convention and regulation to the point where only a small *fraction* of deposits (*liabilities*) from creditor customers are kept as a reserve out of which to pay these depositors, should they wish to withdraw their money. As reserves earn no interest, banks strive to operate with the smallest fraction they can. Assuming that a bank operates with a 10 per cent fractional reserve, for every £100 deposited (*liabilities*), it is able to advance loans (*assets*) of £90. As it is spent, this monetized debt appears in bank accounts elsewhere in the system. In turn, further deposits are created against which these other banks may extend loans – in the first instance, a loan of £81 (£90 minus £9 (10 per cent fractional reserve) = £81). Eventually, the initial deposit of £100 could produce £900 of new money in the form of loans.

In accordance with the conventions of double-entry bookkeeping, the totals of deposits (*liabilities*) and loans (*assets*) in the *entire system* cancel each other. This gives the *appearance* that there exists a one-to-one relationship between deposits and loans, as is suggested by common sense – and, until fairly recently, endorsed by academic opinion. However, the accountancy rules and conventions do not capture the *dynamic* money-creating role of capitalist banking. As

the great French historian Marc Bloch observed, the 'secret' of the capitalist system consists of 'delaying payments and settlements and consistently making these deferrals overlap one another' (quoted in Arrighi 1994: 114). The time frame of the delays and deferrals that makes possible the expansion of both sides of the banking systems' balance sheet is established by conventional norms. There are significant cultural differences in this respect that would appear to impede the development of a truly global money market. East Asian economies – in particular Japan, as we shall see – operate with long and sometimes indefinite time frames in which debts are rolled over and extended. For the system to continue to produce money, debts must not only be repaid, eventually, but be repaid within the conventional time frame. The norms that prescribe the conventional delays and deferrals must be observed. In Keynes's phrase, the banks must 'march in step' in the construction of this systemic balance sheet of debits and credits in order to produce monetary expansion. Any disruption of the system's routines risks the collapse of the credit pyramid and the 'disappearance' of the money that is constituted by the creditor-debtor relations.⁶ (As we shall see, in order that this complex system of credit and debt is not disrupted, it is imperative that every bank has access to short-term loans (overnight if necessary), usually from the central bank, in order to balance their books.)

However, not every private debt is fully monetized in this way. All money is credit, but not all credit becomes money. Private sector capitalist expansion typically involves the proliferation of debt contracts and private credit instruments with limited transferability (known as 'near money'). Usually, they will not be considered sufficiently creditworthy by the formal banking system. This is the site of an important struggle within capitalism between the creation of indigenous credit networks by firms and the banks' efforts to control the terms on which credit is created. The banks' privileged access to the state money at the top of the hierarchy gives them an advantage. As this credit is created outside the formally regulated system which has direct access to central bank money, the process is referred to as 'disintermediation'. As we shall see, this is potentially destabilizing, as, for example, in the UK's 'secondary banking crisis' in the early 1970s (for the USA, see Guttman 1994). Today, in a similar process known as 'securitization', enterprises raise money from outside the banking system by selling claims on their assets, including future income, directly to buyers. As the credit creation is not directly 'intermediated' by banks, it is frequently argued that this market-based raising of finance might bring about the 'end of banking' (see Martin 1998; Mayer 2001). However, this confuses a recurrent

cyclical pattern in capitalism with a long-term secular trend. 'Disintermediation' and the issue of private debt, or 'near money', occurs in all expansionary phases of the capitalist economy. None the less, it creates instability unless it is fully monetized by being discounted by banks that, in turn, have access to the central bank's sovereign money (see the discussion of Minsky's financial instability hypothesis in chapter 8). Furthermore, the purchase of these private credit instruments is made with borrowed bank money. The question of the degree of accommodation of privately created credit is, arguably, the fundamental dilemma faced by monetary authorities.

Public sector demand for money: state debt and the creation (supply) of 'high-powered money'

If a state is viable and can tax effectively, its promise to pay its debt (demand for money) will be the most sought-after, and consequently the basis for the creation of money (supply) in the banking system. The origins of the relationships were outlined in the previous chapter. In exactly the same way as a private clearing bank's creation of money by lending to a customer, the central bank creates a deposit for the state by accepting its promise to repay the loan – usually in the form of a government bond. The state is able to pay its debts to suppliers with cheques drawn on its account at the central bank. These will first be paid into the recipients' accounts held at their commercial bank, which, in turn, presents them at the central bank for payment. As the commercial banks are required to hold some of their assets as cash deposited with the central bank as liquid reserves for crisis management, the payments mechanism increases the commercial banks' reserve holdings. Mainstream economic theory refers to this as 'high-powered money' – that is, the 'base' money for the 'credit-money multiplier' of the most sought-after promise to pay. Accordingly, government borrowing and spending will, *ceteris paribus*, increase the potential to supply credit-money – that is, the capacity of the banking system to issue new debt.

Rather than issuing new bonds, a government and its central bank might engage in 'open market operations' in an attempt to regulate the supply of money. A government might instruct the central bank to buy or sell its existing securities on the money markets. On the one hand, if the central bank buys back bonds from the private sector, the effect is to permit a possible increase in the supply of credit-money on the base of increased reserves, as in the case of the sale of new bonds. On the other hand, the central bank may be instructed to sell bonds to the commercial banks in order to reduce their reserves and limit their

capacity to create credit-money through lending. In this model, cash reserves of high-powered money are held to operate exactly as bullion reserves would do under a precious metal standard. It was on these grounds that 'monetarists' argued that high-powered money could be controlled precisely enough to regulate the total money supply (exogenously determined money supply). We have seen in Part I that conceptual and methodological problems in measuring money quickly led to the abandonment of the doctrine. But these difficulties should not lead to the dismissal of the significance of so-called high powered money, as in some heterodox and post-Keynesian economics. As we have seen, it is not a question of endogenously or exogenously determined money; rather, these two terms express the two sides of the struggle over the production of credit-money that is typical of capitalism.

The experience of the late twentieth century would suggest that attempts *directly* to control the aggregate supply of money with high-powered money, or by any other method, are unworkable. The main instrument of monetary policy is now *indirect* control, through interest rates, of the propensity for indebtedness – that is, the demand for credit-money. Indeed, most central banks no longer give much weight to monetary aggregates. By its very nature, the creation of money in the capitalist system is indeterminate. Disintermediated credit creation is the norm, and the gap between the situation on the banks' balance sheets and the actual levels of debt may be considerable.⁸ It would appear that '[i]n the real world banks extend credit, creating deposits in the process, and look for the reserves later. The question then becomes one of whether and how the Federal Reserve will accommodate the demand for reserves. In the very short run, the Federal Reserve has little or no choice about accommodating that demand; over time its influence can obviously be felt' (US central banker Alan Holmes, quoted in Henwood 1997: 220).

Any influence is not felt directly, but as a consequence of the fact that the central bank has the power and discretion to act as 'lender of last resort' in the event of the banks' inability to maintain the efflux and reflux of the payments system, without which the money disappears. The banks are ultimately dependent and, apart from any other consideration, have an interest in conforming to the central bank's requests concerning credit-money creation. The central bank's power derives from its production and control of the most sought-after promise to pay.⁹ During the 'secondary banking' crisis in the UK in the early 1970s, for example, the Bank of England organized a 'life-boat' for sinking banks, in return for which the survivors were invited 'to submit themselves to voluntary supervision' (quoted in Mayer

2001: 113; for further illustrations, see Mayer 2001: chs 5 and 6). Other less compliant financial firms might find themselves excluded from any rescue.

The creditworthiness of the state's high-powered money: budgets, taxes and bonds

Modern neo-chartalism, outlined in chapter 2, provides an alternative to the orthodox economic emphasis on the exogenous origins and impact of high-powered money that goes beyond merely asserting the contrary endogenous money position (Wray 1998; Bell 2000). It is acknowledged that governments can spend and create high-powered money at will, but it is argued that this could lead to excess reserves in the banking system that would eventually force down the interest rates (Bell 2000). The excess can be drained in two ways: first by taxes, and second by sales of government bonds to the banking system. In the first instance, taxpayers' cheques will debit their bank's account at the central bank. Second, government can instruct its (central) banker to offer bonds for sale to the banking system to drain an excess caused by its own spending. Thus, it is argued, Treasury bond sales are not a *borrowing* operation at all, but a means of removing excess reserves from the banking system in order to maintain interest rates.

Neo-chartalists seek to establish that the state does not in fact have *need of its citizens' money* from taxation and bond sales in order to spend.¹⁰ But, as we noted in Part I, they appear to have missed the significance of the *political* nature of both *origins* and *functions* of the linkage between state spending, taxes and bonds in the capitalist system. These links did not originate, for example, in the function of draining excess reserves that might exert downward pressure on interest rates. Rather, they were the historical consequence of an emerging bourgeois class's resistance to the attempt of a powerful sovereign arbitrarily to control spending and taxation. Subsequently, the concern with the balance between spending, borrowing and taxation in, say, principles of sound money has become a matter of an implicit settlement between the state, capitalist 'rentiers' and the tax-paying capitalist producers and workers. Moreover, the stability of any settlement is greatly increased by its legitimization in terms of economic principles and practice. Ultimately, the political balance of these economic interests that the state is able to forge is concerned with checking its arbitrary power and establishing its creditworthiness – that is, its ability to pay its debts. This is not so much a matter of what the state is capable of in a *de facto* practical sense, but of how this is interpreted as legitimate or not by groups and classes (including the

state itself) whose struggle for economic existence produces money. This is the actual function of sound money principles. Holders of Treasury bonds must be encouraged to believe that the state can pay interest and redeem the bonds.

The state and the market *share* in the production of capitalist credit-money, and, as I have stressed, it is the *balance of power* between these two major participants in the capitalist process that produces *stable* money. First, the issue of government bond issues and open market operations can only take place if the terms on which they are offered are acceptable to the state's creditors – that is to say, if they are convinced, by whatever means, that the yields will adequately cover prospective inflation. In simple terms, the rules (discussed below) by which money is produced in the capitalist system depend, ultimately, on the willingness with which a state's debt will be accepted by an independent class of rentiers. Taxation and state securities are two essential elements, or social bonds, in the capitalist state. They provide the *actual* flows of money by debt creation and destruction. This takes place according to agreed rules, expressed in a budget, that satisfy conflicting and competing interest groups and render the process meaningful and legitimate. Any disruption has very serious consequences.

The Working Fiction of the Invariant Standard

We should remind ourselves of the importance of the working fiction of an invariant monetary standard of abstract value. Inflation makes it difficult to calculate real rates of return, and the uncertainty hinders the contracting of debt for investment and the creation of value.¹¹ Most importantly, monetary depreciation may increase to a point where it is no longer possible to set a high enough rate of interest that will generate a positive rate of return for creditors without greatly increasing the likelihood of debtors' default. 'All permanent relations between debtors and creditors, which form the ultimate foundation of capitalism, become so utterly disordered as to be almost meaningless... There is no subtler, no surer means of overturning the existing basis of society' (Keynes 1919: 220). Again, it is the long-term rate of interest on state debt that sets the benchmark.

Until the twentieth century, the attempt to create an invariant standard consisted in the administrative *fixing* by the state's (later central) bank of an exchange rate between nominal money and a precious metal that also had a market value. (How this affected the price level need not concern us here, beyond noting, once more, that

the metallic standard was intended to generate trust in money as a store of value, rather than to establish specific exchange ratios between money and other commodities.) Today's pure credit-money standards have had to develop quite different methods for establishing credible money. These are ostensibly based on what is taken to be the objective knowledge of the economy provided by economic science, and how this is enacted by the state and its bank. The working fiction is now more clearly a function of the assessment of *both* the government's fiscal practice and its central bank's monetary policy. It is the role of the central bank to establish credibility in an invariant monetary standard in relation to the creditworthiness of fiscal policy and practice. Since the abandonment of monetarist attempts precisely to control the quantities of money in the system, credibility in stable money is assessed in relation to *procedural correctness* in arriving at interest rates that are intended to regulate the willingness to become indebted.

Current orthodoxy for establishing credibility in an invariant standard has developed out of the restructuring of the balance of power between the major economic groups and classes since the hyperinflation of the 1970s. How this new settlement was produced is discussed in the next chapter; here the basic elements of the monetary authorities' current practice are outlined (see, for example, Blinder 1999; Blinder et al. 2001; Issing 2001). It is characterized by the following general features.

The basic elements of monetary policy are generally formulated by the government, through its ministry of finance or treasury, in relation to the fiscal position – for example, the size of the budget deficit and the level of government expenditure, as discussed above. Additionally, central banks, in conjunction with the ministry of finance, construct substantive fiscal and financial rules of thumb, considered to be non-inflationary, for the state and its agencies to follow. For example, the 'Taylor rule' models interest rates as a linear function of the 'output gap' and the deviation of inflation from the explicit 'inflation target'. The issue is posed *explicitly* in the academic policy literature as an empirical question of the relative merits of rules versus discretion in the central bank's conduct of policy. Implicitly, it is a question of trust, in which simple rules have gained favour because they 'can be seen... as the means to ultimately ensure that credibility is earned and maintained, because they can be monitored by third parties' (Issing 2001: 42). But even their proponents do not advocate them as *prescriptive* economic policy tools, because their very simplicity does not provide a reliable economic analysis.

Most central banks now have a significant degree of independence in deciding the interest rate that is consistent with these policies and

achieving monetary stability. The intention is to depoliticize monetary policy by removing it from the direct influence of those interests most likely to exert inflationary pressures, most notably governments and their electorates' demands.

The primary policy objective of controlling inflation, with a few notable exceptions, is presented as an explicit inflation target in a range usually between 2 and 4 per cent. A central bank committee consisting of some of its own officials, technically expert co-opted economists, and, in some cases, representatives of the major economic interest groups, decides, after taking into account any rules, what short-term rate of interest will best achieve the target. Monetary authorities (primarily the central bank and ministry of finance) attempt to achieve, by means of regular and frequent meetings, a record of consistency in decision making in relation to the application of their own understanding of the monetary situation and any substantive rules that might have been formulated. (However, it should also be noted that this aim for consistency is frequently jeopardized by rivalries and conflicts between the two institutions and the indeterminacy of the experts' econometric models and data.)

It is now maintained that a record for consistency of decision making is best achieved by 'transparency' – that is to say, the open communication to the public realm of a reasoned case for any decision.¹² Consistency can be accomplished only in relation to a consensus on the meaning of the monetary situation as described by economic theory and econometric models. In this situation, as we shall see, the monetary authorities are engaged in the creation of an 'epistemic community' of understanding based on theoretical economic knowledge and routine practice. (However, transparent disagreements between experts may undermine the aim of consistency; see n. 18.) In short, the manifest aim is to depoliticize monetary policy, and place it in the hands of institutionally autonomous experts whose claim to neutrality is based on the application of positive economic science.

Once the state's fiscal creditworthiness has been formally rated by credit-rating agencies such as Standard and Poor and Moody's, or judged by an IMF or OECD report, and the central bank has established its credibility, then, the 'working fictions' are traded, in the forms of currencies and government bonds, on the global money markets. As an eminent American economist recently explained, 'central banks have fully established their anti-inflation credentials and the bond markets hold them accountable by the hour just in case there is a temptation to lapse' (Dornbusch 2001: 15).

Economic theory, performativity and ideology

These current arrangements are the result of two related changes in the social structure of monetary systems at the end of the twentieth century. The first involved the expunging of inflation from the late 1970s onwards (see chapter 8). In a second change, the money markets, especially those in state bonds, became organized more impersonally, as they globalized after the 'big bang' deregulation of the major financial markets (see chapter 8). Hitherto, the buying and selling of government securities in 'open market' operations had been largely domestic affairs operated by a closed personal network, with very little public disclosure. The replacement of personal by institutional ownership and the growth of impersonal transnational markets required quite a different structure in order to operate. Formal, transparent rules and the formation of epistemic communities, based on a shared understanding of the markets' rules and the meaning of macro-economic indicators, replaced socially embedded trading. Markets can function only on the basis of shared understandings that give meaning to changing events and circumstances (H. White 1981). These new organizational arrangements are a means of creating common definitions of the situation.

As ever, economic theory has played an important role in the reconstruction of the latest versions of the practice of sound money. In particular, rational expectations theory may be seen as an expression of the changes outlined above. In this regard, academic economics sees the relationship between theory and practice as one in which the latter is brought closer to the theoretical optimum. However, on closer inspection, it is clear that the expertise and transparency of monetary policy making is not securely grounded in the basic tenets of mainstream monetary economics.¹³ To be sure, central bankers pay lip-service to the basic tenets of orthodox monetary theory, especially the long-run correspondence of the quantity of money and the level of prices. But they acknowledge that this cannot guide their practice in dealing with what they see as short-term disequilibria. It is conceded that there is no satisfactory way of constructing empirically based models of these short-run effects, or of judging the relative merits of the models (Issing 2001: 7, 21). If 'the key issue of exactly how monetary policy impacts on "real" variables over time is still only imperfectly understood' (Issing 2001: 7), how, then, do central banks and their experts actually go about their business?¹⁴ It seems that they do as they have done for several decades. Central banks depend on accumulated *conventional* wisdom on the most important empirical

signals of impending inflation.¹⁵ These conventional signals are, of course, modelled in *ad hoc* econometric analyses, but 'a straightforward selection of the "best", if not the "true", reference model becomes a matter of *faith*' (Issing 2001: 40, emphasis added). If contemporary central banks are not applying the agreed, verified results of economic science to monetary policy, what do these acts of faith intend? What are twenty-first-century central banks doing?

Manifestly, they are attempting to establish a transparent procedural correctness that is assessed according the agreed organizational arrangements and the current macro-economic thinking. The construction of the institutional fact of stable money is established, in part, by the performativity of economic theory and practice conducted by experts (Searle 1995). The expert decisions are performative in the sense that the resulting utterances are intended to bring about the circumstances that they describe – as when Alan Greenspan defined the US Federal Reserve's role as 'fulfilling the expectations it had created'. Performativity is seen very clearly in the efficacy attributed to inflation targeting – that is to say, the belief that the mere setting of a target will bring about the intended result. It is widely held, for example, that the persistent and protracted deflation in Japan could be halted, and even reversed, if the central bank were to set a high inflation target. Moreover, it is important that the process of defining the situation – that is, the 'impression management' of the 'performance' – should be skilled (Goffman 1969 [1959]). Central banks 'must create an impression of competence... and quiet acquiescence' (Blinder et al. 2001: 23).

The two audiences to which central banks direct their performances are the public and the markets (see Blinder et al. 2001). 'Public' refers to *labour* and *productive capital*, and 'markets' are the *money markets* – especially the market in government bonds. These are the three major economic classes whose inflation expectations (or 'definition of the situation') will have a determinant impact on the stability of money's purchasing power. With the weakening of the alliance between the two producer classes after the 1970s, the markets are considered to be the most important of the monetary authorities' audiences, and '[s]ince this channel is dominated by expectations "convincing the markets" is part and parcel of monetary policy-making' (Blinder et al. 2001: 25). And, as we have noted, the money markets' assessment of the credibility of the commitment to stable money is now immediately decisive in its effect on the long-term interest rates of government bonds. With operational independence and transparency of deliberations established, any cut in short-term interest rates, for example, is less likely to be interpreted as a politically motivated loosening of monetary policy in response to demands from consumers, producers or the

government. Consequently, the money markets are less likely to demand and force higher compensatory rates on long-term bonds. Indeed, it is a measure of the success of the new practices that recently, on occasion, long-term interest rates have fallen to a level below those of the short-term rates. (This represents a reversal of the normal ratio, in which the market risk of long-term uncertainty is expressed in higher interest rates.)

In Part I it was argued that orthodox commodity theories of money have also played an ideological role in masking the social character of the creation of money. But the very nature of recent changes in the production of money would now appear to make it more difficult to *naturalize*, and ideologically to conceal, the social construction of money.¹⁶ However, modern independent central banks continue to attempt ideologically to *universalize* social and political relations. At the most fundamental level, this is apparent in the concepts of both neutral money and a monetary policy that implicitly denies or conceals inequalities and opposing interests in the actual process of creating money. First, it is maintained that inflation is an unambiguous cost, borne equally by all members of society, and that it is possible in principle, if not yet accomplished in practice, to theoretically establish an optimum monetary policy that would minimize these costs (Issing 2001; Kirshner 1999). Second, monetary policy is informed by an underlying meta-theoretical assumption that there exists a discoverable, *naturally* optimally efficient state of affairs in the 'real' economy, which contains natural levels of unemployment, rates of interest and so on. In this, there can be no 'real' basis for opposed interests – only cognitive error and consequent sub-optimal solutions to common problems that have a universal impact. In this conception, the struggle for economic existence can only be the struggle for rationality.¹⁷ However, as we shall see in the following chapter, both assumptions are demonstrably false, and make it difficult to explain the rise and fall of the 'great inflation' of the 1970s.

Following Weber, we might say that the manifest aim of modern central bank practice is to establish the highest level of *formal rationality* of inflation expectations. That is to say, central bank practice, as outlined above, attempts to establish a routine and *procedurally predictable* regime of co-ordinated expectations on the part of the bank and the money and capital markets. Such credentials are established through a record of exemplary policy decisions, which are formally rational in relation to the agreed causes of inflation or economic prospects in general, as pronounced in the epistemic community of academics, policy-makers and practitioners in the financial system. However, Weber also strongly argued that any semblance of *formal*

rationality in terms of predictable, routine conduct must have a *substantive* basis in the predictability of the particular *power relations* that underlie the conduct. The production of capitalist credit-money is at the core of the complex economic 'battle of man with man' – that is between debtors, creditors, taxpayers and government bond-holders. The question of sound finance, like the question of the value of money itself, is part of this struggle. As Wray has pointed out, if high-powered money grew on trees, it would be worth very little (Wray 2004: 106). High-powered money is the result of the struggle between debtors' demand for money and creditors' belief that the state can service its debt, which in turn depends on tax revenues. And it is the need to work for a *taxable* income that gives it value.

Conclusions

As we shall see in the following chapter, the ability of monopoly capitalists to mark up prices, and of labour to mount successful wage claims, in the advanced economies has been moderated by the changes in the structure of power relationships that were outlined above. In short, the shift in the balance of power has been brought about by the intensification of global competition and its corollary – the weakening of trade unions and the creation of deregulated flexible labour markets. To a significant degree, central bank inflation forecasts will be maintained to the extent that this balance of power is also maintained. This is not to say that monetary policy does not have an effect, but rather that it is as *reinforcement* of any balance of power that has been forged. The current arrangements followed on the restructuring of the balance of power during the last two decades of the twentieth century.

Arguably, the most structurally fundamental struggle in capitalism is not that between productive capital and labour, but rather between debtor (producers and consumers of goods) and creditor (producers and controllers of money) classes and centres on two rates of interest – the long and the short. (The state has its own interest as a debtor, but is also the site of the struggle.) Rates of interest represent benchmarks, or terms of reference, for 'settlements' between conflicting groups. The central banks are the main mediators of these struggles, and all the recent changes in their organization and operation express the resurgence of money-capitalist creditor power. Central bankers are presented and, in some cases, present themselves as having the knowledge and capability to control the trajectory of the economy. But in reality this control is severely constrained. First, all the evidence points to the

fact that, at a given rate of interest, central banks must accommodate the private demand for money – that is, the money supply is endogenous. Second, central bank base rates seem relatively powerless to control asset prices in the money and financial markets. Indeed, it is argued that central banks are tempted to 'follow the markets' and deliver the interest rates that are 'embedded in asset prices' (Blinder 1999: 60).¹⁸

As we saw in Part I, the approach taken here rejects the concept of a 'natural' rate of interest that expresses the natural marginal productivity of the factors of production (see also Smithin 2003). Rather, the essence of capitalism is to be found in the calculation of, and switching between, *two possible courses of action* – the accumulation, production and control of credit-money ($M-M_1$) and the production of commodities ($M-C-M_1$) (see chapter 8, also Arrighi 1994; Minsky 1982; Keynes 1973 [1936]). Capitalism consists in the continuous comparison of money market rates and the profitability of satisfying wants by production in firms (Weber 1978: 96–7). Each side of the economy imposes limitations on, and continually threatens to perturb and impede, the operation of the other. For example, real (nominal rate minus inflation rate) rates of interest should neither be high enough to elicit a shift of capital from production, jeopardizing income generation for the servicing and repayment of debt, nor fall to a point that demotivates creditors. But the range of these limits is determined by the struggle between the two relatively autonomous sectors in capitalism's social structure. When the extremes of these limits are reached – that is, to say, in hyperinflation and debt deflation – the struggle may give way to a rebalancing of the power relations and a new settlement.