

economies of the ancient Near East. Here the measure of value was not integrated into a circulating material form. The main function of money of account was in assessing rents and taxes and calculating economic equivalencies between stocks and flows of different commodities. Payment was typically in the basic staple of barley, but could be in a silver equivalent – denominated by the money of account. The value of the Mesopotamian shekel did not derive from its silver weight, but from the monetary equivalency between silver and barley established by the state.

The integration of money of account and means of payment occurred in the wake of the disintegration of the agrarian empires. The widespread use of mercenaries in the ensuing warfare required a reasonably standardized and convenient form of payment that would be widely acceptable across different jurisdictions. These looser relationships between the state, military force and economic exchange weakened the monetary circuit between state and taxation. Mercenaries did not necessarily owe a tax debt to their employers, whilst, on the other hand, they had need of an acceptable medium of exchange. The connection between the mercenary's political freedom, economic autonomy and the extension of market exchange should be noted.

Paradoxically, this loosening of the links between money and political and administrative control eventually led to a greater extension of territorial control in a 'taxation-coinage multiplier'. Mercenary armies developed into Greek city-states with citizen-soldiers and their own sovereign coinage. From these the empires of Alexander and Rome arose. Between 150 and 50 BC, during a century of great Roman imperial expansion, silver coinage increased tenfold, and 'money percolated into a myriad of transactions which had previously been embedded in the subsistence economy' (Hopkins 1980: 110).

Despite the hitherto unparalleled sophistication of the coinage and the extension of market exchange, it should not be forgotten that Rome's overall level of monetization was relatively low by modern capitalist standards (Goldsmith 1987: 58). Aside from the military, there was no wage labour, and money was used mainly for the exchange between taxation and the acquisition of the means of payment through the sale of commodities to the imperial state. The private commercial sector was no greater than it had been in Egypt or Greece, and 'did not in general represent progress' (Goldsmith 1987: 58). Like the emergence of coinage after the fall of Babylon, it was the disintegration of the Roman Empire that created the conditions for developments in monetary practice that became the basis for modern capitalism.

## 6

# The Development of Capitalist Credit-Money

'Credit' operations of whatever shape and kind do affect the working of the monetary system; more important, they do affect the working of the capitalist engine – so much so as to become a central part of it without which the rest cannot be understood at all.

Schumpeter 1994 [1954]: 318

The Banque does not solely belong to its shareholders; it also belongs to the state which granted it the privilege of creating money.

Napoleon Bonaparte (1806), quoted in Crouzet 1999: 76

Accounts of the rise of capitalism influenced by neoclassical economics and classical Marxism have focused, respectively, on the exchange and production of commodities. Money is seen to play a passive role. Changes in its forms and functions are explained as responses to the need for more efficient transactions and to developments that occurred elsewhere in the economy.<sup>1</sup> However, notwithstanding the importance of the free market, machine technology, factory organization and labour-capital relations, the historical specificity of capitalism is also to be found in its distinctive credit-money system.

The idea that the development of credit-money was a force in capitalist development is to be found in the work of writers who were influenced by the German Historical School of economics and, to a lesser degree, in the French *Annales* school of history.<sup>2</sup> '[T]he financial complement of capitalist production and trade', Schumpeter

also wrote, was so important that the 'development of the law and practice of negotiable paper and of "created" deposits afford the best indication we have for dating the rise of capitalism' (Schumpeter 1994 [1954]: 78). The crucial element is that the production of credit-money in a banking system is a self-generating, relatively autonomous process in so far as the 'banks can always grant further loans, since the larger amounts going out are then matched by larger amounts coming in' (Schumpeter 1917: 207, quoted in Arena and Festre 1999: 119). Moreover, Schumpeter believed that the distinctiveness of capitalism was, in part, to be found in the entrepreneur's role as debtor. Although accumulated wealth 'constitutes a practical advantage', usually someone 'can only become an entrepreneur by previously becoming a debtor'. Furthermore, in capitalism 'no one else is a debtor by the nature of his economic function' (Schumpeter 1934: 101-3, quoted in Arena and Festre 1999: 119). From the French School, Bloch captured this same essential element of capitalism with the observation that it is 'a regime that would collapse if everyone paid his debts' (Bloch 1954 [1936]: 77). The essence of capitalism lies in the elastic creation of money by means of readily transferable debt.

As we shall see, capitalist credit-money was the result of two related changes in the social relations of monetary production in medieval and early modern Europe. First, the private media of exchange (bills of exchange), used in merchant networks, became detached from the existence of any particular commodities in exchange and transit, and were used as pure credit between traders. Later, in a crucial further stage of dislocation, bills became detachable from the particular individuals named in the creditor-debtor relation. Signifiers of debt became transferable to third parties, and could circulate as private money within commercial networks (Kindleberger 1984; Boyer-Xambeu et al. 1994). For the very first time, the extensive production of a form of money took place outside the state's monopoly of currency issue. Eventually, such signifiers of debt became completely depersonalized (that is, payable to 'X' or 'bearer') and were issued as bank money; that is to say, the promises to pay drawn on banks became a widely accepted means of payment. With this change, the private capitalistic financing of enterprise on a large scale became a possibility. In a second, and related, major structural change, some states began to finance their activities by borrowing from their wealthy merchant classes. Their promises to repay these national debts became the basis for public credit-money, which existed in an uneasy and uncertain relationship with the coinage.

Orthodox economic explanations imply that the development of credit and modern forms of finance result from economizing on

debt is dislocated from the original debtor  
 thus debt becomes a credit-transferrable

mining and minting and/or as a response to the insufficiently elastic supply of commodity-money to meet the needs of the expansion of commerce and industrial production in capitalism (North 1981). Of course, economic interest was a spur to the development of advantageous monetary practices; but these were made possible by changes in social and political structure that were, in the first instance, only indirectly related to the pursuit of cost efficiency. In the first place, monetary practice, as ever, evolved with regard to the demands made by states in pursuit of their own interests. Second, the particular character of these changes cannot be understood outside the circumstances that were presented by the unique configuration of medieval Europe's social and political structure. The disintegration of Rome left the cultural shell of a civilization coextensive with Christendom, but comprising multiple, insecure, acephalous political jurisdictions (Mann 1986). The evolution of capitalist credit-money was, arguably, one of the most important consequences of these circumstances

### The De-linking of the Money of Account and the Means of Payment

After the fall of Rome in the middle of the fourth century AD, money almost disappeared. As imperial trade and production diminished, and mercenary soldiers' wages no longer needed to be paid, the demand for media of exchange and payment fell considerably. But, most importantly, as we have seen, the fiscal flows of the Roman Empire dried up. This situation held particularly on the Celtic margins of the former empire, where coinage became redundant for two centuries, after having been in continuous use for more than 500 years (Spufford 1988: 9). As the archaeological finds of large 'hoards' of money imply, it was no longer routinely needed. Given the very small silver content of late Roman coins, it is likely that they were simply dumped (Davies 1996: 116-17). The two basic functions of money as a unit of account and a means of payment were unable to operate. The social and political system that was 'accounted for' by the abstract money of account no longer existed.

The resumption of minting on a large scale in the eleventh and twelfth centuries was an expression of the growth of kingdoms, principalities, duchies and local ecclesiastical jurisdictions, which began to emerge from the feudal networks of personal allegiances (Bloch 1962). The silver penny (from the Roman denarius) was the basic coin, but it was produced in a vast proliferation of different weights and fineness by the myriad jurisdictions (Spufford 1986: xix-xx; Boyer-Xambeu et

al. 1994: chs 3 and 5). However, the fragmentation was partially overcome by the use of a common money of account, which the framework of Latin Christianity was able to sustain. In order to establish a degree of fiscal coherence across the loosely integrated Holy Roman Empire, Charlemagne (768–814) imposed a money of account, derived from the Roman system. There were 240 pence (denarii) to the pound (libra) of silver, which, in turn, was divided into 20 shillings (solidii). Only the silver pennies were extensively minted, and these, as we have noted, were of differing weight and fineness. The money of account, based on pounds, shillings and pence, did not necessarily correspond to any of the actual minted coins in use (Einaudi 1953 [1936]; Innes 1913). The two primary functions of money, integrated by Roman coinage in a single object, had become de-linked – ‘le décrochement de la monnaie de compte’ (Bloch 1954 [1936]: 46). The measure of value was a pure *abstraction* for monetary calculation. Payment could be made in kind, or in the freely circulating coins from the different jurisdictions that were given value by the abstract money of account – not by their metallic content (Bloch 1962: 66). This state of affairs prevailed across the whole of medieval Europe, and persisted in some parts until the late eighteenth century. The dislocation of money of account and precious metal coinage means of payment fostered a consciousness of money as dematerialized or ‘imaginary’ in which ‘people acquired the habit of counting in pounds of 20 shillings with each shilling divided into 12 pence’ (Einaudi 1953 [1936]: 230; see also Bloch 1954 [1936]).

It is essential to understand that the ‘imaginary money’ was *invariable*, in that people continued to count in these ratios regardless of the debasement, clipping or deterioration of the actual coinage (Innes 1913; Einaudi 1953 [1936]). By the late seventeenth century, minted pound coins weighed only 7 pennyweights of silver, not the 240 of the money of account; that is to say, 3 per cent of its abstract ratio. None the less, its purchasing power, in relation to the other coins, was the same as it had been at the time of Charlemagne’s decree. Thus, by the late Middle Ages, when people priced things, they had in mind not coins, but commodities and obligations denominated in money of account (Einaudi 1953 [1936]: 230).<sup>3</sup> The *décrochement* of the money of account from the means of payment firmly re-established the abstract monetary calculation that had been practised in ancient Babylon.

Contrary to orthodox economic histories of money, Charlemagne did not intend to provide a standard measure of value as a ‘public good’, in order to facilitate market exchange. Rather, as in all previous monetary developments, the fiscal needs of church and state were most

important – especially ecclesiastical transfers across European Christendom. But the use of a standard money of account across the Christian ecumene did of course eventually provide the foundation for a trans-European market. In response to the quickening of trade and fiscal demands, scores of authorities in many hundreds of mints produced coins – again, it must be stressed, with countless variations in weight and fineness.<sup>4</sup> These circulated freely across European Christendom, and all were evaluated against a benchmark money of account. A list of coins used as means of payment in a large transaction in Normandy in 1473 illustrates the diversity. Nine kinds of coin were itemized: French gold *écus*, English gold nobles, English groats, various French silver coins, Flemish and German silver, and some silver struck by the duke of Brittany. All were rated in terms of the money of account – *livre tournois* – and the total was rounded by adding 7s. 2d. of ‘white money now current’ (Lane and Mueller 1985: 12; see also Einaudi 1953 [1936]: 236; Day 1999).<sup>5</sup>

From time to time, the original Carolingian unit of account of pounds, shillings and pence and coinage were integrated by a standard of value coin that was struck by one of the more powerful kingdoms. In 1226, Louis of France struck the *livre*, or *gros, tournois*, which had the weight and fineness of the ‘imaginary’ *sou* (shilling). For a time, the ‘real’ and the ‘imaginary’ were reunited, at least in the French provinces. But eventually, minting stopped, and the *livre tournois* itself existed only as a unit of account, as in the above example of the fifteenth-century transaction in Normandy.

From the thirteenth century, the most powerful of the emerging states asserted their sovereignty, as Louis of France had done, by proclaiming their own moneys of account, most of which were variants of the Carolingian pounds, shillings and pence (Bloch 1954 [1936]; Spufford 1988; Boyer-Xambeu et al. 1994; Day 1999: 59–109). These were used not only to denominate local coins, but also to impose an exchange-value on the foreign coins that circulated freely across the imprecise and permeable territorial boundaries. Now, as *both moneys of account and coinages varied, monetary relations became extremely complex*. Any coins had multiple values, one of which was declared in the state of issue, but also others, expressed in the money of account of the zone of sovereignty in which it happened to be circulating at the time. The exchange relations between the values were *purely abstract monetary relations*, in the sense that the money of account, not their metallic content, determined the relative values of coined money. In other words, coins and, as we shall see, credit instruments such as bills of exchange were all established, as *money*, by moneys of account. In short, the various media of exchange and payment became money by

being *counted* – not weighed, or otherwise assayed as a valuable commodity (Boyer-Xambeu et al. 1994: 6).<sup>6</sup>

Under these circumstances, monetary policy involved manipulation of one or both of the two elements: the weight and fineness standard in an actual coin, and the valuation of the myriad coinages in existence in relation to the money of account. In the first instance, policy was driven by two contradictory aims. On the one hand, monarchs gained extra seignorage profit by reducing the metallic content of coins. (Some of their debts could be paid in bullion rather than coinage.) However, given the promiscuous circulation of coins, monarchs also had an interest, on the other hand, in extending the issue of their own coins. This could be achieved by the imposition and effective collection of taxes, but in the typical conditions of the weaker states this also required the maintenance of an acceptable metallic content – especially for the large-value gold coins that were used as stores of value.

It must be stressed again that variations in metallic content did not have any obvious and direct impact on prices, as orthodox economic theory maintains (see Fischer 1996).<sup>7</sup> Even if states had direct control of sources of precious metal, it was much easier to impose and manipulate a sovereign money of account – that is to say, to declare a value of existing coins in relation to an ‘imaginary’ standard coin that need not be minted. The devaluation and revaluation of money was achieved by ‘crying down’ and ‘crying up’ the money of account (Innes 1913). Depreciating the nominal value of the coins – that is, ‘crying down’ the coinage – was an alternative to increasing the tax rate as a means of increasing the monarch’s purchasing power. It would be declared, for example, that an increased number of pennies were equal to the money of account of, say, a florin. However, this strategy was a short-lived expedient, as other prices were soon adjusted upwards in order to gain sufficient devalued coins to pay for the increased taxation.<sup>8</sup>

In short, medieval money was produced in a struggle for control of bullion, coinage and the money of account; it was anarchic and chaotic, but the turmoil provided the conditions for a significant monetary development (for a graphic description of the confusing complexity, see Day 1999: 59–110).

### The De-linking of the Money of Account and the Evolution of Capitalist Credit-Money

The separation of moneys of account from means of payment and the free circulation of coins with multiple territorially determined values

had two important implications for the development of modern capitalist banking and its distinctive forms of money. First, the circulation of coins outside their jurisdiction of issue increased the need for money-changers, whose activities provided the basis for the re-emergence of *deposit banking* (Usher 1953 [1934]; Mueller 1997). Second, and more importantly, these particular circumstances of anarchic coinage and increasingly long-range trade provided the stimulus for the development of the *bill of exchange* into a form of transnational private money denominated in an agreed money of account. Eventually, when the advantages of these new forms of money had become obvious, and where states were strong enough to enforce the transferability of debt, capitalist credit-money came into being. Again, it should be stressed that this was not a straightforward process dictated simply by a growing awareness of the efficiency of the new forms of money. The actual outcome was produced by particular circumstances, which were always accompanied by conflicts of economic and political interest.

By firmly establishing the practice of abstract money accounting, the fortuitous separation of money of account from means of payment laid the foundations for these innovations. The conceptual distinction between, on the one hand, money as money of account (‘description or title’) and, on the other, money as means of payment (‘the thing which answers to the description’) would be of no practical significance if the thing always answered to the description, or if the description referred only to one thing (Keynes 1930: 4, emphasis original). However, the de-linking opened up the possibility that a range of ‘things’ might be taken as answering to the ‘description’ and could, therefore, be used as means of payment. By the late fifteenth century, Pacioli, in his treatise on double-entry bookkeeping, listed *nine* ways by which payment could be made. In addition to cash, these included credit, bill of exchange and assignment in a bank (Lane and Mueller 1985: 6). Both these developments – money changing/deposit banking and the use of credit instruments – were the result of the geopolitical structure of late medieval Europe. On the one hand, political and social order was sufficient to sustain an expansion of commerce; on the other hand, monetary anarchy – especially competing moneys of account – created difficulties in making payments.

It is possible to discern in these complex circumstances the gradual development of four elements that culminated in capitalist credit-money. First, the (re-)emergence of banks of deposit in the late thirteenth century; second, the formation of public banks, especially in Mediterranean city-states in the fifteenth century; third, the widespread use of the bill of exchange as a form of private money used by

the international merchant-bankers/traders during the sixteenth century; and fourth, the very gradual depersonalization and transferability of debt in the major European states during the seventeenth and early eighteenth centuries, which transformed the private promises to pay into 'money'.

In this regard, the most decisive final development was the integration of the bankers' private bill money with the coinage of sovereign states to form the hybridized, or dual, system of credit-money and a metallic standard of value. It was the late twentieth century before the latter finally disappeared to leave money in its pure credit form.

### 'Primitive' banks of deposit

Early medieval money-changing 'bankers' (*bancherii*), whose services were essential in the monetary anarchy of multiple and overlapping coinages and moneys of account, also took deposits of cash for safe keeping, which eventually permitted the book clearance of transfers between their depositors. However, these early banks did not issue credit-money in the form of bills and notes, and it is largely for this reason that they are referred to as 'primitive' – that is to say, non-capitalist (Usher 1953 [1934]: 264).<sup>9</sup>

In this regard, as we saw in relation to ancient Mesopotamia and Egypt, it is important to distinguish these two distinct bank practices – 'book' clearance of credit and debt and the 'creation' of deposits by lending. Book transfer and clearance between depositors as a means of payment come into existence when a sufficient number of deposit accounts are opened in single enterprise. Here the 'book' money exists as a currency substitute. Payment by bank transfer was, for example, countenanced by a Venetian ordinance of 1421 – *contadi di banco* (bank money), in addition to *denari contadi* (coined currency) (Usher 1953 [1934]: 263). The banker could also use some of the deposits to make loans or invest in trade, without depriving the depositors of the use of their deposits – unless of course they *all* wished to use them at the same time. Both practices augment the stock of public currency; but this is limited to the particular credit relations that actually exist between the parties involved. In other words, there exists a complex network of interpersonal credit relations orchestrated by the bank. Transfers between accounts had to be conducted in person in the presence of the banker, as they were in the banks of the ancient and classical world (Usher 1953 [1934]; Weber 1981 [1927]). Written orders were still illegal, although they were increasingly being used. But these were restricted to very small personalized networks, as in

sixteenth-century Venice, where 'the merchants rubbed shoulders with one another every day at the Rialto' (Day 1999: 37).

But accepting deposits, book clearance of credit and the lending of coined money 'merely transfers purchasing power from one person to another ... [b]anking only begins when loans are made in bank credit' (Usher 1953 [1934]: 262). This creation of credit-money by lending in the form of issued notes and bills, which exist independently of any particular level of incoming deposits, is the critical development that Schumpeter and others identified as the *differentia specifica* of capitalism. The issue of credit-money, in the form of notes and bills, requires the depersonalization of debt, which enables the transferability of promises to pay. These can then circulate outside the network of any particular bank and its depositors. The transformation of the book clearance of credit transfers between depositors into depersonalized, transferable debt slowly developed with the emergence of public banks and the private bankers' bill of exchange.

### Early public banks

What Weber referred to as eighteenth-century capitalism's 'memorable alliance' between financiers and states originated in fourteenth-century Mediterranean city-states. The 'primitive' deposit bankers and money-changers had to purchase licences from the city governments and perform various public functions, in return for which they received protection. In fourteenth-century Genoa, for example, bankers converted currencies for the commune, sought out forged or forbidden coins and generally supervised the circulation of the coined currency. The government required the bankers to make their records available for inspection and to produce guarantors for outstanding debts. In return, the government backed the bankers' credibility by recognizing their book entries as proof of transactions in bank lending and transfer between accounts. Most importantly, the city governments became the banks' largest clients. Public banks were established at Barcelona in 1401 and at Valencia and Genoa in 1407. Venice's Banco della Piazza di Rialto, founded in 1587, also accepted bills of exchange payable to its depositors and converted the state's debt into transferable bonds. However, the early public banks did not transform the state's debts into 'new' money by the issue of freely transferable or circulating notes and bills based on the state's promise to repay its debts (Usher 1953 [1934]; Weber 1981 [1927]).

During the late Middle Ages, monarchs in the larger kingdoms were regular borrowers from merchants and bankers, but these were,

in effect, personal loans.<sup>10</sup> However, loans to the city-states were public, in that the debtor was the corporate government (see the general survey in Bonney 1999). This linkage of the bourgeois depositors and the city governments was the precursor of the typical capitalist mode of money creation. At this stage, the clearance of debts and credits in the banks' giro of depositors effectively monetized the city-state debts. The suppliers of goods and services to the city governments were able to draw on their bank accounts before payment from the state had been received (Mueller 1997: 42; Day 1999: 67-8).

In contrast to the conflict of interests between the sovereign and the bankers in the monarchies (see Munro 1979), these early state-bank relations were based on *intra*-class credit relations in the governing plutocracies of the Italian city-states. In effect, they were borrowing from each other, and this creation of infrastructural power depended on the solidarity and cohesion of the ruling oligarchy. Factionalism and political instability proved to be one of the chronic sources of fiscal and, ultimately, military weakness in these states. None the less, an entirely new social technology of state financing had been developed, to be integrated later with other techniques – most importantly, the bill of exchange.

#### The bill of exchange

The transformation of the social relation of debt into the typically capitalist *form* of credit-money began when signifiers of debt became anonymously transferable to third parties. The process may be divided roughly into two periods. First, in the sixteenth century across that part of Europe covered by Latin Christianity, forms of private money such as bills of exchange (and, later, promissory notes) were used in commerce, and existed alongside the plethora of diverse coinages of the states and principalities. Second, during the late seventeenth century, some states outside Latin Christianity (most notably Holland and England) integrated this monetary technique with public deposit banking, and began to issue *fiduciary* money. In this way, the bill of exchange, as a form of private money, gradually evolved to become part of the public currency. By means of its incorporation into a sphere of monetary sovereignty, private promises to pay now became a more extensive and stable form of public money. Again, it must be emphasized that these *particular forms* of money cannot be accounted for simply as *direct* responses to the needs of the market for more efficient exchange or of states for finance.

As we have noted, from the thirteenth century onwards, the princes of Latin Christendom not only minted their own coins, but also proclaimed, as an expression of sovereignty, their own version of the Carolingian money of account (Boyer-Xambeu et al. 1994: 6). Consequently, every coin in the promiscuous international circulation might have a different value in each jurisdiction in which it was to be found. There was now no common yardstick. As we have also noted, the extreme monetary uncertainty is evident in the absence of numerical markings on coins (Innes 1913). In other words, at the precise moment when the states' pacification of Europe allowed more extensive trade, their claims of sovereignty in both money of account and coinage created a complexity that threatened to impede it. In these circumstances, money-changers found ready employment; but their activities could do no more than ease the difficulties, and then only at the local level. The problem was resolved in the first instance by the small networks of exchange bankers, based in the Italian republics. They gave coherence to the anarchy by using their own version of the Carolingian 1: 20: 240 money of account as the basis for their bills of exchange, which were used to finance trade.

The modern bill of exchange originated in Islamic trade, and almost certainly entered Europe through the Italian maritime city-states during the thirteenth century (Udovitch 1979; Abu-Lughod 1989). Exchange by bill required two networks – one of traders and one of bankers. A trader would draw a bill on a local banker, which he would then use as a means of payment for the specific goods imported from outside the local economy. The exporter of the goods would then present the bill for payment to his local representative of the banking network. In their simplest form, the bills directly represented the value of the goods in transit. Their adoption facilitated long-distance trade, but there is nothing in these economic advantages themselves that would suggest that the bills would develop into credit-money. Indeed, this is precisely what did not happen across the Islamic world. Other conditions were necessary.

Without delving too deeply into the complexities, it is essential to understand that it was the particular geopolitical structure of late medieval Europe that created the circumstances in which exchange by bill could not only flourish, but also develop further into private money existing alongside the sovereign coinages. The anarchy of myriad moneys of account, and their separation from the equally varied means of payment in a plethora of monetary sovereignties, was the basis for the exchange bankers' *systematic* enrichment from the use of bills of exchange.

The bankers were able to enrich themselves and promote the use of bills through a series of exchanges that involved the *conversion of one*

money of account into another. The bankers met at regular intervals at the fairs to fix their own overarching money of account, expressed in terms of an abstract coin (*écu de marc*) upon which the private bill money was based. Their enrichment depended on the existence of two conditions. First, the bankers had to maintain the permanent advantage of the central fair rate of exchange of their own money of account and (at Lyons, for example) over any other. Secondly, in order to achieve this, they had to control the direction of both an outward flow and an inward return of bills through their networks. In this way, they were able also to control the advantageous arbitrage in which the passage of bills unfailingly produced a profit as they were converted from one unit of account to another (Boyer-Xambeu et al. 1994: ch. 6).

In other words, this state of affairs bore no relationship to a market in bills, as this is understood in conventional economic analysis. The situation outlined above, and the profit opportunities that it provided, were the result of a purely monetary relation that existed between the myriad moneys of account and their lack of any stable relationship to the equally varied coinages. The bankers could control the direction of a bill through the moneys of account of the myriad jurisdictions in a way that was always favourable to them, as this was determined by their own money of account at the central fair where the accounts were settled. As described by Davazanti in the sixteenth century, this mode of exchange by bill was exchange *per arte*, as opposed to the forced exchange that was determined by the flow of commodities (Boyer-Xambeu et al. 1994: 130).

Leaving aside for a moment the longer-term consequences of the bill of exchange for the development of capitalist credit-money, it would be difficult to overemphasize the more immediate and direct effects on economic life. Until this time, imports and exports of goods were inextricably linked by quasi-barter exchange involving bullion. Moreover, apart from well-established bilateral trade between parties known to each other, merchants were travellers who accompanied their goods and means of payment. After the extension of the bill network from the late fourteenth century onwards, they became sedentary, and the cities expanded.

Exchange by bill *per arte* was the means whereby the nations of bankers enriched themselves by exploiting the unique opportunities afforded by the particular structure of the late medieval geopolitical structure and its monetary systems. In doing so they expanded the early capitalist trading system. The bill of exchange system allowed an increase in trade without any increase of coinages in the different countries. But this was an unintended consequence of the exchange bankers' entirely self-interested exploitation of the particular circum-

stances (Boyer-Xambeu et al. 1994: 130). The exchange banking nations had created a source of enrichment that was relatively autonomous from the supply and demand for 'real' exchange; but its consequence was fundamentally to transform the way in which the latter was organized and pursued.<sup>11</sup>

### The depersonalization of debt

Exchange *per arte* – that is, the creation of credit in the bill of exchange independently of the existence of any actual goods in transit – was also known as 'dry exchange'. It entailed a dissociation of pure credit from the 'real' representation of goods. In turn, this eventually led to a further dissociation of the bill from any particular dry exchange credit relation – that is, to the growing autonomy of *depersonalized debt relations* and their eventual evolution as a form of credit-money. Subsequently, exchange by bill eventually became integrated with public banking, and resulted in the issue of credit-money by states.<sup>12</sup>

As we have noted, verbal personal contracts, based on Roman law, in both casual credit relations and more formal arrangements, conducted by the early banks of deposit, predominated until the sixteenth century (Usher 1953 [1934]: 273). These were made before a notary and witnesses, and became a matter of public record. This form of contract served to fix debt as a particularistic social relation; and therefore, until written contracts became the norm, the transferability of debt to the point where it served as a general impersonal means of payment was not possible.

The widespread use of the bill in dry exchange – *per arte* – undoubtedly hastened the transition from oral to written contracts, and opened up the possibility that the signifier of bilateral debt could be used in the settlement of a third-party debt. 'Bills were drawn for the first and fictitious destination and the option of a reimbursement in Genoa' (Lopez 1979: 16; see also Spufford 1986: xlv). This was a pure monetary instrument, which consisted exclusively in a promise to pay denominated in an abstract money of account. In this way, a further dissociation was effected: a form of circulating money was separated from the precious metal manifestation that it had taken in the previous 1,000 years. During the sixteenth century, bills began to leak out of the network of exchange bankers and take on the property of more general, but still restricted, means of payment. (For example, the name of the presenter of the bill was omitted when the bill was drawn and added later as necessary (Usher 1953 [1934]: 286).) But until the bills became widely transferable as means of payment to third parties outside the network of bankers, they remained private money.

In particular, bills were not a means of *final settlement* of debts – especially tax debts. Moreover, the elite banker ‘nations’ opposed the free and extended circulation of bills; it threatened their systematic enrichment *per arte*, which depended on absolute control of the directional flow of bills.

Significantly, this further development of the bill into a more generally acceptable means of payment occurred in Holland and, later, England, which were *outside* exchange bankers’ *direct* sphere of influence. In Holland, by the middle of the sixteenth century, the properly constituted agent of the named payee on the bill – or *bearer* – was recognized in law. Towards the end of the century, changes to the parties involved in a contract were written on the back of a bill, and this was accepted as an order to pay (Usher 1953 [1934]: 287). From a technical standpoint, the document *itself* was now deemed to contain all the necessary information, and, in effect, signifiers of debt had become *depersonalized*. However, full transferability of such instruments of debt as means of payment outside the merchant capitalist networks and within a sovereign monetary space was not established, as we shall see, until the early eighteenth century.

During the sixteenth century, a singular form of profit making was made possible by the exchange bankers’ exploitation of the diversity of moneys of account and their dislocation from the equally varied means of payment that resulted from the geopolitical structure of myriad weak states.<sup>13</sup> For a time, the transnational exchange bankers brought a degree of integration to the system by linking the value of the French king’s *sbus tournois* with their own abstract money of account – the *écu de marc*. This expressed a particular balance of power between the princes’ sovereign claims, with their attendant tax advantages, and the bankers’ profit-making ventures. However, this balance shifted dramatically towards the end of the sixteenth century. Two interdependent forces were involved. First, the exchange bankers’ networks weakened to the point of collapse in the aftermath of typical capitalist defaults and liquidity crises, which they alone could not stabilize. Secondly, the French state reasserted sovereign control of its monetary system (Boyer-Xambeu et al. 1994: ch. 7). In 1577, the French monetary authorities effectively removed the foundations for enrichment from exchange *per arte* by the establishment of a uniform metallic standard that *reconnected* the *money of account* and *means of payment* and by the prohibition of the circulation of foreign coins. Henceforth, exchange by bills became a *financial* rather than a *monetary* relation in the sense that their value ceased to be fixed in the abstract money of account rate, but rather on the floating exchange rates of metallic coins – as in today’s foreign exchange markets

(Boyer-Xambeu et al. 1994: 202). This form of exchange, and banking in general, withered temporarily in face of the absolutist monarchies’ metallic money (Kindleberger 1984: ch. 6). However, the new credit-money practices moved on geographically to those states with more powerful merchant-banking classes, such as Holland and England. In the latter, credit-money and the older coinage form were eventually recombined in a further significant development.

### The Transformation of Credit into Currency

Apart from later refinements, the basic *organizational* and *technical means* for producing the various forms of credit-money were, from a practical standpoint, widely available by the sixteenth century. Italian treatises on the new techniques described how the supply of precious metal coinage could be augmented. Three methods were identified: bank clearance of debt the creation of money in the form of claims against the public debt and exchange of bills *per arte* (Boyer-Xambeu et al. 1994). As we have seen, bills and promissory notes were slowly becoming disconnected from the direct representation of goods in transit or of personal debt; but they were not widely accepted as means of payment. In other words, the social and political bases for the transformation of private debt into currency lagged behind technique. Even in England, where the new forms of credit-money eventually became most extensive, the establishment of full transferability of debt was a long and gradual process, which was not completed until the eighteenth century.<sup>14</sup>

Moreover, it would appear that social and political structures that had provided the basis for the new capitalist credit-money – in the forms of public debt and private bills – were *in themselves* incapable of further expansion. This new ‘social power’ in the form of an elastic production of credit-money was impeded by the very conditions that had originally encouraged its development. For example, informal contracts by which the mercantile plutocracies of the Italian city-states lent to each other through the public banks were constantly jeopardized by the factional rivalry that was typical of this form of government. These conflicts also undoubtedly played their part in the general decline of the Mediterranean city-state republics from the sixteenth century onwards. With regard to the merchant-bankers’ *private* bill money, it is difficult to see how they could have carved out the necessary monetary space for their bills, based on a sovereign jurisdiction and the necessary level of *impersonal* trust. Moreover, as we have noted, it was not even in their interests to do so, as it would have

removed the circumstance from which they profited. Without a wider base, the liquidity of bills of exchange was almost entirely restricted to banking and mercantile networks, and could not evolve into credit-money currency.

In other words, there were definite social and political limits to the market-driven expansion of credit-money. The essential monetary space for a genuinely impersonal sphere of exchange was eventually provided by states. As the largest makers and receivers of payments, and in declaring what was acceptable as payment of taxes, states were the ultimate arbiters. They created monetary spaces that encompassed and integrated social groups whose interaction was embedded in particular social ties or specific economic interests. Until private credit-money was incorporated into the fiscal system of states which commanded a secure jurisdiction and a legitimacy, it could be argued that it remained, in evolutionary terms, a dead-end.

Rapidly shifting political boundaries, the promiscuous circulation of coins across them, not to mention competing moneys of account, were the norm. Credit-money was a product of this insecure monetary space, but, in turn, these very same circumstances could not sustain it. In this regard, it is significant that the bills of exchange were centrally important in the operation of the fairs of Champagne and Burgundy during the fifteenth and sixteenth centuries. They flourished in precisely those more feudalistic, but pacified, parts of Europe which were least favourable to the creation of a strong coinage, but just strong enough to protect the fairs. The bankers' bill-money flourished in those regions where a balance of power allowed them to function. Early capitalist monetary practices spread to these regions not only because they were on the Baltic-Mediterranean trade route, but also because the dukes of Burgundy, for example, unlike the kings of France, were not despotically powerful enough successfully to establish a monetary monopoly that integrated a money of account with metallic currency.

The two forms of money – or, rather, the structure of social relations and the interests of the producers of private bills and public coins – were antithetical and antagonistic. On a most general level, the minting of coin was both a symbol and a real source of the monarch's sovereignty. Monopoly control brought great benefits, which it was feared would be eroded if exchange by bills were to displace the coinage. But, paradoxically, the first step in the creation of stable monetary spaces that could sustain credit-money was the strengthening of metallic monetary sovereignty.

It could be said that the stringency and effectiveness of bullionist monetary policies were a good measure of the power of the medieval

monarchical state. And this was nowhere more apparent than in England, where, eventually, credit-money was first successfully established as public currency. Here, mercantilist conceptions of the strength of states and related metallist monetary policy were strongly opposed to the bill of exchange. Its widespread use involved a loss of sovereign control – especially over the profits of seignorage and the manipulation of the money of account by 'crying up' and 'crying down' the coinage. At times, from the fourteenth to the mid-seventeenth century, English kings banned the importation of foreign coins and the export of bullion, ordered exporters to supply their bullion to the mints, attempted to prohibit the bill of exchange, and generally sought to limit the use of credit (Munro 1979).<sup>15</sup> It is significant that when Pacioli's 1494 treatise on financial practice and double-entry book-keeping was translated into English in 1588, the section on banking was omitted on grounds of irrelevance (Lane and Mueller 1985: 68). The controls on exchange and the domestic unit of account exercised by the English monarchy largely prevented the promiscuous circulation of coins and multiple moneys of account that took place in continental Europe. Consequently, both deposit banking through money changing and exchange by bill *per arte* were both less developed in England. However, the critical factor was that the new forms of credit-money could not be *entirely* suppressed. And it was precisely in this secure, socially and politically constructed monetary space that credit-money was able eventually to function as currency.

Henri III's reconstruction of the French coinage, which dealt the decisive blow to the exchange bankers' method of enrichment, was modelled on Elizabeth I's thorough recoinage in England during 1560–1 (Davies 1996: 203–8). The French stabilization collapsed in 1601; but in England, the setting of four ounces of sterling silver as the invariant standard for the pound unit of account lasted until World War I. This stability is historically unique, 'little short of a miracle, and almost inexplicable at first sight' (Braudel 1984: 356). However difficult it might be to explain, the maintenance of the standard through the centuries was indisputably the linchpin of England's fiscal and political system. As we shall see, its retention was a condition of the survival of the constitutional and fiscal settlement between sovereign, government and ruling classes after the successful resistance to the absolutist claims of James II, Charles I and Charles II in the seventeenth century. The maintenance of the standard encouraged a steady supply of *long-term* creditors for the state, and in this way provided a secure basis for the eventual adoption and expansion of the credit-money system. England eventually achieved what Venice and others had been unable to secure, and reaped the benefits. We

must now examine how this critical development, involving the successful hybridization of the two forms of money (coinage and credit), was achieved in England. It occurred in two steps: the creation of a single monetary space for a national coinage, into which credit-money was then gradually introduced.

### Sovereign monetary space in England

The temptations of increased seignorage by means of debasement proved too much for Henry VIII in the search to finance his costly wars. During the 'Great Debasement' (1544–51) the silver content of the coinage was systematically reduced from 93 per cent to 33 per cent, which resulted in a seignorage to the Crown amounting to over £1.2 m (Goldsmith 1987: 178; Davies 1996: 203).<sup>16</sup> Although the reduction of the metallic content of coins does not necessarily affect prices (Innes 1913, 1914; Braudel 1984: 356–9; Davies 1996), the debasement did discredit the monarchy and create insecurity by destroying confidence in money as a *store of value*. Like all serious monetary disorder, it threatened political and social disorder.

Elizabeth I's reforms stabilized the coinage, successfully prohibited the circulation of foreign coins and secured monetary sovereignty. English monetary policy was unequivocally monarchical and bullionist (Munro 1979). Citing the 'abuses of merchants and brokers upon bargains of exchange', Elizabeth's minister, Lord Burghley, forbade bill of exchange transactions that were not licensed and the issue of bills by unknown merchants, and placed a  $1/2d.$  in the pound (£) tax on the discounting of bill for coin.

Other elements of state building aided the creation of monetary sovereignty. It was precisely at this time that England became a more coherent linguistic and cultural unit, in which class and state were integrated by the overarching nation (Mann 1986: 462). Significantly, the word 'nation' began to lose its medieval meaning of a group united by common kinship – as in the banking nations centred on the great fifteenth- and sixteenth-century Italian families. The emerging English nation-state became the basis for the impersonal trust that eventually enabled the forms of credit-money to become established outside the interpersonal banking and exchange networks in which, hitherto, they had been contained.

At this juncture, however, the late sixteenth-century English state had, in effect, established a form of money that was in all important aspects the same as that which had disintegrated in Rome more than 1,000 years earlier. At the very moment when the techniques for the new forms of credit-money were being disseminated across Europe

by trade and treatise, the strongest states were reconstructing the ancient form as both symbol and measure of their sovereignty.<sup>17</sup> In the absence of further events and conditions, credit-money's development into public currency could just as readily have been inhibited by monarchical monetary policy – as it had been in France, for example. However, a century later, the Bank of England was founded, and an enduring state credit-money was issued. It was the outcome of a particular *political struggle* between the supporters of the two different forms of money – coin and credit. This outcome consisted in a remarkable coalescence of the interests of commerce and statecraft, produced by a compromise that expressed the delicate balance between too much and too little royal power.<sup>18</sup>

On the one hand, English kings continued to assert medieval royal monetary prerogatives. Charles I appointed a Royal Exchanger with exclusive powers over the exchange of money and precious metals; and in 1661 Charles II sought to enforce the old statutes of Edward III and Richard II licensing bills of exchange (Munro 1979: 212). On the other hand, an increasing number of the same mercantile supporters of monetary stability also advocated 'Dutch finance' – especially the creation and monetization of a national debt.<sup>19</sup> As I have emphasized, the techniques were by now well understood.<sup>20</sup> More than 100 schemes for a public bank were put forward in the second half of the seventeenth century, with the aim of regularizing state revenue and further removing it from the arbitrary control of a monarchy with absolutist pretensions (Carruthers 1996). Many were based on Amsterdam's Wisselbank (1609), which itself had been patterned closely on Venice's Banco di Rialto (1587) (Goldsmith 1987: 214).

The most important question concerned the nature of the material wealth that was to be the basis of the prospective banks' issue of credit-money – that is, for its capacity to honour promises to pay in something other than merely another promise to pay. Lessons had been learnt from the earlier experiments. The circulation of these mere promises in the form of deposits and stock held by the mercantile and affluent classes had proved to be unstable in Venice, and was viewed with suspicion. Furthermore, the Dutch had more recently experienced similar crises. Many agreed with Defoe that 'land is the best bottom for banks' (quoted in Davies 1996: 260). But, it was also beginning to be realized that mere promises to pay were, in fact, a new form of money, *sui generis*, in that they were not actually representative of any material value. As we saw in Part I, chapter 2, a credit theory of money was emerging.

[O]f all beings that have existence in the minds of men, nothing is more fantastical and nice than Credit; it is never to be forced; it hangs upon opinion, it depends upon our passions of hope and fear; it comes many times unsought for, and often goes away without reason, and when once lost, is hardly to be quite recovered... [And] no trading nation ever did subsist and carry on its business by real stock;... trust and confidence in each other are as necessary to link and hold people together, as obedience, love friendship, or the intercourse of speech. (Charles Davenant, c.1682, quoted in Pocock 1975: 77)<sup>21</sup>

In England during the seventeenth century, a 'civic morality of trust' was developing that could sustain a wider credit-money economy outside the closed networks of the metropolitan mercantile and political elite (Muldrew 1998). It was a consequence of profound changes in credit relations that would seem to have occurred during the previous century. During the 1570s, bilateral personal credit, typically based on traditional oral contracts before witnesses, became commonplace for a wide range of sales and services (Muldrew 1998). For reasons that have not been fully explained, defaults soon became widespread. However, in the wake of the collapse of the credit relations, a new culture of credit based upon a currency of reputation was constructed. Given the interconnectedness of the credit relations, defaults must have had extensive ramifications: total litigation in the 1580s 'might have been as high as 1,102,367 cases per year or over one suit for every household in the country' (Muldrew 1998: 236). It is possible, but by no means clear, that such a large-scale use of the law led to the final destruction of the personal feudalistic ties of affiliation and dependence of the Middle Ages. It would appear that a process of normative reconstruction followed, in which the general quality of trustworthiness as a *public*, or *communal*, virtue replaced *personal* commitment. It entailed 'a sort of competitive piety in which virtue of a household gave it credit' (Muldrew 1998: 195). Moreover, as Muldrew emphasizes, this moral basis of trustworthiness, which could support extensive market relations and a credit-money economy, was not the result of a natural sociability. Rather, it had to be created not only by legal enactment and enforcement, but also through culture – drama, ballads and poetry. Universalistic trustworthiness, which could be *claimed by acting in a reputable manner*, replaced the obligations to honour agreements based on particularistic ties of family or kin.<sup>22</sup>

#### The dual monetary system: the hybridization of credit and coinage

By the late seventeenth century, the two forms of money – private credit and public metallic coinage – were available, but unevenly spread across

Europe. However, they remained distinct, and their respective producers – that is, states and capitalist traders – remained in conflict. As I have suggested, England's social and political structure favoured the integration of the different interests that were tied to the different moneys. Here, the balance of power was such that a compromise and a sharing of monetary sovereignty were a possibility. But there should be no presumption of the inevitability of a hybridized form of money that combined the advantages of each – sovereign coin and private credit. As ever, events proved decisive in tilting the balance away from the sovereign's monopolistic control of the supply of money.

Charles II's debt default in 1672 hastened the adoption of public banking as a means of state finance. Since the fourteenth century, English kings had borrowed, on a small scale, against future tax revenues. There was also a small market in the tally stick receipts for the loans 'which effectively increased the money supply beyond the limits of minting' (Davies 1996: 149). However, compared with state borrowing in the Italian and Dutch republics, English kings, like all monarchs, were disadvantaged by the very despotic power of their sovereignty. Potential creditors were deterred by the monarch's immunity from legal action for default and their successors' insistence that they could not be held liable for any debts that a dynasty might have accumulated.

With an impending war with the Dutch, an annual Crown income of less than £2m and debts of more than £1.3m, Charles II defaulted on repayment to the tally holders in the 'Exchequer Stop'. It was a critically important event in the London mercantile bourgeoisie's rejection of English absolutism. It culminated in the Glorious Revolution and the invitation to William of Orange to invade and claim the throne. The prevention of any recurrence of default was a paramount consideration, which Parliament put to the new Dutch king in the constitutional settlement of 1689. In the first place, William was intentionally provided with insufficient revenues for normal expenditure and, consequently, was forced to accept dependence on Parliament for additional funds. Second, with William's approval and the expertise of his Dutch financial advisors, the government adopted long-term borrowing. This was funded by setting aside specific tax revenues for the interest payments (Carruthers 1996: 71–83; North and Weingast 1989; the classic path-breaking account remains Dickson 1967).

The state's creditors were drawn from London merchants, who backed a proposal for a Bank of England, in order to take the financial developments a step further. They provided £1.2m for the Bank's stock, which was then loaned to the king and his government

at 8 per cent interest, which, in turn, was funded by hypothecated customs and excise revenues. In addition to the interest, the bank received an annual management fee of £4,000 and a royal charter that granted it the right to take deposits, issue bank notes and discount bills of exchange. After the failure of a Tory land bank competitor, a monopoly on banking and the right to issue further bank bills and notes to the total of newly subscribed capital was granted by royal charter in 1697. As Galbraith explains:

When subscribed the whole sum would be lent to King William: the government's promise to pay would be the security for a note issue of the same amount. The notes so authorised would go out as loans to worthy private borrowers. Interest would be earned both on these loans and on loans to the government. Again the wonder of banking. (Galbraith 1995 [1975]: 32; see also Carruthers 1996; Davies 1996)

In effect, the *privately* owned Bank of England transformed the sovereign's *personal* debt into a *public* debt and, eventually in turn, into a *public* currency.<sup>23</sup> Underpinning this transformation in the social production of money was the change in the balance of power that was expressed in the equally 'hybridized' concept of sovereignty of the 'King-in-Parliament'. The institutions for the production of capitalist credit-money, and the balance of economic and political interests that underpinned it, were beginning to take shape. The state was financed by loans from a powerful creditor class that were channelled through a public bank. Each had an interest in the long-term survival of the other.

This fusion of the two moneys, which England's political settlement and rejection of absolutist monetary sovereignty made possible, resolved two significant problems that were encountered in the earlier applications of the credit-money social technology. First, the private money of the bill of exchange was lifted out from the private mercantile network and given a wider and more abstract monetary space based on impersonal trust and legitimacy. This involved an underlying fusion of modern elements such as an emerging civic morality of creditworthiness and contract law with the traditional sovereignty of the monarch.<sup>24</sup> Second, Parliament sanctioned the collection of future revenue from taxation and excise duty, to service the interest on loans. Here again, the *balance* between too little and too much royal power was critically important in determining the settlement between debtor and creditor. Expressed in the concept of the sovereignty of King-in-Parliament, it reduced both the factional strife that had prevented such long-term commitment in the Italian republics and also the

absolutist monetary and fiscal policies that weakened the French state in the eighteenth century (Bonney 1999; Kindleberger 1984). The new monetary techniques conferred a distinct competitive advantage in the geopolitical struggles of the time, which in turn rendered England's high levels of taxation and duties for the service of the interest on the national debt more acceptable (Ferguson 2001).

From a monetary perspective, the most important, but *unintended*, long-term consequence of the establishment of the Bank was its monopoly to deal in bills of exchange (Weber 1981 [1927]: 265). This arrangement practically fused the private money and public currency. The purchase of domestic bills of exchange at a discount before maturity was a source of monopoly profits for the Bank. But it also proved to be the means by which the banking system as a whole became integrated, and the supply of credit-money (bills and notes) was influenced by the Bank's discount rate. The two main sources of capitalist credit-money that had originated in Italian banking – that is, public debt in the form of state bonds and private debt in the form of bills of exchange – were now combined for the first time in the operation of a single institution. But, most importantly, these forms of money were introduced into an existing sovereign monetary space defined by an integrated money of account and means of payment based on the metallic standard. The Bank's notes were at the top of the hierarchy of moneys, and were introduced widely into the economy when they were exchanged for the discounted private bills and notes.<sup>25</sup>

It must be stressed that during *precisely* the same period in which the Bank of England was established and the full transferability of debt was made legally enforceable, the precious metal coinage was greatly strengthened. That is to say, this process did not involve a dematerialization of money that was driven – either intentionally or teleologically – to greater efficiency. Whether from a theoretical or a practical standpoint, overwhelming intellectual opinion across Europe was behind precious metallic money throughout the seventeenth and eighteenth centuries, and beyond. In England, Locke, Hume and, later, Smith argued unswervingly in favour of a strong precious metal money. No less a figure than Sir Isaac Newton was persuaded to lend his authority to restoration of the full weight of the coinage that had deteriorated over the century since Elizabeth I's reforms. During his twenty-seven-year Mastership of the Royal Mint, which ended in 1727, the coinage was placed securely on a gold basis.<sup>26</sup> As credit-money became the most common means of transacting business, England also moved towards the creation of the strongest metallic currency in history.

The monarch had lost absolute control over money, which was now shared with the bourgeoisie. Unlike the *de facto* and informal linkage between the king's coinage and the exchange bankers' money of account and bills in sixteenth-century France (Boyer-Xambeu et al. 1994), the English state's integration of the two forms permitted a further development of credit-money. Coins and notes and bills were eventually linked by a formal convertibility in which the latter were exchangeable for precious metal coins. This hybridized nature of the system of dual monetary forms was the result of a compromise in a *struggle for control* that eventually resulted in a mutually advantageous accommodation.<sup>27</sup>

In addition to the main money supply of precious metal coins and bank notes, there existed other significant forms of money. On the one hand, as we have noted, inland bills of exchange continued to play an important role until mid-nineteenth century in the expanding capitalist networks, especially in industrial northern England. On the other hand, copper tokens were struck privately, throughout the country, and were used as media of exchange in local economies to augment the silver legal tender that was in short supply and minted in denominations that were too high for the routine transactions of the mass of the population. Both existed well into the nineteenth century (Anderson 1970; Davies 1996). These local monetary spaces gradually lost their identity and were very slowly but inexorably integrated into a national space. As ever, the integration was accomplished by the *money of account*, as Rowlinson has pointed out:

By the 1830s, then, Britons could at different times and places have understood gold sovereigns, banknotes, or bills of exchange as the privileged local representatives of the pound... the pound as an abstraction was constituted precisely by its capacity to assume the heterogeneous forms, since its existence as a currency was determined by the mediations between them. (Rowlinson 1999: 64–5)

The centralization of the British monetary system and those of the states that sought to emulate her capitalist development was an inevitable consequence of the public banks' domestic and, then, international roles in the *dual* system of precious metal and credit-money. First, as the banker to a strong state, the public, or central, bank has direct access to the most sought-after promise to pay – that of the state to its creditors. The central bank's notes are at the top of the hierarchy of promises in a credit-money system. By discounting other, less trusted forms of credit for its own notes, as remarked above, it is able to achieve a *de facto* dominance, and thereby maintain the

integrity of the payments system, which constitutes capitalist credit-money (Weber 1981 [1927]; Bell 2000; Aglietta 2002).<sup>28</sup> Second, for most of the eighteenth and nineteenth centuries, the issue of notes based on the state's promises was also given the added guarantee of convertibility into gold at a fixed rate. As other national economies placed their monetary systems on the gold standard at the end of the nineteenth century, the international relations between central banks and their management of the gold flows tended to enhance their central control of the respective domestic monetary systems (Helleiner 1999). Since the disappearance of the last vestige of precious metal money in 1971, when the USA abandoned the gold-dollar standard of the Bretton Woods international monetary system, it has been argued that central banks have lost a degree of control to foreign exchange markets (B. Cohen 2001b). But far from signalling the demise of central banking, their role in creating *credible* pure credit-money has enhanced their power and autonomy. Indeed, in pursuit of the goal of stable, pure credit-money, central banks of the major economies have gained power over the domestic systems through control of the supply of reserves and the discount rate.<sup>29</sup> These questions are pursued further in the following chapters.

## Conclusions

The social relations for the 'manufacture' of capitalist credit-money were first successfully developed in England from the late seventeenth century onwards, and were copied, with varying degrees of success, throughout the developing Western world. Capitalist credit-money connects the state with the bourgeois classes. The institutional structure of this form of money consists in three-way debtor-creditor relations between the state, rentiers and taxpayers, which are mediated and reproduced by a public bank, an efficient bureaucratic administration and a robust Parliament. Holders of the national debt were given confidence in the state's promise to pay interest and capital by the funding of the debt with hypothecated tax revenues, collected by a vast army of bureaucrats (Brewer 1989). The terms of the settlement between state, creditors and taxpayers – that is, the levels of borrowing and tax rates – were negotiated and scrutinized in Parliament (North and Weingast 1989). For three centuries, this form of money was grafted on to the existing, but greatly strengthened, precious metal coinage, and thereby its storage of value function was given an additional guarantee. But, as I have frequently stressed, the ratio between money and goods, or money's purchasing power, was not established

directly by the market exchange ratios between precious metal and other commodities. Rather, monetary authorities *promised* to maintain the conversion price of gold and notes that they had fixed. For most of its history, money in capitalism was produced in a dual or hybrid system in which public metal coinage and private credit were integrated and transformed. As we saw in Part I, the idea of a metallic standard ideologically naturalized the underlying social relations. Apart from its almost entirely symbolic role in the Bretton Woods monetary system, the gold standard has been inoperative for almost a century.<sup>30</sup>

The basic elements of the pure form of capitalist credit-money are explored further in the following chapter; but here we might note the immense increase in infrastructural social power that the relatively elastic production of money brought about. What was observed at the time is now widely accepted – that is to say, England was able to defeat France in the struggle for European dominance during the eighteenth century because of its ability, and France's inability, to create credit-money (Crouzet 1999; Ferguson 2001). In contrast to Patterson's Bank of England, John Law's Banque Royale (1719) was an utter failure. A detailed comparative analysis cannot be presented here, but there are obvious significant differences. First, France did not have as powerful a bourgeois mercantile class, with such an intimate knowledge of, and confidence in, 'Dutch finance', to dictate terms to the state in the creation of financial and monetary institutions. Second, the French state could not provide the two crucial guarantees to its potential creditors – reliably collected tax revenues and gold standard convertibility of notes. In Weber's terms, France remained a *patrimonial* polity in which the state was a *source* of enrichment and not a *means* for the further creation of wealth. Finance was raised by the sale of offices, and tax collection remained privatized in the hands of tax-farmers. The beneficiaries in the traditional classes of the *ancien régime* had no interest in monetary and financial rationalization. It took the Revolution, and its failure, before France could attempt to emulate her rival in the nineteenth century.

It is significant that the two most successful states of the capitalist era – Britain and the USA – have also been the most indebted (Ferguson 2001: 133–41). The relationship between power, success, debt and the creation of money is complex. It involves virtuous cycles in which debt finances successful state activity and enables further credit to be extended on favourable terms to the borrower. Economic activity is stimulated and taxed at a rate which gives confidence that revenues are adequate to service the debt. On the other hand, of course, it may equally end in disaster: ventures may fail, taxes cannot

be collected, debts cannot be repaid and a vicious cycle of decline sets in. Any outcome will be the result of many factors in which chance and contingency, as ever, will play an important part. But any successful extension of 'infrastructural' power by means of credit-money can *only* take place within a legitimate institutional framework based on an acceptable and workable settlement between creditors and debtors.