Origins: War, National Debt, and the Capitalized State

The initiators of the modern credit system take as their point of departure not an anathema against interest-bearing capital in general, but on the contrary, its explicit recognition. (Marx 1981: 429)

In order to trace how debt became a technology of organized differential social power under capitalism and the consequences this technology has on social relations and the environment, we must provide a brief genealogy of its emergence. Due to disciplinary silos and the prevalence of contested concepts across disciplines, we are in immediate danger of falling into traps if we are not clear what we are looking for at the outset. Many mainstream scholars of money, finance, and the capitalist firm try to convince us that capitalism has primarily been about the mitigation of risk, decreasing transaction costs, organizational and technological efficiency, and equilibrium prices (Roy 1997). In this reading of history, it is as if the goal of all human evolution—the *telos* of the species—has been the reduction of risk and transaction costs, the search for greater efficiency, and the endless search for equilibrium prices and Pareto optimality. We do not deny some role for these phenomena and fetishes—real or imaginary. What we do not share is this teleological approach to historical inquiry. First, because it occludes the illegitimate hierarchical effects of organized power and second because our starting point of differential power relations does not permit a teleological reading of history. In short, things can always be otherwise, and part of our task as scholars is to uncover how the present is no natural or progressive derivation, but constituted in social struggles that simultaneously

open up and close down political prospects. But an antiteleological view, skeptical of progressive or linear renderings of history, does not mean that history is absent human logic and rational pursuits.¹ As Weatherford has argued, “every culture organizes life around a few simple principles, activities and beliefs” (1997: 8). Without wanting to minimize other aspects of human endeavor, in *capitalist* culture, life and social reproduction are largely organized, we contend, around the *logic of differential accumulation* and the ritual of capitalization in an effort to gain more money and power over others and the environment (Nitzan and Bichler 2009). This is the pathological pursuit not of the entire population—who generally pursue what could be called the *logic of livelihood*—but only of a small minority. In other words, most people pursue money because they need it to survive and have a decent quality of life, not as an end in itself and not always to exert power over others. At the center of this order stands the privileged subject of capitalist history: the investors or capitalists who are driven by their own logic to accumulate differentially (Gill 1995). Differential accumulation simply means that capitalists aim to accumulate more money faster than others relative to a moving benchmark or shifting “normal” rate of return. In this sense, capitalists have no idea what maximum profits are, since they can only assess their performance relative to other capitalists trying to do the exact same (Nitzan and Bichler 2009: 241 and 309). For example, if I make 5 percent returns on my investments over a year and you make 7 percent, I know that my decisions were inferior relative to yours. If the average return on investment, however, is 11 percent, then both of us have drastically underperformed even those who have achieved “average” returns. If we were serious about beating the average rate of return, then our underperformance would be an indication that we need to change strategies.

The concept of capitalization is closely related to the logic of differential accumulation. Capitalization is the act of investors discounting a future flow of income into a present value adjusted by some factor of risk. The exact math, along with the time value theory of money, took a while to develop, but as we will see, the act of discounting future profit flows based on some assessment of risk

has a long historical pedigree.² As we know from Chapter 1, most capitalization consists of some form of debt instrument, mostly various forms of government debt, financial bonds, and nonsecuritized loans (e.g., student loans and credit cards). The other way capitalization is accomplished is in the equity or stock market. These markets are historically novel and a way of organizing corporate power and ownership (Henwood 1997). They provide investors with an exit option should they want to sell their ownership claims to companies or buy new claims to the income streams of other firms. Worldwide outstanding capitalization is \$67 trillion across sixty major exchanges.³ Di Muzio (2014) has argued that the rise in capitalization from humble beginnings coincided with the exploitation of energy derived from fossil fuels.⁴ Thus, what this suggests is that a key facet of capitalist culture since its emergence is the explosive rise in capitalization and institutions like the stock market, to support the trade in ownership claims over the future profit of companies shaping social reproduction by capitalizing energy. The largest companies in the world by market capitalization are called “dominant capital” by Nitzan and Bichler (2009). When we refer to “dominant capital,” in this book we mean the companies listed on the *Global Financial Times* 500—a list of firms ranked by market capitalization.⁵ These firms have tremendous power to shape and reshape patterns of social reproduction given their control over production and social reproduction. They control energy, food, medicine, clothing, software, media, telecommunications, transport, mineral wealth, and much more. It is also important to note that many of these nonfinancial firms are also deeply in debt to banks. For example, US nonfinancial corporate debt is \$13.9 trillion according to the Federal Reserve.⁶

But while differential accumulation is the dominant logic of capitalism and capitalization its dominant ritual, market dependence and the price system are also integral to capitalism. This means that money—in this case, the unit of account—is absolutely central to capitalism since accumulation is measured in pecuniary terms and only pecuniary terms. Insofar as this is an accurate assessment of our

affairs, we ought to have a clear understanding of how capitalist money is created. As Ingham and others have noted, there is considerable confusion over what money is and how it is produced. Orthodox economics is of no help. Modern economics textbooks continue to inculcate a distorted and incorrect account of modern money creation, leading to generations of graduates leaving school with little understanding of arguably the most important social institution of their societies. As Ingham has explained and others have confirmed, modern money is “a social relation of credit and debt denominated in a money of account” (2004: 12; see also Rowbotham 1998). The majority of any country’s money supply is produced when banks issue loans to willing borrowers, namely, governments, businesses, and households.⁷ In other words, banks are not intermediaries—they do not take from savers and lend to borrowers with differential interest rates.⁸ Nor does the creation of money depend upon someone entering a commercial bank to make a deposit (Sheard 2013). Commercial banks are quite simply “merchants of debt” that produce and allocate needed money as interest-bearing debt (Minsky cited in Ingham 2004: 161).

In traditional economic accounts, money is said to play at least three roles in society: a medium of exchange, a store of value, and a unit of account or measure of value. Following Innes and Keynes, Ingham (2004) argues that the unit of account function of money is far more important than the actual role played by the “medium” of exchange (Wray 2004). Money is not paper bills, coins, gold, silver, or chocolate, but an abstract unit of account that can be represented by any medium (albeit, the medium is typically selected by a political authority or power-holder and must meet certain standards). As Ingham (2004) and others argue, the role of money as an abstract measure of value is logically and historically prior to any fascination with coins or the gold standard and can at least be traced back to the first agrarian command economies of the Nile and Tigris (Wray 2004). Indeed, as Rowbotham suggests, “most money exists purely as a number” (1998: 10). However, while we should not confuse money with a “thing” or a material substance as do most

mainstream economists, Ingham argues that we can conceive of four historical modes of monetary production:

- Money accounting according to a standard of value without transferrable tokens (earliest known case: Mesopotamia, third millennium BC)
- Precious metal coinage systems (Asia Minor, ca. 700 BC to early twentieth century AD)
- Dual system of precious metal coinage and credit-money (fifteenth to early twentieth century)
- The pure capitalist credit-money system (mid-twentieth century onwards) (Ingham 2004: 77–78).

We agree with Schumpeter, Keynes, and Ingham that one of the key aspects that distinguishes capitalism from earlier forms of organizing society and its endeavors is the way in which money is created as interest-bearing debt (Schumpeter cited in Ingham 2004: 63). If, as Nitzan and Bichler (2009) claim, capital is commodified differential social power measured in money, then we ought to be highly curious how money is produced and allocated in our societies. In this chapter we argue that the key to understanding debt as a technology of power is not just to appreciate that modern money is largely created as debt by commercial banks but to point out, more importantly, that the production and allocation of money is *privately owned*. Thus, to provide a genealogy of debt as a technology of power in this chapter, we must be concerned with how the production and allocation came to be privately owned, controlled, and capitalized by the few. The corollary of this social fact is not simply that it makes the relationship between debtors and creditors paramount in capitalism but that the supply of money is “subject to rigorous control” so that there is always a demand for money and a dearth of its availability (Rowbotham 1998; Ingham 2004: 7). To use Veblen’s language, we could call the private ownership over the production and allocation of money the greatest “sabotage” in human history since, in order to exert any power whatsoever, the owners of banks and their managers must

effectively incapacitate or restrict the money supply and war against possible alternatives to their effective monopoly. So far they have been very successful because they have attached themselves to state power. One indication is that money and monetary reform were very heavily debated in the past (Rowbotham 1998: 7). Today, debates and proposals for monetary reform do occur, but they are relatively marginal and have so far failed to gain significant political traction despite the obvious unfairness and frailty of the current system of modern finance and money production. This is what makes debt a technology of differential power beneficial to creditors: private ownership over an exclusive right to create credit (money as debt) and, over time, the naturalization of this power as private—both feats strongly assisted by the fact that most mainstream economics textbooks teach a completely inaccurate model of how money is supplied to the economy (Häring 2013). But while this is a central aspect of our argument, we also recognize that what is ultimately being monetized and capitalized is energy in its various forms. The money supply of various countries—particularly of the empires of England/Britain and later the United States—was allowed to expand because of surplus energy provided by fossil fuels. A further impetus of the present system of money creation, we argue, requires constant economic growth that is unsustainable in the long run due to the natural limits of some resources and the fact that fossil fuels—the primary source of energy for capitalism—are nonrenewable. It is worthwhile here to stop to consider why economic growth is so paramount to our societies. Why must our economies grow—even when GDP tells us nothing about human well-being (Daly 2005; Fioramonti 2013)?⁹ It seems that there are at least three main reasons: two are imperative given the enforced scarcity of money for the majority and one is ideological. As identified by Rowbotham (1998: 37ff), forced economic growth first results from the competition for money to pay down debt or for use in buying goods and services. Since banks create money when they extend loans to borrowers *but do not create the interest*, there is always more debt in the system than there is the ability to repay the debt. For example, as stated above,

business or nonfinancial corporate debt in the United States is \$13.9 trillion. If we apply a simple rate of interest of just 3 percent, at the end of the year, the US business community would owe \$417 billion to their creditors. Since this \$417 billion has not been created at the time when the loans were taken out (the principal is only created, never the interest), the money to pay down business debt must be found elsewhere in the economy—thus ultimately removing it from popular circulation when debts are repaid. This creates a further scarcity of money in the economy. Moreover, the cost of borrowing must also be pushed on to consumers: it becomes an integral part of business pricing and inflation in the economic battle to accumulate differentially. Figure 2.1 demonstrates the rise in business debt in the United States and we assume a similar trajectory for other advanced capitalist nations.

The second factor identified by Rowbotham is the chronic lack of purchasing power in the economy, which results from the fact that “distributed incomes” are insufficient to purchase the goods and services produced in society. The evidence for this claim is the mounting consumer debt in rich countries. As *The Economist* reports, “The ratio of debt to disposable income rose by an average of 30 percentage points, to 130%, in OECD countries between pre-boom 2000 and pre-crisis 2007.”¹⁰ There would be no need for this consumer

Figure 2.1 US nonfinancial business debt 1960–2014 Q1

Source: Federal Reserve, LA144104005. Q.

debt if there were not a chronic lack of purchasing power in the economy. Furthermore, even if everyone “lived within their means” or “only spent what they earned” as conservative social forces are wont to advocate, the global economy would inevitably collapse. For example, the total outstanding unsecured debt as of 2012 stood at \$62 trillion dollars across 183 countries (McKinsey 2013). It is the *largest category of debt*—bigger than the total national debt of all countries combined—and is up by 170 percent from 1990. Such debt consists of personal loans, lines of credit, credit cards, and student debt among other debt “products.” Now imagine if all of a sudden this debt-money vanished from the global economy. Disaster would surely ensue.

The third reason for forced economic growth is ideological insofar as the promise of economic growth is supposed to increase the wealth of everyone over time as the economic pie gets larger. Hence, political elites and the extremely wealthy avoid any clarion calls for redistribution or a transformation of the prevailing social relations of production and exchange. As Kempf argued,

To escape any re-evaluation, the oligarchy keeps repeating the dominant ideology according to which the solution to the social crisis is production growth. That is supposedly the sole means of fighting poverty and unemployment. Growth would allow the overall level of wealth to rise and consequently improve the lot of the poor without—and this part is never spelled out—any need to modify the distribution of wealth. (2008: 70)

The need for economic growth in spite of observable ecological limits on a finite planet is thus hardwired into debt-based economies—it is encoded not only in the math of the system but also in the ideological politics of growth. To illustrate how pathological the pursuit of growth is, try imagining any politician running a successful campaign at present by arguing the need to degrow the economy. Or imagine a corporate chieftain arguing that he or she would like to generate fewer earnings in the next quarter than the last. Both are absurdities in a debt-based monetary system based on differential power.

So to sum up here, our brief genealogy of debt as a technology of power has to take account of the following:

- Differential accumulation
- The rise of capitalization based on fossil fuel energy
- Differences in modes of money production
- The creation of the price system and market dependence
- The ownership and capitalization of money production as interest-bearing debt
- The fact that debt-premised economies require perpetual economic growth
- The international dimensions of these phenomena.

To do so, we now turn to examine how debt became capitalized by organized power and find its genealogy rooted in war, the national debt, and the capitalized state of England.

Money, war, and debt before the Bank of England

While the social relations of credit and debt existed long before the emergence of capitalism, and money has taken many forms historically, we are interested in how debt became a technology of organized and capitalized power (Weatherford 1997; Davies 2002; Graeber 2011). The key development occurs with the creation of the Bank of England in 1694 and the innovation of a funded long-term national debt capable of being serviced by the ever-growing regressive taxation on the public (Dickson 1967; O'Brien 1988; Brewer 1989; Braddick 1996). But we should not theorize England as existing in isolation from the geopolitics, foreign markets, and the religious and dynastic power struggles of Europe and later, the world (Teschke 2009). As many scholars have observed, since the Norman Conquest of 1066, rulers actively centralized political power earlier than most continental nations (Wood 2002). Over time, the nobility was largely demilitarized

relative to their continental counterparts, making violent challenges to centralized royal authority less likely (Brewer 1989). England also achieved the “first uniform national currency” by 1066—a feat that would take continental powers hundreds of years more to achieve (Davies 2002: 130). Finally, due to an “energy crisis” in the 1500s resulting from widespread deforestation that priced wood out of reach for many, more of England’s population turned to coal as a key source of energy (Nef 1977; Siefert 2010). This new energy source and the need to excavate more coal from the watery bowels of the earth sparked what has popularly been called the world’s first Industrial Revolution as steam power and rail were used to pump water out of mines to extract and transport more coal energy (Smil 1994). As we will discuss briefly below, this new energy source inspired a number of inventions and innovations, increased productivity and surplus, and ignited the rise in British capitalization on the London Stock Exchange.

Despite these differences, England shared at least four characteristics with the nations of continental Europe. First, the country was overwhelming agrarian, undemocratic, and run for the benefit of royal authority and the lords of estates. Second, money was understood to be gold and silver rather than, say, pure credit or cattle. One of the chief goals of the rulers was to control the production of this money where possible and obtain evermore of it. Third, there was a dearth of money due to the belief that money could only be silver and gold—metallic substances believed to have some “intrinsic” worth. As a consequence, increasing the money supply could only be done in one of three ways: finding new mines at home or abroad, trading goods and services with other nations in exchange for gold and silver, or plundering it from others. Fourth, due to England’s geography, it avoided much of the constant and expensive warfare experienced on the continent in the early modern era. However, England too engaged in foreign battles and was therefore in constant need of money to finance its conquests and conflicts and to satisfy the desire of its ruling class for more money, wealth, and power (Brewer 1989).

Up until the Glorious Revolution of 1688 and the creation of the Bank of England (1694) and the national debt, the production or creation of

money and its initial allocation was the prerogative of the sovereign (Davies 2002: 136). The sovereign would enlist various “moneyers” or mint-masters of a certain reputation to mint the sovereign coins and occasionally remint them when they had become debased or overused. Minting errors or chicanery with the currency was greeted with corporeal punishment such as the chopping off of hands, blinding, or castration, if not all three acts (Davies 2002: 140). These coins would then be spent into the economy, particularly for war-making or the support of soldiers in continental battles for dynastic power and wealth. This created a situation where private merchants engaged in the production and trade of goods and services could potentially amass a small fortune in coins. It is also worth remembering that the historical record appears to confirm that, at least in the early modern era before the Industrial Revolution, most peasants had little access to this form of money (Dyer 1997; Gilbert and Helleiner 1999: 3). In other words, metallic money of the silver and gold variety was circulated by the powerful in pursuit of their interests as an early form of accounting for their social power to command goods and services from others (Davies 2002: 145). Money was largely a product of the powerful, not a weapon of the weak. Some of the coins spent into the economy by the regent would then be redistributed to the sovereign purse through official taxation. This meant that monetary and fiscal policies were tightly linked. As Davies noted, “minting and taxing were two sides of the same coin of royal prerogative” (2002: 147). Taxation made the coins valuable since they were needed to pay taxes.

However, unlike royal authority in France, which was constantly on the prowl for more taxes because it had to pay for a burgeoning group of venal officeholders who were often tax exempt themselves, English sovereigns appear to have been more constrained by their subjects. This made it more difficult to overburden the population with excessive taxes—particularly without regular parliaments. This does not mean that taxes were not onerous on some populations; it is just to suggest that from a comparative perspective, the English were more lightly taxed than their counterparts in France, with the burden falling

more on the propertied than on the nonmonetized peasantry. However, after the Glorious Revolution of 1688 and the creation of the national debt, the English would become the most heavily taxed population in all of Europe. As we will discuss momentarily, a plethora of new taxes was raised to finance the English ruling class's continental wars and colonial conquests (O'Brien 1988; Brewer 1989). But this could not have had any effect and, indeed, would have destroyed the economy without an expansive monetary supply first occasioned by the Bank of England issuing loans originally backed by silver coinage (Carruthers 1996; Davies 2002; Wennerlind 2011).

What is often forgotten is that before the sovereign was made subordinate to Parliament, financing war was the *personal* responsibility of royal authority. With relatively strict limits placed upon taxation, and with a limited money supply, this meant that if the sovereign wanted to pay for expensive wars, he or she could only raise funds in a limited number of ways. First, the sovereign could borrow from private subjects and where finance was not forthcoming, the regent could force loans. The first option was limited by the creditor's perception of the royal finances, while the second (forced loans) was limited by the private power of moneyed lenders and their ability to obscure their truth worth. Second, peerage titles, venal offices, monopolies, and royal lands could be sold for ready cash to private social forces. While the first two options were not as common as the practice was in France, the third and fourth options (discussed below) were very common and a chief source of royal revenue. In fact, since Richard I (1189–99), successive monarchies effectively “privatized” royal assets and privileges when they needed money to repay debts and/or finance war (Davies 2002: 158; Wennerlind 2011: 25). Brewer put this in the context of war:

The fiscal demands of the crown also prompted the sale of trade privileges and monopolies. Joel Hurstfield has described this as “putting up for auction the machinery of government itself.” Begun by Elizabeth and rapidly expanded during the Spanish War in the

1580s and 1590s, the practice reached a peak in the 1630s when the monopolies on starch, coal, salt and soap raised £80,000 a year for the crown, and between £200,000 and £300,000 for the monopolists. (1989: 14)

As we shall see, this practice of selling state assets to repay debt continues to this day. The only difference is that “public” rather than “royal” assets are now sold to private capitalists—a key facet of debt being mobilized as a technology of the powerful in our own times (Chossudovsky 2002: 55ff; Perkins 2004). A third way regents could raise funds was from rents on the royal estates. This was a key source of revenue, but since successive regents sold off more and more royal property, the proceeds were never sufficient to finance war and other affairs of state. A fourth option was to debase the currency by lessening its metallic content, thus creating more coins out of the same metallic base. This was, of course, a highly contested option among the true believers in sound metallic money. Two additional avenues could be used: the plunder of gold and silver from enemies and, by the time of Henry VIII, the dissolution of the monasteries. The expropriation and private sale of the monasteries was primarily a revenue-raising exercise as the “department established to supervise the dissolution, the Court of the Augmentation of the Revenues of the King’s Crown” makes clear (Woodward 1966; Davies 2002: 194ff).

So what are we to make of money, war, and debt before the Bank of England? First, while the sovereign did have the ability to mint money, once it was spent into the economy, successive regents lost control of it and could only recollect money through taxation and the various other means mentioned above. What this suggests is that while the regent was effectively above the law and therefore exercised differential legal power over subjects, at base the regent had *very limited financial power*. The way in which money was spent into the economy, private monopolies were granted, and royal assets were sold allowed private social forces to amass greater and greater fortunes ultimately giving a small group of merchants and creditors considerable financial power over the juridically

superior monarch. Second, at least since Richard I, all successive monarchies were in constant debt to creditors, which continued to weaken their power over time. Evidence of this can be seen in the emergent political theory of the time. Harrington's tract *Oceana* (1656) argued that the breakdown of the monarchy in the bloody English Civil Wars (1642–51) was largely the result of a shift in the financial power of the propertied (Pipes 1999: 32). Differential power in property and finance now rested with wealthy subjects rather than the monarch. The regent could not be all powerful and the nation's largest debtor at the same time. Third, the fiscal demands of the sovereign were largely for the purposes of war-making and defending the realm—expensive propositions that called for evermore money (Brewer 1989). Last, because money was primarily thought of as silver and gold, there was virtually always a scarcity of money, though not of potential material capacity (Davies 2002: 170). Increasing the money supply meant debasement or finding new sources of silver and gold by trading with other nations, plundering other nations, or finding and exploiting new mines. If the monarch would have had the power to create capitalist credit-money out of thin air, the history of capitalism might have been radically different. But rather than becoming the realm's chief creditor, successive monarchies were typically the kingdom's chief debtors. In this light, it is hardly surprising that the regent would eventually be made subordinate to the financially prosperous and propertied in Parliament. As it turns out, the power to create money as interest-bearing debt was given to private social forces. Thus, a potentially public institution operating in the interests of all emerged as a private institution operating in the interests of a small class of merchants and financiers.

The Old Lady of Threadneedle Street

By the time of the Glorious Revolution of 1688—a revolution that solidified parliamentary power over the monarchy—elite debates had raged over the scarcity of money and what could be done about the dire situation. Moreover, there was a general feeling among certain

sectors of the elite that the economy was not living up to its full potential. Capacity to improve and produce more agricultural goods and manufactures seemed within technical reach, but so long as money was conceptualized as bullion, the supply could not be easily increased and expanding commerce beyond a certain limit, virtually impossible. As Wennerlind notes, “while modern economic theory does not recognize the possibility of a scarcity of money, seventeenth-century thinkers were *consumed* by this problem” (2011: 17 *our emphasis*). In an effort to expand the money supply, contemporaries even sought the philosopher’s stone, or the alchemical ability to transform base metals into gold and silver. The idea of credit was well known and extensively used domestically and in international exchange, but like alchemy, it too was limited (Muldrew 1998). Before the Bank of England, credit was traditionally a private and personal affair between known lenders and borrowers—not a social relation among strangers. It is also true that goldsmiths extended the currency by issuing paper notes in excess of their gold deposits (Davies 2002: 249ff). But whatever the various types of credit notes or pledges in existence to facilitate commerce, they were neither generally assignable nor transferrable, thereby limiting their use as a normally circulating currency that could replace the national coinage in circulation and increase the supply of money with any great effect (Wennerlind 2011: 69).

In this atmosphere of scarce money, a hundred or more proposals were put forward for some type of public bank that could relieve the popular cry for more money (examined more fully in Horsefield 1960). On the heels of these proposals, only one scheme was officially sanctioned: the privately owned, for-profit Bank of England. As Dickson (1967) has argued, this institutional innovation ushered in a “financial revolution” that would facilitate the agricultural and industrial revolutions. However, as Wennerlind (2011) argues, what was ultimately required before any institution could be developed to solve the problem of scarce coinage was an epistemological revolution that dissociated money from a metallic substance such as gold or silver. Wennerlind traces this to the Hartlib Circle’s belief in

the possibility of constant improvement and their reinterpretation of money as a symbol of value rather than a staunch material substance. As he explains,

The Hartlibians believed that by facilitating circulation and engendering productive endeavors, money had the capacity to activate hidden or dormant resources in nature and mankind. Money thus partnered with knowledge and industry as the key ingredients in the infinite expansion of nature and society. Moreover, as the world of goods expanded continuously the money stock had to be able to grow proportionally in order to circulate all the new commodities ... Expanding the money stock was therefore no longer about solving a temporary scarcity of money, but rather about the introduction of a monetary mechanism that could facilitate change and growth, *ad infinitum*. (2011: 45)

This ideological transformation, however, did not wholly delink credit from a metallic substance—a mode of money production not countenanced *fully* until the United States abandoned the gold standard instituted by the Bretton Woods agreement of 1944. Nor, as is the case today, did this institutional innovation delink money from war or the preparation for war (albeit some states have smaller military budgets and a few, none at all, e.g., Costa Rica). In fact, while the birth of the Bank of England can be traced to the scarcity of money debates of the seventeenth century, the ultimate reason for its creation was not the Hartlibian improvement of society but to finance war against Europe's most powerful ruler, Louis XIV. As Davies makes clear,

The Bank of England came into being by the Ways and Means Act of June 1694 and was confirmed by a Royal Charter of Incorporation (27 July 1694). The Act makes it clear that its real purpose was to raise money for the War of the League of Augsburg by taxation and by the novel device of a permanent loan, the bank being very much a secondary matter, though essential to guarantee the success of the main purpose. (2002: 259)

The political settlement of 1688 placed more power in the hands of Parliament to govern and oversee the fiscal matters of the realm. This

gave greater confidence to city merchants, goldsmiths, and property holders more generally, who had often been the victims of forced loans, arbitrary taxation, and royal defaults in the past (North and Weingast 1989). Organized by the Scot, William Paterson, and a coterie of city merchants, the Bank of England was to extend a permanent loan of £1.2 million in banknotes to the new government to finance the war with France. In exchange, the bank received corporate existence, 8 percent annual interest on the initial sum lent (£100,000), and a £4000 pound annual management fee (Davies 2002: 260; Broz and Grossman 2004: 56). The income stream of interest and fees paid to the Bank of England was secured by a specific tax—the “Tonnage”—which raised taxes on the carrying capacity of sea-going vessels largely carrying alcohol. Together, these acts constituted a radical historical break from early forms of finance since, for the first time, a funded, permanent *national* debt was created. This meant that private creditors were no longer capitalizing the power of royal authority when they lent to the regent, but the fused power of the King-in-Parliament and their ability to tax the population by force if necessary. A further development stemming from this institutional innovation was that the money supply could be extended more fully than in the past. To recall, goldsmiths could issue their own notes in excess of their gold reserves, thus increasing the money supply. But this exercise was limited by their private reserves and the confidence of borrowers and depositors, and therefore individual goldsmiths could not solve the scarcity of money problem in England. What made the Bank of England unique was that it was an organized corporate force of creditors that capitalized the King-in-Parliament’s power to tax, therefore guaranteeing a revenue stream of interest on a permanent public debt that would likely never be paid off in full.¹¹ Marx noticed the historical and international dimension of the public debt:

The system of public credit, *i.e.*, of national debts, whose origin we discover in Genoa and Venice as early as the Middle Ages, took possession of Europe generally during the manufacturing period. The colonial system with its maritime trade and commercial wars served as a forcing-house for it. Thus it first took root in Holland.

National debts, *i.e.*, the alienation of the state—whether despotic, constitutional or republican—marked with its stamp the capitalistic era. The only part of the so-called national wealth that actually *enters into the collective possessions* of modern peoples is their national debt. Hence, as a necessary consequence, the modern doctrine that a nation becomes the richer the more deeply it is in debt. (1887: 529)

What made England different from its precursors is that backed up by a relatively small reserve of silver (and later gold), the Bank of England could also issue assignable notes in considerable excess of its reserves—effectively creating a new currency and expanding the money supply to greater effect than individual goldsmiths. As Wennerlind points out, though there were historical precursors, this created “England’s and Europe’s first widely circulating credit currency” (2011: 109).

Scholars of the “financial revolution” in England have made much of these developments since Dickson’s (1967) seminal work on the Bank of England and the permanent national debt. However, despite minor disagreements in the literature, most have focused on the institutional factors that made the revolution a success. These scholarly accounts tend to be more celebratory than critical and they too often downplay the effects of class power and violence in the making of debt as a technology of institutionalized social power—a power wielded, we remind the reader, by minority social forces extending loans as interest. Our approach is different: we want to uncover the power underpinnings of this new relation of force between money-creating creditors and the majority of debtors. Not only do we want to uncover the international dimensions of this new institutional apparatus of credit, debt, and political power, but we also want to demonstrate the ways in which the exclusive nature of money creation as interest-bearing debt by private social forces was instantiated and the consequences of this system’s operations on political economies today. We will discuss this in greater detail in the next two chapters, but here we want to draw out some of the key theoretical and practical dimensions of debt as a technology of power at its institutionalized inception.

First, the national debt backed by the government's power to tax facilitated colonial adventures and furthered wars that dispossessed first peoples of their land, enforced their labor and new ways of life, destroyed languages and culture, and put to death many of those who resisted imperial policy. All of this extended ruling-class power in Britain through the internationalization of debt relationships backed by superior force. As Brewer notes, "after 1688 the scope of British military involvement changed radically. Britain was at war more frequently and for longer periods of time, deploying armies and navies of unprecedented size" (1989: 22). Indeed, in the eighteenth century, English governments spent "between 75 percent and 85 percent of annual expenditure" on the military apparatus or servicing debts to private creditors for previous wars (Brewer 1989: 31). Thus, the so-called "national" debt was intimately tied up with ruling-class power and a growing apparatus of transformative international violence. But there is something more missed by most observers of this period. The power of money creation was slowly slipping toward private creditors at the Bank of England, and later commercial banks outside and inside of London, and this meant that financing the organized violence of ruling-class power embodied in the state was *the largest way in which new money entered the economy*. Put another way, as Britain's national debt ballooned to pay for wars, so too did its monetary supply and interest charges owed to private creditors.¹² With more war, there was more money in the economy and therefore the potential for greater prosperity, albeit unevenly shared across the class hierarchy. While the nature of national belligerence may have changed since the days of formal colonialism, government spending on war and the preparation for war is still one of the fundamental ways in which new money enters the economy. For example, at least since 2000 if not before, the United States current account deficit closely mirrors its defense spending so that if defense spending were significantly curtailed it is likely that the United States could achieve balance of payment surpluses (see Figure 2.2). Yet if this war-spending is not forthcoming or replaced by other types of government spending, the global money supply of

Figure 2.2 US military spending and current account deficit 1980–2014

Source: Federal Reserve and OMB. Historical Tables 3.2.

dollars (effectively the world’s most important reserve currency) will contract and there will inevitably be more financial crises, business failures, and higher world unemployment. The “fiscal-military-state” or what some have called the welfare-warfare state is the direct result of debt being mobilized as a private technology of power (Clayton 1976; Brewer 1989).

Second, debt as a technology of power cannot be mobilized without exclusive ownership and the right to exclude others from doing the same thing. If everyone is a creditor, there are no debtors. Although the initial charter of the Bank of England did not grant the bank an exclusive monopoly over the issue of paper notes, as other social forces vied for the same power, the bank’s owner-managers worked to solidify their exclusive rights. In the Bank of England’s recharter of 1697, Parliament agreed that no other bank should be erected while the Bank of England remained in operation. As Parliament needed to finance more foreign wars, additional protections were included in renewed charters:

In 1708, during the War of Spanish Succession and again in exchange for a fresh loan, the Bank obtained from Parliament its most significant protection from competition: the legal prohibition of associations of more than six individuals from carrying on a banking business in

England. This was crucial in restricting competition, because issuing bank notes was the major source of bank funding in this era. The Act of 1708 thus gave the Bank a monopoly over joint-stock note issue. (Broz and Grossman 2004: 57)

What this suggests is that early on, the bank sought to incapacitate competing banks and secure its own exclusive rights to issue credit to the government in return for political favors, interest, and fees. But it was not just competing banks and ideas for releasing credit to the public to facilitate trade that were attacked by the Bank of England's operators. As Wennerlind's research shows, protecting the nascent credit industry meant the death penalty for counterfeiters. To secure the public's trust in credit, Sir Isaac Newton was made warden of the mint and tasked with "investigating, detecting and prosecuting crimes against the currency" (2011: 18). Since there could only be one real counterfeiter—the Bank of England—members of the population who clipped coins or counterfeited the new paper banknotes were punished by death: hanging in the case of men and burning in the case of women (Wennerlind 2011: 150). The death penalty was not only a monetary policy but a deterrent for the inception of debt as a technology of organized power (Wennerlind 2004). Today, the entire commercial banking system depends on this type of exclusive right to issue credit and the profits of these institutions are protected by a massive legal apparatus that punishes crimes against money and sanctions what in an earlier time used to be called usury (Geisst 2013). In most countries today, usury is a legally sanctioned weapon of the powerful against the weak. What this means is that not only do publically elected officials actively refuse to create and allocate non-interest-bearing credit as a public good, but they also enforce their very exclusion from money creation! And while modern banking is not altogether a monopoly—there is indeed ostensible competition among the banks for market share—this is in considerable respects—illusory. Through interlocking ownership, commercial banks have come to capitalize one another so they have what could be called an "effective monopoly" on creating the money supply (Vitali et al. 2011).

A third theoretical and practical dimension emerges from our brief analysis above: the relationship between differential capitalization, energy, and the normal rate of return. With the creation of the Bank of England and the national debt, a “normal” rate of return connected to state power was established.¹³ Thus, at its inception, Parliament promised an 8 percent return on invested capital to city financiers who subscribed to the Bank of England. In modern parlance, this interest rate provided a “benchmark return” by which investors could judge alternative courses of investment, thus institutionalizing what Nitzan and Bichler (2009) call “differential accumulation” by pegging interest to state power. To this day, interest rates on government bonds remain the benchmark or heart of global finance since they all represent the state’s power to tax its citizenry and service debt to creditors. Emerging alongside this market in government securities was the chartered joint-stock company (Scott 1912; Walker 1931; Micklethwait and Wooldrige 2003; Robins 2006). In England, these companies predate the Bank of England and were capitalized on the basis of their exclusive rights to profit from trade granted to them by royal charter. Yet two companies were particularly important for helping to finance or uphold the national debt of England: the South Sea Company and the East Indian Company. The South Sea Company was founded in 1711 and was originally intended to help alleviate government debt by engrafting government securities into company shares. The capitalization of the South Sea Company was largely contingent on the Spanish *Asiento*, which granted the company exclusive rights to sell African slaves to Latin America. In effect, investors who bought shares in the South Sea Company were betting on the profit and loss of the slave trade, or put differently, they were capitalizing the violence used to capture and commodify human life energy—a particularly important international dimension of England’s ability to service its national debt to private social forces. The national debt also helped the East India Company finance its trade and colonial control of a considerable portion of Asia by using its ownership over some of the national debt to secure loans to finance its foreign operations (Baskin and Miranti 1997: 103). The Bank

of England, the South Sea Company, and the East India Company had the largest capitalization of the time before more coal energy came on line to offer greater opportunities for capitalization in mines, steel, and railroads (Baskin and Miranti 1997: 56). In essence, by 1717, would-be equity investors had at least three *major* options to achieve differential accumulation: (1) they could capitalize the national debt and the power of the state to enforce domestic taxation and colonial policy; (2) they could invest in the slave trade to Latin America through the South Sea Company; and/or (3) they could invest in the gradual colonization and trade with Asia through the East India Company (Baskin and Miranti 1997: 56). These endeavors were immensely transformative and set the stage for the further development of debt as a technology of organized power. Nowhere was this perhaps more clear than in the colonies of Europe, where debt would gradually take over—but never wholly replace—the role of force in rendering the population useful for the differential accumulation of the few.