# 4

# The Evolution of Capitalist Money

Means of payment in a state money of account is the most prevalent money in modern capitalist societies, but state monetary sovereignty is not absolute. First, money creation is shared with privately owned banks. One of capitalism's distinctive characteristics is, in effect, a franchised and regulated banking system which produces money 'endogenously', denominated in the state's money of account – transmitted by cheques and debit and credit cards – in addition to 'exogenous' money issued by central bank cash and emitted by government spending. This shared creation of money places limits on central bank control of the money supply and is the source of a further academic and political controversy (see chapter 7). Second, capitalist contract law permits the creation of private acknowledgements of debt (promises to pay, IOUs, etc.) which circulate as means of payment in financial networks. This 'near' money overlaps with and penetrates the franchised banking system, further diluting control of the supply of money and, in certain circumstances, competing with state money. This 'near' money is part of a monetary hierarchy in which forms of money are ranked by the ease of their conversion into state money: that is, their 'liquidity' (Bell, 2001; Ricks, 2016). Non-state forms of money will be examined later, but we begin with a sketch of the evolution of the institutions which produce the state and bank money which sits at the top of the hierarchy in modern capitalism.

This development may be divided into two broad periods. The first, between the sixteenth and early twentieth centuries, saw the fusion of states' precious metal currency with merchants' private credit with which they conducted their business. In the second phase, starting in the early twentieth century, money's link to precious metal gradually came to an end. When money could no longer be identified as a naturally scarce valuable substance, it became more difficult to disguise its true nature as a 'social technology' with the potential to be created to advance collective welfare.

## The 'Template' for Modern Money: the Fusion of Public and Private

Between the sixteenth and nineteenth centuries in western Europe, three separate institutions became linked in the 'template' for the creation of forms of money that are now almost universal. First, states produced currency – based on a money of account of a real or 'imaginary' precious coin – which, in turn, was accepted as payment of taxes. Second, private banking networks issued and managed the exchange of bills in mercantile trade, accepted deposits, and extended loans to rulers and governments. Third, states granted a charter to a privileged private bank to manage their debt by raising loans from private merchant capitalists. Eventually, the state-chartered banks became the 'central' banks which controlled and regulated the private banking network, stabilizing crises by acting as 'lender of last resort' (Ingham, 2004; Calomiris and Haber, 2014; Vogl, 2017).

The core element of this process was the gradual integration of the private banks' notes and bills with the public currency issued by states in payment for goods and services. As with all money, the private notes were issued as a 'liability': that is to say, issuers promised to redeem their own notes as payment for any debt that they were owed. For example, 'free banking' in the USA, between 1837 and 1886, allowed the issue of notes by banks and almost any organization: railroad companies, churches, restaurants, and so on. In England, the 1844 Bank Charter Act granted exclusive note issue to the Bank of England and prohibited any new bank from issuing



its own notes. Mergers and concentration in banking during the nineteenth century effectively created 'new' banks which gradually reduced the number of note issuers – the last in Britain, Fox, Fowler and Company, closed in 1921.

Today, legal tender money is created by both the state and the banking system. States issue payment for goods and services, usually by drawing on their account at their central bank. And the regulated banking system has a state-granted franchise to issue the legal tender, denominated in the state's money of account, by extending loans to borrowers. That is, capitalism contains a social mechanism by which these private debtor–creditor contracts are routinely 'monetized'. The links between the state, central banks, and the banking system transform *private debt* into *public money*.

As we explained in chapter 1, modern banks lend by creating a deposit of *new money* for the borrower with taps on the computer keyboard. (This differs from the coinage era, where loans reduced the money-lender's hoard.) The pervasive influence of the commodity theory of money is evident in the commonplace description of this process in economics textbooks as the creation of money 'out of thin air' – or *ex nihilo*. However, 'thin air' is not involved; rather, modern bank money is *socially* created by the borrower's legally enforceable *promise* to repay the debt. The deposit is a *private debt* owed to the bank which becomes *public money* when it is spent by the borrower. At this juncture, its origin as a private debt is utterly irrelevant to whoever receives it as payment. This modern 'alchemy' achieves what the medieval efforts to turn lead into gold failed to do.

Bank customers' deposits are owed by the bank to the depositors and consequently are the bank's *liabilities*. The existence of deposits created by the bank as loans (the borrower's *debt/liability*) is based on the promise of repayment and consequently they are classed as the bank's *assets*. If necessary, the bank's assets and liabilities can be balanced by borrowing from other banks in the network and from the reserves that it is required to hold at the central bank.

The issue of money – or, more accurately, its *emission* in payments made by the state – similarly involves debts and credits which are managed by the state treasury and central bank. Payment for state expenditure is made by the treasury

from the state's account at the central bank. Unless a state and its central bank have adopted a precious metal standard and convertibility of paper notes, the money is emitted by 'fiat': that is, declaration. (Consequently, as we saw in chapter 2, Modern Monetary Theory contends that the sovereign monetary power can spend money into existence and, in practice, does not require the prior collection of taxes.)

The inflationary potential of an unlimited emission of fiat money is constrained by the rules and norms of 'sound money': that is, to make it 'scarce' by specifying a prudent balance of expenditure and revenue. Government deficits, created by an excess of spending over tax revenue, are financed by borrowing with the sale of interest-bearing bonds to private finance capital in the money markets. Here judgement is passed on the acceptability of a government's fiscal position: that is, the balance between revenue and expenditure. This assessment is based on conventional wisdom in the financial community and the monetary authority, which is in turn influenced by mainstream academic economics. If it is thought that government expenditure risks inflation by putting 'too much' money into the economy, money markets might demand higher interest rates to offset the risk. It is important to note that there is no single unequivocal answer to the question of 'how much' money, created by government spending, is 'too much'. Any judgement depends on many factors, including the most favoured of the many different answers to the question given by the competing economic models that are the stuff of academic dispute.

This production of modern capitalist money will be examined in more detail in the following chapter; here we outline how this was the result of conflict and cooperation between the state and private mercantile money in a public–private partnership. The European 'commercial revolution' of the fourteenth and fifteenth centuries created a wealthy merchant class which in Max Weber's phrase formed a 'memorable alliance' with the state, laying the foundations for modern capitalism.

Weber's analysis of the western origins of capitalism has been criticized for its 'Eurocentric' view of modern history, which neglects commerce and banking in East Asia. However, the relationships between state and capital in East Asia differed from the alliance forged in Europe (Ingham, 2015). In broad terms, there are three types of merchant capital–state relationship. First, there is *isomorphism*, in which the state is also a merchant trading company, as in the Italian city-state republics. For example, the merchant republic of Venice was in effect a joint-stock trading company with the Doge as its president, the Senate its board of directors, and the populace its shareholders. Second, there is *mutual exclusion and unresolved antagonism*, as in China. For example, Chinese banking was inhibited by the fear that deposits might be plundered by local and central government. And, third, there is *mutual accommodation and interdependence*, as in the 'memorable alliance' of the monarchy and/or government and merchants in Holland and England. (Ingham, 2004, chap. 7; Calomoris and Haber, 2014, chap. 4). It is to this type of relationship that we turn now.



## The 'Memorable Alliance'

By the fifteenth century, parts of western Europe – in particular, a corridor from Italy through Burgundy to Holland – were sufficiently pacified to support the expansion of long-distance trade. Networks of merchants used private credit money (promissory notes, bills of exchange) that were netted out and settled at regular intervals at 'fairs' – notably, in Champagne and Besançon. (The denomination of the credits and debts in the merchant bankers' own unit of account also enabled them to make profits by arbitraging fluctuating exchange rates between state moneys of account and their own [Boyer-Xambeu et al., 1994; Ingham, 2004].) The merchants' money conflicted with the efforts of the monarchs to establish monopoly control of their currency and territory. Minting coins was both a symbol and a real source of sovereignty, consolidating fiscal power and creating opportunities to profit from seigniorage and the manipulation of the money of account, as noted in chapter 2. The existence of mercantile money also diluted sovereign revenue by tax avoidance, as still occurs today.

During the fifteenth and sixteenth centuries, these two paths of monetary development eventually merged to create

the distinctive capitalist monetary system (for a full discussion, see Ingham, 2004, chap. 6; Vogl, 2017, chaps 2–4). The first step was taken in the Mediterranean city-states, where – unlike the northern monarchies – the form of government favoured the integration of private mercantile money and state money. 'Public' banks were established by the governing merchant class in these bourgeois city-state republics: Barcelona (1401), Genoa (1407), and, most importantly, Venice's Banco della Piazza di Rialto (1587). They were established to convert merchants' loans to the city government into transferable bonds, based on the state's promise of repayment. Consequently, they were widely accepted as a means of payment in addition to the coined currency. In effect, the rulers of the bourgeois republics were borrowing from and lending to each other and using their IOUs as money. Marx believed that the state had been 'alienated' to the bourgeoisie.

However, the superimposition of private and public debt in the city-states was a source of instability. Acceptability of the state's bonds could be impaired by merchants' defaults and political conflict in the governing mercantile plutocracy. None the less, a new 'social technology' for creating money had been developed which was to achieve more stability in northern Europe, where it was based on an interdependence – as opposed to superimposition – of bourgeoisie and state.

During the sixteenth century, some northern European monarchies gained greater control of their sovereign monetary spaces, prohibiting the circulation of foreign coins, restricting the use of bills of exchange, and strengthening their metallic money. Elizabeth I's comprehensive recoinage in England during 1560–1, establishing four ounces of silver as the standard for the pound sterling, greatly enhanced confidence in the currency. Ironically, however, a strong metallic currency led to a scarcity of money and many monarchs became increasingly dependent on loans from merchants to finance their wars. Defaults were common, intensifying the conflict between sovereign and bourgeoisie. As early as 1339, for example, Edward II of England defaulted on a Florentine debt which was worth the annual Florentine production of cloth at the time (Arrighi, 1994, 103).



Charles II's default on his debt to the London merchants in the 'Stop on the Exchequer' (1672) was the catalyst that led to one of the most significant events in the development of modern capitalist money. Discontent among ruined merchants increased bourgeois support for 'Dutch finance', which had been established in Amsterdam in 1609. Modelled on the techniques developed in the Mediterranean city-state 'public banks' for the creation of credit money, Amsterdam's Wisselbank converted loans into transferable bonds and notes.

Following Charles II's death in 1685 and the accession of James II, the London merchants and parliamentarians invited the Dutch Prince of Orange to invade and accede to the English throne as William III in the 'Glorious Revolution' of 1688. The offer of the English throne came with strings attached. 'Dutch' public banking was established, but William had to accept a constitutional and fiscal settlement involving financial dependency on parliament and the bourgeoisie. London merchants provided £1.2 million of capital for the foundation of the Bank of England in 1694 to arrange long-term borrowing to finance William's expenditure – mainly on the wars to weaken competitors' trade. The £1.2 million of capital, loaned to the king and his government at 8 per cent interest, was to be funded by taxes and duties. In the new financial technology, the king and his government's *promise* to service the debt to the Bank of England became its *asset*, on which it was able to issue its own banknotes to private borrowers for the same amount of £1.2 million, *doubling the creation of money*.

In effect, the 1688 constitutional settlement in which sovereignty was now located in the 'crown-in-parliament' had subtly transformed the king's *personal* debt into the *'national'* debt. (As described in chapter 1, this is the same as the modern bank creation of deposits in the form of *public* money for a borrower, based on his or her promise to repay the *private* debt to the bank.) This 'national' debt became a perpetual and permanent loan which is never repaid, binding creditors to the state by their receipt of continuous annual interest. The ownership and control of the public – or 'national' – debt by numerically very small capitalist interests remains a definitive element of modern states, making them literally 'capitalist states' (Hager, 2016).

Marx grasped this incisively:

> As with the stroke of an enchanter's wand, [the public debt] endows barren money with the power of breeding and thus turns it into capital, without the necessity of its exposing itself to the troubles and risks inseparable from its employment in industry or even in usury. The state creditors actually give nothing away, for the sum lent is transformed into public bonds, easily negotiable, which go on functioning in their hands just as so much hard cash would. (Marx, 1981 [1887]: 529)

Modern capitalism's creation of money was grounded in the fiscal norms that the 'memorable alliance' had laid down, linking the state, creditors, and taxpayers in antagonistic interdependence. The state now depended on both financiers and taxpayers; continuous loans required dependable taxation to service interest payments on the debt. During the eighteenth century, efficient bureaucratic tax collection became one of England's 'sinews of power' (Brewer, 1989). However, taxes were unpopular; creditors were wary of a state default or the inflationary erosion of the investment by excessive state spending; and states had to mediate between these demands whilst pursuing their own interests.

Over the course of the eighteenth century, hundreds of local 'country' banks were established, using the same process for producing new money. Deposits created by borrowers' private debts to the bank became the assets for the issue of banknotes which existed alongside the minting of coined currency, augmenting the money supply. Backed by the sovereign and government's promise to pay interest on the debt, the Bank of England's notes were in most demand, enabling it to profit by accepting local notes at a discount in exchange for its own. Consequently, Bank of England notes began to circulate widely in the monetary space defined by the pound sterling money of account that Elizabeth I had stabilized at 4 ounces of silver.

Despite the apparent opposition between the two forms of money, expressed at the time by the age-old dispute on the nature of money between William Lowndes and John Locke, the banknotes and metallic currency were complementary. Gradually, it was realized that an exclusively metallic coinage restricted state expenditure and economic expansion; but without the precious metal standard, confidence in banknotes, as 'claims' on currency money, would have been weaker. In 1692, Sir William Petty, Oxford Professor of Anatomy, and founder member of the Royal Society, posed a rhetorical question: 'What remedy is there if we have too little money?' To which he replied: 'We must erect a Bank, which well computed, doth almost double the effect of our coined currency' (Hull, 1997 [1899], 446).



The integration of the two forms of money in England – private bank credit and state currency – was made possible by a resolution of the conflict between the bourgeoisie and the monarchy. The constitutional settlement reordered the antagonistic relationship between crown *and* parliament as 'crown-*in*-parliament'. The *modus vivendi* was the result of the delicate balance between too much state power, which might have suppressed mercantile banking, and too little state power, which might be insufficient to sustain a linchpin metallic currency to underpin the bank money.

The history of the USA illustrates how the forging of a monetary system, based on the integration of state and banking money and mediated by a central bank, can be inhibited by unresolved economic and political conflict. Fearing that bankers' power posed a threat to agrarian interests and the government's control of money, President Thomas Jefferson opposed Alexander Hamilton's 1791 charter for the Bank of the United States. Eventually, the charter was granted and renewed in 1816, but regionally based economic and political conflict persisted. After a further renewal was refused, the Second Bank of the United States was liquidated in 1841 (Calomiris and Haber, 2014).

The USA was without a central bank until the founding of the Federal Reserve in 1913 in response to the serious banking crisis six years earlier. The central bank's federal structure was an attempt to satisfy conflicting economic and political interests by giving twelve regions their own reserve banks. But this simply incorporated the conflicts into the banking system – especially, the Midwest's opposition to New York's Wall Street connections. 'Crippled by populism', a decentralized, fragmented, and unstable banking system persisted well into the twentieth century (Calomiris and Haber, 2014, 153).

Regional, economic, and political conflict in the UK was never great enough to stall the gradual extension of the Bank of England's control and management of the monetary system. During the late nineteenth century, it finally assumed the role of 'lender of last resort' in financial crises triggered by bank defaults and panic cash withdrawals from other banks. Lending to viable banks to save the system from collapse had been advocated since the 1840s, but Walter Bagehot's *Lombard Street* takes the credit for its acceptance. To halt a stampede for cash, he argued that the Bank of England should restore confidence by lending 'most freely . . . to merchants, to minor bankers, to "this and that man", whenever the security is good' (Bagehot, 1873, 51). The Bank of England's intervention provided the rationale for establishing the US Federal Reserve and almost all other central banks (Calomiris and Haber, 2014).

By the late nineteenth century, Britain's combination of a 'sound' gold-based currency and a robust banking system, founded on the world's leading economy, had become the monetary model to be emulated. However, at the pinnacle of its success, the gold standard's inherent weaknesses were exposed.

## 'The Barbarous Relic'

During the early twentieth century, it became clear that it would be increasingly difficult to fulfil the promise to redeem bills and notes in gold. Indeed, the metallic standard could only continue if notes circulated without being presented for conversion. This was even more obvious at the international level, where trade payments were made with the bills and notes of credit issued by London's merchant banks (de Cecco, 1974). Quite simply, the quantity of available gold was unable to maintain a credibly stable relationship with the volume of payments required by the vast expansion of global capitalism.

Furthermore, demands for greater state expenditure, especially to deal with the economic dislocation and depressions in the aftermath of the First World War, could not be met if governments maintained the gold standard constraint on the money supply – the 'golden fetters' (Eichengreen, 1995). In Keynes's view, the 'the barbarous relic' should be abandoned (Keynes, 1971 [1923], 172). (Ironically, the USA's belated adoption of the gold standard in 1900 occurred almost precisely at the time that it became increasingly difficult to maintain.)



A glimpse of the reality of modern money that lay behind the golden façade was revealed at the outbreak of the First World War in 1914, which was followed by large-scale selling of stocks and runs on banks, paralysing continental financial systems. Panic spread to London and queues formed outside the Bank of England demanding the exchange of convertible banknotes for gold sovereigns. Fearing the rapid exhaustion of the meagre gold reserves, the government closed the banks by declaring a four-day Bank Holiday. The Bank of England suspended gold convertibility; raised interest rates to 10 per cent to attract deposits; transmitted a massive infusion of credit to the banking system; and bought the London banks' outstanding credits that could not be settled by continental banks.

The most novel measure was the issue of £300 million of ten shilling (10/-) and one pound (£1) notes by the Treasury – not the Bank of England, which had only £9 million of gold. Signed by the Secretary of the Treasury John Bradbury, the 'Bradburys' were calmly accepted by the public and the crisis was averted. This was the first significant direct issue of money by the state. Although grateful for their salvation, the bankers balked at this circumvention of their profitable business in interest-bearing government debt. They insisted that the Treasury should not issue any further 'interest-free' money; if not backed by gold, money must be based on established practice, in which the state's promise to repay debt was the Bank of England's asset on which further notes could be issued. Furthermore, government debt incurred by the war must be financed in the time-honoured way with money borrowed at 3.5 per cent annual interest from the private sector, rescued in 1914 with public money. (See chapter 7 for the comparable rescue after the Great Financial Crisis in 2008; and also the question of 'interest-free', 'sovereign' money.)

The episode had shown that it was possible to create viable money without either gold or the arrangements between private finance capital and state debt that had evolved since

the late seventeenth century. But, at the time, none of the parties had any wish to abandon the 'memorable alliance' and its linkages between the state, its central bank, and the banking system. Rather, the ruling elite in the institutional nexus between City finance, state Treasury, and the Bank of England attempted to recreate the pre-war world and Britain's former power (Ingham, 1984). The domestic and international gold standard was controversially reintroduced in 1926, but ignominiously abandoned following a European banking crisis in 1931. Now, if the supply of money were no longer fixed to a naturally scarce precious material, could it be a resource at society's disposal to improve human welfare? With the extension of the franchise in western democracies and the onset of the Great Depression in the 1930s, the question took on more urgency.

## Modern Money: War and Democracy

With Britain's inability to maintain the gold standard, international monetary arrangements entered a period of instability in which no major economy was willing or able to manage its currency as a 'world money' for international trade. As the strongest currency, the US dollar was best placed to take on the role, but the government was unwilling. The reluctance probably reflected the fact that the fragile US banking system and its inexperienced, devolved, and politically fractious Federal Reserve were incapable of managing the dollar as international money. The absence of an adequate quantity of globally acceptable means of payment exacerbated the stagnation of world trade and the economic slowdown, which led to protectionism, nationalist populism, and, ultimately, the Second World War.

The collapse of the gold standard constraint on the supply of money was not immediately followed by the abandonment of the conventional fiscal orthodoxy of balanced budgets and 'sound money', which remained underwritten by economic orthodoxy. None the less, worldwide crises during the 1930s Great Depression brought some relaxation of monetary policy, especially in the later New Deal programmes in the USA. However, the apparent success of massive spending on public works by the Communist and Fascist regimes was met with scepticism. It was conceded that these measures might create employment in the short term, but the 'Treasury view' prevailed in Britain. Based on the 'classical' economic tenets of 'neutral' money and the 'real' economy, it held that levels of public spending in excess of revenue would ultimately lead to inflation.



The struggle for control of money in the capitalist democracies now began in earnest. Keynes and others gave a theoretical basis to the efficacy of money, arguing that 'effective demand' created by government spending induced virtuous circle of production, employment, and consumption. But these ideas were not generally accepted until during and after the Second World War, which wrought two important changes, influencing the way money was created and controlled in Britain and the USA. First, techniques were developed for the management of the entire economy as if it were a single enterprise. With Keynesian theory, the government control of materials, labour costs, and, above all, money laid the foundation for more proactive economic strategies, as opposed to piecemeal reaction to crises. Second, the Second World War tipped the balance of political and economic power in the democracies in support of government spending to ensure well-being and employment. Mass participation of populations, as both combatants and targets of bombing, had given further impetus towards social democratic policies that had been hesitantly pursued during the first half of the twentieth century. Now, governments were under pressure to fulfil their promises of recompense for the privations that populations had endured. The struggle for control of money creation entered a new phase.

## The Post-1945 Domestic and International Monetary Order

As the war came to end, the Allies began to plan the reconstruction of the world economic and political order. It was essential that pre-war economic nationalism and protectionism was replaced by a liberal international economic system, which, in turn, required an internationally accepted means

of payment. The question was addressed at Bretton Woods, New Hampshire, at a conference of British and US officials in 1944. Leading the British delegation, Keynes submitted a proposal for a new stateless world money which he whimsically dubbed the 'bancor' (*banc* [bank], *or* [gold]): that is, paper money underwritten by the participating nations. Keynes's proposal would have diffused power among the participants, but, wishing to avoid dilution of its post-war dominance, the Americans rejected it. Instead, they insisted that the dollar, valued at $35 per ounce of gold, was to be the linchpin global currency against which the exchange rates of all others were to be established by collaboration between national central banks and the newly established World Bank and International Monetary Fund.

Adopting a gold-dollar standard gave considerable power and advantages to US governments and Wall Street's international banks. As the fixed linchpin, the dollar could not be affected by the currency market's assessments of the strength of the US economy and the size of government debt. Consequently, the USA was free to decide on interest rates and a money supply to suit its needs; and US corporations and banks gained profits and a competitive advantage from the dollar's status as world money. In the words of the French Minister of Finance, Valéry Giscard d'Estaing, in 1965, it was 'an exorbitant privilege' (Eichengreen, 2010; see also Gowan, 1999). In the same way that the pound sterling enhanced British hegemony during the gold standard era, the dollar after 1945 was the USA's most potent weapon in the international 'struggle for economic existence'.

Although it was agreed that international free trade was the best means of achieving growth, Keynes had argued that these principles should not be applied to money. Speculation on international money and capital markets could impede the domestic economic policy commitments to full employment and social welfare. As Keynes explained:

> There will continually be a number of people constantly taking fright because they think that the degree of leftism in one country looks for the time being to be greater than somewhere else. . . . [T]he whole management of the domestic economy depends on being free to have the appropriate rate of interest without reference to rates prevailing elsewhere in the world. Capital control is a corollary of this. (Keynes, 1978, 149)



The pursuit of full employment and social welfare required that governments were able to control two monetary factors: interest rates and the currency's exchange rate. Interest rates affected the level of investment and employment; and exchange rates had an impact on the price of imported raw materials and of exports and, consequently, on employment. Control of international capital movements was to prevent speculative trading of currencies, based on variations and differences between countries in interest rates and inflation prospects. Controls restricted the purchase of foreign currency to its use as a medium of exchange and payment in international trade – Keynes's money "a mere intermediary' (Keynes, 1971 [1923], 124). For a while, the states retained the control of money that they had taken from the banks during the war, revising the balance of power with private money-capital in their favour. But we shall see that this proved impossible to maintain when the resumption of economic growth inevitably resuscitated the power of global capitalist banks and corporations.

## A New 'Alliance' and the Long Post-War Economic Boom

From the late 1940s to the early 1970s, the USA, western Europe, and some East Asian countries experienced unusually high and sustained growth, together with full employment and low inflation – capitalism's 'Golden Age'. During this period – with some variations – there existed a broad social democratic political consensus in western capitalism based on an application of Keynesian economics. Government deficit spending in advance of revenue could increase the levels of 'aggregate demand', leading to employment and, consequently, increased tax revenue to balance the government's accounts. Moreover, full employment and welfare provision were linked in further positive feedback: employed workers would need less welfare, which their taxes would help to finance.

'Free market' economic orthodoxy was moved off centre-stage, but its advocates continued to insist that government control of the economy and monetary system to pander to the electorate was not only economically irresponsible but also the political 'road to serfdom' (Hayek, 1994 [1944]). Deficit government expenditure did not express the 'real' capacity of the free market economy to produce output and employment and would ultimately create a supply of money in excess of the economy's needs, resulting in inflation.

The acceptance of deficit finance was an expression of a readjustment of the powers involved in the creation of money. Enhanced government control led to measures which became known as 'financial repression' (Reinhart and Belen Sbrancia. 2011). Governments aimed to reduce the cost of servicing the interest on their massive post-war debt and much-needed new loans by maintaining very low or even negative real interest rates. This was done by manipulating the financial system to reduce returns on financial investment to lower levels than would be expected in a free market. Caps were placed on interest rates on government debt and bank deposit rates. A captive domestic market for government debt was created by requiring banks to increase their capital requirements by holding government bonds. The export of finance in search of higher returns overseas was curtailed by capital controls introduced as part of the post-war Bretton Woods international monetary system. As Keynes envisaged, the pursuit of full employment required the integrated and coordinated control of both domestic and international money.

This shift in the balance of power in capitalism was also evident in the disadvantage to the financial sector of the economy and those classes which managed and lived on accumulated and invested wealth: the 'rentiers'. Taking the Bank of England into public ownership in 1946 gave governments the power to enact 'financial repression'. They could now control the banking system more directly in order to keep pressure on interest rates, reducing the cost of borrowing needed to cover deficit spending. However, this 'repression' of the state's creditors was a renegotiation not a repudiation of the terms of the time-honoured 'memorable alliance'. The state did not directly create money as it had done briefly with the issue of 'Bradburys' in 1914.



From 1945 to the late 1960s, there was an economic, social, and political equilibrium, or 'settlement', in many western democracies which was based on the way in which money was created and managed. Capitalist enterprise, organized labour, and financial classes (rentiers) accepted a revised distribution of rewards. Capitalism's 'Golden Age' of high levels of employment, steady rates of growth, and low inflation resulted in real increases in wages and profits, producing relative contentment after decades of depression and war. In the absence of alternatives, the disgruntled rentiers had little choice but to accept the revised terms of their deal with the state. Of course, there were political and economic crises; but these were never serious enough to doubt that the turmoil of the 1930s had been eliminated. As ever, governing elite hubris was eventually dashed by capitalism's volatility and its ever-shifting balance of power. Satisfaction with the new status quo among classes and economic interests was short-lived and there was a renewed struggle to control the creation of money.

## The Disintegration of the 'Golden Age'

By the late 1960s, a range of factors converged to bring an end to the domestic and international political settlements and agreements upon which the economic and monetary management of the 'Golden Age' depended. During the early 1970s, moderate levels of inflation in many western economies began to accelerate to over 10 per cent, reaching 26 per cent in the UK by 1976. Opponents of Keynesian economics seized on this as evidence for their theoretical critique of government deficit spending, but although there was a revival of orthodox monetary theory, matters were not so straightforward. As the suddenness of the inflationary surge was not closely correlated with an increased money supply, it was clear that other forces were involved. External factors such as the OPEC oil price rise and exchange rate instability played a part. However, a major driving force of inflation was generated by the very conditions that had initially sustained the post-war social and political equilibrium: full employment and rising real wages.

The wage–price spiral and inflation crises of the 1970s were expressions of a shift in the balance of power and associated changes in social and cultural expectations (Smithin, 1996; Ingham, 2004, 153–9; 2011, 81–8; Hung and Thompson, 2016). Full employment had removed the restraining influence of Marx's 'reserve army' of the unemployed and had empowered and emboldened organized labour forces. Commenting on wartime promises to maintain full employment, the Polish economist Michał Kalecki had presciently argued that governments would eventually have deliberately to deflate the economy to dampen the workers' new-found power and expectations of ever-increasing wages (Kalecki, 1943). By the middle of the 1960s, 'relative satisfaction' with peacetime full employment of the 1950s had given way to 'relative deprivation'. Rather than satisfaction in gratitude for respite from the past privations of their class, workers compared themselves with other classes and expected even better times.

The democratizing influence of the Second World War and the resumption of mass consumption capitalism, exhorting the working classes to participate in the 'affluent' society, were powerful solvents of Britain's traditional social order. With purchase by instalments and the removal of restrictions on bank loans, a place could be secured in a new status order based on 'conspicuous consumption'. As noted in chapter 3, increased levels of oligopoly enabled firms to accede to wage demands and simply pass on the increased costs in higher prices for consumers. A wage–price spiral was set in motion: firms and their workers both raised their prices, which were financed by money produced by loans from the banking system.

Inflation not only nullified nominal wage increases and provoked further demands, but also eroded real returns on financial investments to the point where they became unacceptably negative. The rentier and creditor classes grew disaffected with the post-war 'repressed' low rates of interest, which they had been prepared to accept if their returns were not completely erased by inflation. As Kalecki had forecast, interest rates were raised to constrain the money supply, deter borrowing, and placate creditors by restoring positive real returns on investments. However, there is a limit to how far interest rates can rise before a wave of defaults on loans



and a fall in borrowing for investment and consumption stall the economy. Moreover, it was politically and economically necessary to resume economic growth and full employment without incurring inflation. To achieve this, governments eventually turned to the old economic orthodoxy, which had never been entirely displaced by Keynesian economics. However, we shall see that the real 'war on inflation' was not only waged with ideas but also fought in a battle for the control of money, which involved the removal of trade unions' power successfully to claim higher wages.

The 1970s domestic inflationary crises were closely associated with the breakdown of the other political agreement that was designed to underpin the post-war Keynesian governance of capitalist economies in the West: the Bretton Woods international monetary system. As world growth gathered pace after the war, it became increasingly difficult to control capital movements and foreign exchange transactions. Checking and matching trade invoices to authorize the release of foreign currency for payments was cumbersome; and the recovery and expansion of transnational corporations and banks simultaneously greatly increased and hampered the monitoring of capital flows. However, the greatest source of these flows and the most serious threat to Bretton Woods was the very thing upon which it was based: the dollar. More precisely, it was the vast reservoir of dollars that the US balance of payments deficits had flooded into the world that proved to be decisive. These expatriate dollars fed the formation of unofficial parallel money and capital markets alongside the Bretton Woods system – most notably, the euro-dollar markets based in London that emerged in the late 1960s (Helleiner, 1994; Burn, 2006).

Efforts to counter these developments were ineffective; but the final blow came in 1971 when the USA decided that its interests were no longer served by maintaining the Bretton Woods system of a fixed relation between the dollar and gold. After years of erosion, this brought an end to the regulatory regime of capital controls and managed semi-fixed exchange rates which had allowed a greater degree of domestic control of economic policies. If anything, the USA's 'privilege' was now even more 'exorbitant'. It retained all the advantages of having the dollar as *de facto* world money

without the responsibility of managing the Bretton Woods system (Gowan, 1999). With the lifting of restrictions, the USA was able to attract foreign capital to finance growing deficits incurred by the Vietnam war and domestic 'Great Society' expenditure. Wall Street was opened to global capital on 'May Day' 1975, setting in motion a process of 'competitive deregulation' in which the leading states opened their markets to fund their borrowing and to give their banks access to profits from dealing in capital flows. By 1995, 61 per cent of all central bank reserves, 77 per cent of all bank loans, and 48 per cent of trade invoices and prices – including all-important oil – were in dollars (Gowan, 1999).

There had been a dramatic tilt in the balance of power from states to private capital in the creation and management of money. Buying and selling on global currency markets – for both international trade and speculation – once again determined exchange rates. The advantage to states of access to foreign capital to finance their debt came at the cost of a loss of control over exchange rates and interest rates. Consequently, as Keynes had envisaged, domestic and social policies were constrained. In these changed circumstances, any government's attempt to manage its exchange rate or interest rates to achieve policy goals faced the insoluble 'trilemma' of simultaneously achieving all three of the following: (i) fixed/stable exchange rates for currencies; (ii) domestic autonomy in control of interest rates by central banks; and (iii) unrestricted foreign exchange markets – that is, free international capital mobility. With floating exchange rates, it was only possible to exert some control over either interest rates or exchange rates, but not both.

For example, a currency's rising exchange rate, caused by speculation, could affect employment by raising the price of exports. However, countering this by lowering interest rates to reduce foreign demand for a currency might lead to more domestic borrowing, increasing the money supply and possibly inflation. And, of course, any hint of inflation would be likely to deter foreign investment in government bonds. Conversely, a falling exchange rate increased the cost of imported raw materials; but an increase in interest rates to halt the exchange rate fall might depress domestic investment and consumption, raising unemployment.



## Revising the Terms of the 'Memorable Alliance'

At the end of the 1970s, after a decade of political and economic conflict and crises in western democracies, the struggle for the control of money took a decisive turn – most notably in the USA and UK. The primary objective of 'Thatcherism' and 'Reaganomics' was to expunge inflation and restore positive real rates of return on invested capital. In this 'revenge of the rentiers' (Smithin, 1996; Volscho, 2017), the ideological and political significance of academic theories of money was never more apparent. During the late 1970s and early 1980s, the neoliberal and 'monetarist' critiques of Keynesian macroeconomic policy were established (Pixley, 2018; Skidelsky, 2018; Smithin, 2018).

In his revamping of the 'quantity theory' of money as 'monetarism', Nobel Prize winner Milton Friedman reasserted the nineteenth-century axiom that 'inflation is always and everywhere a monetary phenomenon in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output' (Friedman, 1970, 24). The main source of any increase was held to be government spending in excess of the capacity of the economy to produce the goods to soak it up. An elaboration identified the mechanism by which government spending generated inflation. Government payments created 'exogenous money': that is, 'outside' the market economy. When deposited by the payees into the banking system, it became 'high-powered' money by increasing the size of the 'fractional reserve' on which the banks could make loans 'multiply'. Holding a 10 per cent 'fractional reserve', for example, a bank could lend £90 for every £100 deposited, which, in turn, would 'multiply' further when deposited in another bank(s): that is, £90 minus £9 'fractional reserve' equals £81 million of lending capacity, and so on. 'Monetarist' theory held that reductions in government spending would prevent this 'multiplication' of money from exceeding the private sector's capacity to produce 'real' output. Furthermore, pragmatic monetarists believed that an insistence that there was a finite quantity of available money might act like the gold standard and initiate a 'self-fulfilling prophecy' that prices could not rise.

Embracing 'monetarism', the USA and UK introduced money supply targets which would be met by the reduction of government spending's emission of money into the economy. The first targets were for 'narrow money': that is, cash (M0) and easily converted bank deposits such as chequing accounts (M1). Less liquid, but increasingly important, forms of money – such as savings time deposits, credit cards, and 'near money'– were classified as 'broad money' (M2, M3, and M4) and initially not targeted. Furthermore, the rapid growth of 'broad money' was ironically accelerated by the Thatcher government's deregulation of the UK's financial system, which removed time-limits on some deposits, increasing their liquidity: that is, their convertibility into cash. The deregulation's unintended expansion of the money supply fuelled an inflationary 'boom' of rapidly rising house prices in 1989, followed, as ever, by a 'bust'. By 2006, the originally most illiquid category (M4) had increased to £1,250 billion from £25 billion in 1984 (Lipsey and Chrystal, 2011). (By 2010, the total money supply was measured at £2.2 trillion, while actual notes and coins in circulation were only £47 billion – a mere 2.1 per cent of the total.)

After consistent overshooting in the UK, the targets were revised upwards and abandoned entirely in 1984. The failure of 'monetarism' was largely a result of its faulty foundations: the greater volume of money is created not 'exogenously' but 'endogenously' by loans in the franchised banking system. This lending does not depend on the prior existence of a level of 'fractional' reserves provided by deposits, including those of governments' 'high-powered' money to its payees. As we noted earlier in this chapter, in the 'alchemy' of capitalist banking, loans make deposits and reserves can be sought later.

Governments fell back on controlling the demand for money by raising interest rates, which had an impact on inflation but at the expense of employment. In the UK, inflation fell from 18 per cent in 1980 to around 5 per cent in the middle of the decade; but unemployment doubled from 1.5 million to over 3 million during the same period. Unwittingly echoing Kalecki's prediction forty years earlier, some politicians saw unemployment as a temporary strategy for reducing labour's power to make successful wage demands. Money



had undoubtedly become a 'weapon' in the struggle for economic existence. In a reversal of post-war Keynesian macroeconomic policy, taming inflation had replaced employment as the government's main economic policy.

However, the power of trade unions to claim a larger share of the national income had to be permanently curbed. Consequently, between 1980 and 1993, the UK's Conservative governments introduced legislation to restrict unions' ability to back claims for higher wages with strikes. Deliberate confrontation in the UK during the 1980s – most notably the coal miners' strike in 1984–5 – resulted in defeat for the labour unions, a loss of power, and a decline of membership. However, changes in the balance of power in the economy were not entirely attributable to legislation and confrontation. By the late 1970s, heavy industries such as mining and iron and steel production, which were the basis for the strong labour unions, were in decline in the established western economies. These and other changes in the structure and conditions of employment, including a return to casual labour, seriously weakened the trade unions. The removal of organized labour's power, together with global competition, has resulted in stagnant real wage growth and an absence of inflation in the western economies so far during the twenty-first century.

## Global Capital, Independent Central Banks, and Monetary Policy

By the 1980s, the main activity on foreign exchange markets was no longer the acquisition of means of payment for international trade – Keynes's 'mere intermediary'. Speculation on currency values accounted for 90 per cent of transactions, exacerbating exchange rate volatility. Currencies were traded rapidly in response to any indication that government debt might be 'unsustainable': that is, inflationary or leading to default. Conversely, 'safe' currencies were bought in the expectation that their value would increase. As Keynes and others had envisaged, futile attempts to defend exchange rates and/or interest rates had an impact on the pursuit of domestic economic policy. The balance of power in the control of

money had shifted further from states and governments to markets. In the attempt to bring some stability and predictability to the markets' judgement of the prospective value of their currency, governments were compelled to establish a credible commitment to controlling inflation. They did so by formally abnegating the control of their money, handing it over to their 'independent' central bank.

A constant theme in money's history has been the attempt by the leading monetary power to remove money from the arena of social and political conflict. 'Metallism' assigned it to the natural realm, but with the end of the gold standard and the rise of representative democracy, this was no longer possible. In many capitalist economies during the last quarter of the twentieth century, the depoliticization of money took the form of granting formal independence to central banks (for an account of the relationship between central banks and democracy, see Pixley, 2018; Tucker, 2018). The control and management of money was handed to technocratic experts, informed by economic theory, in institutionally independent central banks. 'Independence' is interpreted differently in both principle and practice, but the general aim was to detach monetary policy from manipulation by governments bent on pandering to the electorate with inflationary expenditure. 'Independence' can be seen in terms of Carl Schmitt's understanding of sovereignty as the power to decide the 'exception': that is, the decision to act outside established law and convention (Schmitt, 2005, 5). 'Independence' organizes money as 'the decisive exception in capitalist liberal democracy. . . . [T]he monetary realm is posited as the domain of absolute, non-democratic sovereign authority in modern capitalist states, and . . . this virtually unaccountable power is justified by the claim that without it, liberal democracy would fall apart' (Mann, 2013, 199). A comprehensive account of central banks since independence by a former senior Bank of England official, Paul Tucker, concludes that alongside the judiciary and the military they have become the 'third great pillar of unelected power' (Tucker, 2018, ix). As we shall see in the following chapter, the European Central Bank (ECB) was granted 'exceptional' autonomy from the European democratic governments by the Maastricht Treaty (1992). This was more easily accomplished for the ECB because there was



no unified European state to which it might be attached – the euro is a 'stateless' currency.

The evolution of capitalist money shows that control of its creation and the uses to which it is put cannot be understood simply as the result of the application of economic 'science'. The current system for creating money is also the result of conflict over what is to count as money and who produces it. Theories of money have played their part and, indeed, it could be said that the persistence of the unresolved 'incompatibility' between the two main theories is an expression of the ongoing struggle for command of money's power: neutral instrument or force of production?