THE THREE PHASES OF FINANCIAL POWER

Leverage, infrastructure, and enforcement

Benjamin Braun and Kai Koddenbrock

Introduction

The process of financialization has transformed societies across the world. Financial instruments – priced and traded claims on future value creation – extend into all spheres of social and economic life. Yet large gaps remain in our understanding of how global capitalism – a highly unstable system that creates vast inequalities – continues to reproduce itself. How can we explain that the size and profitability of the financial sector recovered so quickly after the global financial crisis? Why has concentration in the financial sector continued unabated, expanding the realm of too-big-to-fail institutions from banking to asset management and financial infrastructure providers? What role do states play as regulators of, and participants in, financial markets?

The crises ravaging the world today reinforce the urgency of these questions. Following the onset of the Covid-19 pandemic, central banks again stepped into the breach (Tooze, 2021). In doing so, they both stabilized the global economy and backstopped the global shadow banking system, thus strengthening the ability of financial firms to leverage their balance sheets to acquire assets across the world. At the same time, countries from Argentina to Zambia once again had to negotiate debt moratoria with the International Monetary Fund (IMF) and private creditors. In the intensifying climate emergency, the financial sector has sought to position itself not only as part of the solution but as the solution to the conundrum of how to plan and finance the transformation and decarbonization of the global economy (Dafermos et al., 2021). Most recently, the sanctions the West imposed on Russia in response to its invasion of Ukraine have demonstrated the enormous power that comes with control over the legal and technological infrastructure that underpins the global financial system.

An important account of the causes of financial globalization was titled "Capital rules" (Abdelal, 2007). It focused on deregulation and the breaking down of

borders to international capital flows. "Capital claims" plays on the same verb—noun ambiguity but shifts the focus from the making of rules to the financial relationships those rules have engendered. Thus, this volume studies the power of financial actors to create and trade financial claims, to keep them alive, and to enforce them vis-à-vis debtors. Broadly speaking, the literature on the power of finance is divided into a Marxist strand that emphasizes the importance of money and finance for the reproduction of capitalism at the macro level and a sociological strand that studies financial actors, instruments, and practices at the micro level, often in a more descriptive way. The ambition of this volume is to straddle this divide through a focus on the financial claim relations that connect wealthy households, financial institutions, and non-financial debtors, and on the processes through which financial actors profit from their central position in those claim relations.

Financial claims exist as financial instruments, held on financial institutions' balance sheets endowed with varying degrees of power and coded in law in ways that fortify and protect the position of claim holders vis-à-vis both the debtor and the rest of the world (Pistor, 2019). The actors and mechanisms of financial power vary across types of financial claims and across their life cycle, which we conceptualize as defined by creation, circulation, and enforcement. At each of these stages, creditors (and, sometimes, debtors) exercise power. The majority of the political economy literature has studied the capacity of financial actors to influence governments via instrumental, structural, or infrastructural power. 1 In addition to this financegovernment nexus at which private and public actors enter a "deal" (Koddenbrock, 2019), the contributions to this volume focus on the power relations among the holders of financial claims, their debtors, and their financial and legal intermediaries. Specifically, we discuss three forms of power associated with financial claims over their life cycle. The ability to issue debt or equity liabilities constitutes leverage power. We deliberately emphasize the power of debtors, since many actors in the financial system, notably banks, are highly leveraged and skilled at instrumentalizing their indebtedness for political or economic gain. Actors who do not hold financial claims themselves but provide the services that facilitate their creation and circulation exercise infrastructural power. Finally, when it comes to repayment, creditors and their lawyers exercise enforcement power.

Our approach locates the politics of money and finance not (only) in the governance and regulation of financial transactions but in the hierarchical, power-laden relationships financial claims establish between specific actors. Hierarchy is a central feature of international relations more broadly (Zarakol, 2017) and is an organizing principle of the global monetary and financial system (Mehrling, 2013, 2015; Pistor, 2013; Bruneau, 2021). By emphasizing hierarchy and power, the contributions to this volume consistently highlight the distributional implications of cross-border claims. Another contribution, which could be described as methodological, is that this volume renders financial actors and relations transparent by often referring to the language of balance sheets — "the *locus delicti* for leverage power" (Pistor, this volume) — thus emphasizing the claim relationships that connect creditors and debtors, assets and liabilities.

Case studies range from banking to government finance, from index providers to central counterparties, and from mortgage finance to investor-state arbitration. The selection of topics reflects the expertise of the research network from which this volume emerged.² Unavoidably, this leaves many areas unaddressed. Most notably, the geographical scope is uneven and tilted toward the Global North, and the climate-finance nexus is not covered. The remainder of this introductory chapter proceeds as follows: The first section will give a brief overview of the research landscape in comparative and international political economy, as well as in the emerging, interdisciplinary field of finance studies. The second is a primer on financial claims - what are the most important categories of financial claims, who issues them, and who holds them. On that basis, the third section presents the three types of power that are explored in the individual chapters and that are at the core of our collective contribution – leverage power, infrastructural power, and enforcement power.

Finance in comparative and international political economy, and beyond

The contributions to this volume study financial claims as instruments through which creditors exercise power over debtors - and, sometimes, vice versa. The contributors to this volume come from, and speak to, comparative and international political economy. They are also, however, engaged in a broader conversation with the emerging, interdisciplinary field of finance studies.

Comparative political economy (CPE) constituted itself as a discipline following the post-war decades marked by high growth rates, rising real wages, and low-income and wealth inequality in Europe and the United States. Traditionally focused on the "real economy" - industrial relations, production and, more recently, consumption - CPE has primarily been concerned with the financing of firms through either banks or capital markets. Building on Zysman's (1983) classic distinction between bank-based and market-based financial systems, CPE fell into the habit of conceptualizing the financial system as a provider of more or less patient capital (Culpepper, 2005; Hall and Soskice, 2001). Despite receiving important updates on banking (Hardie et al., 2013) and institutional investors (Deeg and Hardie, 2016), the core CPE framework continued to operate on a highly abstracted model of the financial system. More recently, the financial and debt crisis of the Euro area has sparked new interest in cross-border financial flows (Schelkle, 2017; Jones, 2021) and in mortgage finance (Kohl, 2018; Fuller et al., 2019; Schwartz, 2020), and the growth model literature has incorporated mortgage and consumption finance into its core framework (Baccaro and Pontusson, 2016). CPE scholars have also increasingly asked how the growth models and regulatory regimes of open economies are shaped by their position within, and interaction with, the European or global financial system, thus bridging the gap with international political economy (Nölke and Vliegenthart, 2009; Regan and Brazys, 2018; Ban and Bohle, 2021; Piroska et al., 2021).

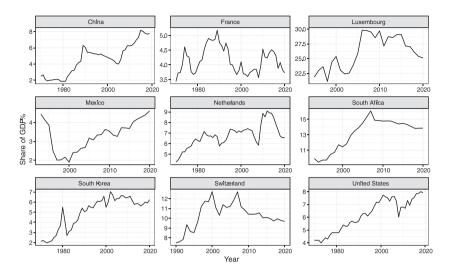
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In International political economy (IPE), the main focus of the literature on finance has been on US (dollar) hegemony and on the governance of finance. IPE has conventionally assigned the politics of money to a separate sphere of interstate monetary relations, studying money as a governmental instrument to pursue strategic foreign policy objectives (Walter, 1993; Andrews, 2006; Cohen, 2017). The literature on finance, by contrast, has focused on the (de-)regulation of financial markets and the liberalization of capital controls (Helleiner, 1994; Abdelal, 2007; Walter, 2008). At the intersection of these two literatures, the lending policies of the World Bank (Weaver, 2008) and the IMF (Kentikelenis et al., 2016; Nelson, 2017; Kentikelenis and Babb, 2019) have featured prominently. Although an IPE tradition exists that has studied finance directly (Strange, 1988), it was only after the global financial crisis that more IPE scholars began to study issues such as the political economy of banking (Copelovitch and Singer, 2020), foreign direct investment (FDI) (Danzman, 2019), financial asset ownership (Chwieroth and Walter, 2019; Pagliari et al., 2020), investor-state arbitration (John, 2018; Williams and Dafe, 2021), and financial dependency (Reis and de Oliveira, 2021). Here, too, many recent contributions are located at the intersection of IPE and CPE, boding well for the future rapprochement of the two subdisciplines.

Mainstream CPE and IPE have thus rarely sought to conceptualize national varieties of financial systems as parts of one and the same global financial system, and the power of finance remained under-theorized. Here, the Marxist tradition has clearly been unduly neglected, especially finance-driven theories of imperialism (Patnaik and Patnaik, 2021; Lenin, 1999 [1907]; Hobson, 2011 [1902]; Luxemburg, 2015 [1913]) and dependency and world systems scholarship (Amin, 1974; Arrighi, 1994). Recently, however, IPE scholars have increasingly drawn on this tradition to theorize the power of finance in the Global South (Alami, 2019; Bernards, 2019; Dafe, 2019; Kvangraven, 2021; de Goede, 2020; Koddenbrock et al., 2022; Tilley, 2020; Alami et al., 2022).³

Finance was eventually brought back into the political economy literature via the concept of financialization (Krippner, 2005; Perry and Nölke, 2006; van der Zwan, 2014). Although these contributions inspired a fruitful research program on the political causes and consequences of financial liberalization and expansion, often this interest did not extend to the power of financial actors and practices themselves. The global financial crisis fundamentally changed this. The site of this change cannot easily be assigned to either CPE or IPE. Indeed, it would be more appropriate to speak of an emerging field concerned with the political economy of finance, in which scholars routinely read and cite each other across disciplinary boundaries. In addition to CPE and IPE, this interdisciplinary field comprises economics (Jordà et al., 2019; Bezemer et al., 2020), economic history (Monnet, 2018; Sissoko, 2019), history (Tooze, 2018; Ogle, 2020), economic sociology (Arjaliès et al., 2017; Quinn, 2019), legal studies (Desan, 2014; Pistor, 2019, 2020), and economic geography (Fernandez and Aalbers, 2016; Ouma, 2020).

From this interdisciplinary literature emerge three foundational insights that underpin our analysis of the political economy of financial claims. First, around



Value-added share of finance and insurance as a share of GDP, selected countries

Source: Data: OECD.

the world, the size of the financial sector has massively increased over the past half century (Oatley and Petrova, 2020). Figure 1.1 shows the value-added share of the financial sector as a share of a country's total gross domestic product (GDP). While value added is a dubious measure of value creation at best in the case of finance (Christophers, 2011; Assa, 2016), it nevertheless provides a way of comparing the relative size of finance across time and across countries. Figure 1.1 shows that the familiar US pattern - where the relative size of finance doubled between 1970 and 2020, from 4 percent to 8 percent of GDP - is not an outlier. Over the same period, South Korea's financial sector tripled, while China's quadrupled in size (see also Petry et al., 2021). While countries such as France or Germany have not seen the same upward trend, their neighboring "offshore" financial centers Switzerland and Luxembourg have grown very large financial sectors over the same period.

Second, whereas the conventional economic perspective emphasizes the generative role of finance by channeling past savings toward new productive projects, we conceptualize financial claims as "forward-looking claim[s] on future resources" (Naidu, 2017: 108). This perspective means to abandon the conceptualization of finance "as a system for the allocation of resources" in favor of a conceptualization of finance as "a form of authority – a weapon by which the claims of wealth holders are asserted against the rest of society" (Jayadev et al., 2018: 360; see also Durand, 2017). Financial claims acquire their weapon-like qualities also through legal coding, which bestows on capital the qualities of "priority, durability, universality and convertibility" (into state money) (Pistor, 2019: 3). Thus, unlike suggested by the "capital flow" metaphor, financial capital exists in the form of solid,

enduring claims on future value and their underlying social and economic relations of (re-)production.

The main contribution of this volume is to offer a perspective on the political economy of financial claims that is holistic – in that the various chapters cover the whole life cycle of financial claims – yet also opens the black box of financial claims by zooming in on the mechanisms of leverage power, infrastructural power, and enforcement power, which underpin the continued profitability of financial investment and financial intermediation. We discuss these three forms of financial power in detail here. To prepare the ground for this discussion, however, a primer on financial claims is in order.

Capital claims crash course: what are they, who issues them, and who holds them?

This section offers a very short, textbook-style introduction on cross-border financial claims, combined with a selective review of the relevant literature in IPE and in adjacent fields. The focus is on introducing the actors, instruments, and relationships that constitute the analytical scaffolding of this volume. It should be noted at the outset that most financial assets are held by rich households and that returns from financial investment, as well as profits made in the financial sector, have been major contributors toward the rise in wealth and income inequality over recent decades.

What are financial claims?

In the pre-industrial past, the asset portfolios of the wealthy were dominated by land (Piketty, 2014). Markets for securities issued by governments and, increasingly, corporations deepened and broadened in the aftermath of the Napoleonic Wars in the early nineteenth century and, in the context of accelerating industrialization and advances in communication technology, reached an "unprecedented degree of sophistication, coverage, and intensity" toward the end of that century (Michie, 2006: 117). The rise of securities markets was intimately linked to imperialism, since securities made it possible for metropolitan wealth elites to invest in, and derive returns from, colonial expansion (Hudson, 2017; Wennerlind, 2011). Today, while housing reigns supreme in the middle-class "asset economy" (Ansell, 2019; Adkins et al., 2020), financial claims dominate in the portfolios of the very wealthy and of institutional capital pools (Pfeffer and Waitkus, 2021; see Figure 1.4).

Although the landscape of financial instruments can seem dauntingly complex, the basic distinction between debt and equity goes a long way toward clarifying the picture. Debt claims tend to be temporary and entitle *creditors* to regular interest payments and to the eventual repayment of the principal – that is, the sum of money lent initially. By contrast, equity claims tend to be permanent and give *shareholders* certain ownership or control rights, which translate into dividend payments. These ownership or control rights compensate holders of equity claims for

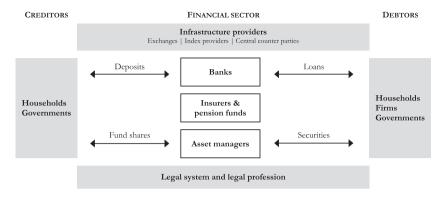


FIGURE 1.2 Actors and claim relationships

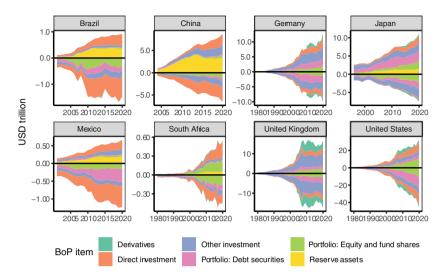
Source: The authors.

their subordinate position in the creditor hierarchy, and thus for the higher risk. In the following we will, for ease of exposition, use the term "creditor" to refer to holders of both debt and equity claims.

The main actors and relationships that populate this volume are depicted in Figure 1.2. A claim relationship generally connects non-financial investors (colloquially: "savers") in search of financial investment opportunities to debtors who, for one reason or another, seek to - or are forced to - borrow. While all institutional sectors - households, firms, and governments - appear as debtors on the right-hand side of Figure 1.2, only households or states can be ultimate beneficiaries (since firms, too, are owned by either households or the state). Note that since holdings of financial assets by households are extremely unequally distributed, the household category on the left-hand side overwhelmingly represents wealthy and very wealthy households. Financial investment chains vary in length and composition, depending on the asset class (Arjaliès et al., 2017).⁵ Generally speaking, however, it is safe to say that the relationship between investors and debtors runs via financial institutions, depicted in the center column. Thus, non-financial creditors on the left-hand side hold financial claims (notably bank deposits and various types of fund shares) against financial intermediaries at the center, who, in turn, hold financial claims against non-financial debtors.

Today, non-financial assets (housing, land, buildings, machinery and equipment, and intangible capital) account for just over one-third of total investable assets, whereas the remainder consists of financial assets (Jordà et al., 2019: 1233). Here, the largest category is corporate equity, followed by deposits, other financial assets (corporate bonds and asset-backed securities), and government bonds. Seen over the long run, the volume of financial claims relative to GDP shows a hockey-stick pattern (Kuvshinov and Zimmermann, 2021). This same pattern can be observed for the subset of financial claims that is the focus of this volume, namely crossborder claims. As shown in Figure 1.3, which plots balance of payments data, the





Foreign assets and liabilities in US dollars, 1980-2020

Source: Data: IMF, balance of payments data.

foreign assets and liabilities of countries have skyrocketed since 1980. The figure disaggregates the international investment position into its main components. We can see that the foreign assets of even very large economies such as China and Japan are dominated by official reserve assets, whereas countries at the core of the global monetary and financial system, notably the United States and Germany (as a member of the Euro area), barely hold any reserves - a simple measure of a country's degree of monetary sovereignty, which is discussed in the chapter by Aaron Sahr. Cross-border bank leverage - the topic of the chapter by Mareike Beck, Samuel Knafo, and Stefano Sgambati - is subsumed in the category "other investments," which consists primarily of deposits with foreign banks (besides "other loans" and "other equity"). Derivatives are concentrated in the UK, the world leader in derivatives clearing, which is the topic of the chapter by Matthias Thiemann. Portfolio assets, especially fund shares - that is, the kind of investment that is guided by index providers studied in the chapter by Jan Fichtner, Eelke Heemskerk, and Johannes Petry and that features prominently in Daniel Mertens and Caroline Metz's study of institutional investment in European mortgage debt – are highest in those countries that have large institutional capital pools, especially pension funds. FDI – discussed in the chapter by Arjan Reurink and Javier Garcia-Bernardo – is a major component of the international investment position of most countries.

Issuers of financial claims

Who are the issuers of debt and equity liabilities? The System of National Accounts (SNA), initially devised in 1947 at the League of Nations, structures the universe

Public	Private		
Government Government bonds	Financial corporations	Non-financial corporations	Households Mortgage debt
Non-tradable government debt	Banks Deposits	Shares Bonds	Consumer debt Student debt
Central bank	Bonds		Micro credit
Money: cash Money: central	Investment funds Fund shares		
bank reserves State-owned banks and	Insurance Insurance policies		
enterprises Bonds	Pension funds Pension liabilities		

TABLE 1.1 Types of liabilities issued by the four institutional sectors

of issuers by institutional sectors: government, financial corporations, non-financial corporations, and households.⁶ Although financial instruments evolve over time, in general terms the liabilities these sectors issue are easily listed (see Table 1.1).

Among public issuers, the *government* is usually the largest. Sovereign debt issued by governments in the Global North has assumed a pivotal role in the global financial system, providing the "safe assets" without which collateralized shadow banking could not operate on the scale it has achieved (Boy, 2015; Gabor and Ban, 2016; Gabor and Vestergaard, 2018; Thiemann, 2018; Vermeiren, 2019). The political economy of sovereign debt plays out differently in the Global South (Deforge and Lemoine, 2021). Whereas many lower- and middle-income countries used to borrow directly from foreign banks, today, they mostly borrow by issuing tradable bonds (Hardie, 2012; Kvangraven et al., 2021). In search of lower interest rates and deeper pools of investment capital, governments have, since the 1980s, actively marketized and internationalized their debt issuance (Lagna, 2016; Lemoine, 2016; Fastenrath et al., 2017; Dutta, 2019). The result has been an increase in the exposure of sovereign debtors to the fluctuations in international capital markets and to the pressures exerted by private foreign creditors, especially in the Global South (Akyüz, 2017; Bortz and Kaltenbrunner, 2018; Alami, 2019; Binder, 2019; Koddenbrock and Sylla, 2019; Naqvi, 2019; Bonizzi et al., 2020). These pressures are exacerbated by the continued importance of foreign-currency borrowing, which, despite some improvements to the global financial safety net, frequently forces debtor countries to turn to the IMF when private capital inflows reverse (Roos, 2019; Stubbs et al., 2021).

The second major liability issued by the public sector are central bank liabilities (commonly called "money"), which take the form of cash and, more importantly for our purposes, reserves held by banks in reserve accounts with their respective central banks. At the top of the global monetary hierarchy, central banks whose currencies are used beyond their own jurisdiction - in the offshore, or Eurocurrency, system - act as international lenders of last resort. The global liquidity

facilities provided by the US Fed both in late 2008 and in early 2020 provide the most dramatic illustration of the systemic importance of this role of central banks (McDowell, 2017; Tooze, 2018; Sahasrabuddhe, 2019). In addition to governments and central banks, states issue financial liabilities via various "off-balance sheet entities" (Murau et al., 2021), notably public development banks that finance their lending by issuing quasi-sovereign bonds (Mertens et al., 2020).

Among *financial corporations*, banks occupy a privileged position.⁷ Only they may issue deposits, that is, bank money. However, in what was arguably the most important development in global banking over the past half century, banks also developed ways of funding themselves via short-term borrowing (Hardie et al., 2013; Knafo, 2022). By borrowing against collateral in the short-term money market, banks could increase the size of their balance sheets far above what was possible with only traditional deposit funding (Fernandez and Wigger, 2016; Gabor, 2016; Sgambati, 2019, Beck, 2021). The remainder of this category includes all non-bank financial institutions, notably asset owners such as pension funds and insurers, as well as the various types of asset managers (providers of mutual and exchange-traded funds, hedge funds, private equity funds, and venture capital funds).

Non-financial corporations generally only issue two types of liabilities, equity and debt. Corporate debt may take the form of loans or, especially for large firms, corporate bonds. From a global perspective, three trends are noteworthy. First, in many advanced economies – and most dramatically in the United States – the number of publicly listed corporations has declined since the crash of the dotcom bubble (Doidge et al., 2017). Second, corporate debt has dramatically increased, in both advanced and emerging market economies (Abraham et al., 2020). Third, FDI has exploded. There are two – largely complementary – explanations of this growth. On one hand, the global rise of FDI since the 1990s reflects the globalization of production, which implies geographically dispersed value chains with varying degrees of vertical integration (Milberg, 2008). On the other hand, FDI flows reflect the attempts to optimize corporate structures to optimize tax "efficiency" (see Reurink and Garcia–Bernardo, 2022, this volume). FDI has been an important conduit for capital exports from the Global South, both during and since colonial times (Koddenbrock et al., 2022; Ogle, 2020).

Finally, the financial liabilities of *households* comprise a growing variety of debts, including credit card debt and student debt, but mortgage debt remains the most important category by far (Montgomerie, 2009; Sparkes and Wood, 2020; Wiedemann, 2021). In the Global South, various forms of financial innovation such as microfinance and digital financial services have brought tens of millions of households into the financial system as bearers of financial liabilities (Soederberg, 2014; Mader, 2015; Gabor and Brooks, 2017).

Holders of financial claims

Financial actors and the assets they control tend to concentrate in financial centers. Empires invariably relied on a metropolitan center to finance colonial expansion

and trade, be it from Amsterdam, Paris, or London (Inikori, 2002; Wennerlind, 2011; Cain and Hopkins, 2016). Since the heyday of British imperialism, London has been joined by New York, Tokyo, and Hong Kong. Clustered around these are offshore financial centers (Hong Kong itself arguably falls into that category), which often specialize in attracting particular types of financial actors: hedge funds in the Cayman Islands, European investment funds in Luxembourg, and so on (Palan, 1998; Fernandez and Hendrikse, 2020; Ogle, 2017). The fact that financial assets are often registered in offshore financial centers has serious distorting effects on other countries' international investment positions as measured in balance of payments data, which should therefore be read and used with caution (Coppola et al., 2021).

In addition to geographic concentration, market concentration is also an important characteristic of most of the financial segments discussed here. For instance, the world's five largest investment banks by revenue - all on the US East Coast jointly account for 35 percent of global investment banking revenue, giving them vast power over securities issuance and mergers and acquisitions globally. Even more dramatic is the concentration in the asset management sector, where Black-Rock and Vanguard - both on the US East Coast - controlled USD 18.5 trillion by early 2022. The two firms today are among the largest holders of most states' sovereign debt and the largest shareholders in most publicly listed corporations, certainly in the United States but also in the United Kingdom and in many other advanced-economy stock markets (Fichtner et al., 2017; Braun, 2021).

The holders of financial claims are the same aforementioned four institutional sectors. In Table 1.2, they are listed with some minor modifications, in order to highlight the sub-sectors most relevant as holders of financial claims. Although all sectors appear as holders of financial claims, it is important to understand that from the bird's eye perspective of the System of National Accounts, the investment chain always leads to either the state or, for the vast majority of claims, private households. This is because firms, whether financial and non-financial, have shareholders, which are either households or the state.

The most important thing to know about household holdings of financial claims is that their distribution is extremely unequal (Pfeffer and Waitkus, 2021). To

Public	Private		
Central banks Public pension funds Sovereign wealth funds	institutions serving households, such		Non-financial corporations Firms holding FDI claims Firms holding
	family offices of the ultra-rich	:	portfolio assets

TABLE 1.2 Holders of financial claims

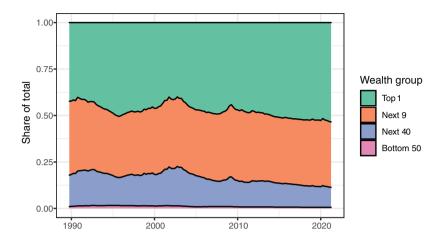


FIGURE 1.4 US household holdings of equities and mutual fund shares by wealth group, 1989–2021

Source: Data: Federal Reserve, Enhanced Financial Accounts.

illustrate this, Figure 1.4 presents data on the distribution of financial assets in the United States. This focus makes sense because US households hold 30 percent of the world's wealth (Credit Suisse, 2021). The share for financial assets would almost certainly be higher still. As shown in Figure 1.4, the richest 1 percent of US households own more than half of the USD 40 trillion of corporate equities and mutual fund shares that are held directly by households. The top 10 percent own almost 90 percent, whereas the bottom 50 percent of households own virtually no such securities.⁹

The unequal distribution of financial asset holdings increases income and wealth inequality because households derive income from financial assets. This income comes in the form of cash payments (interest and dividends) as well as capital gains. When an Oxfam headline announces that the "ten richest men double their fortunes in pandemic," what made these men twice as rich was a doubling of the market value of their assets, the overwhelming majority of which consists of corporate equity (Oxfam, 2022). Only for the richest households does income from interest, dividends, and, especially, capital gains outweigh income from salary and wages.

In the *public sector*, three types of institutions dominate financial claim holdings. Historically, central banks have always been important holders of public debt, either of the bonds issued by their own governments or, for the purpose of foreign reserve accumulation, of the sovereign debt (and other safe assets) issued by issuers nearer the top of the international monetary hierarchy. With the rise of quantitative easing, central banks have become giant institutional investors in their own right (Ronkainen and Sorsa, 2018; van 't Klooster and Fontan, 2019; Walter and Wansleben, 2020; Wullweber, 2021). Since public pension funds and sovereign

wealth funds have long been major investors across the globe, it is clear that public actors are a force to be reckoned with in global capital markets (Babic et al., 2020; Dixon, 2020).

In the financial corporations sector, banks fall into two main categories, commercial banks and investment banks. Commercial banks tend to hold the majority of the loans they extend on their own balance sheets, although the securitization model – the bundling and selling of mortgage loans in particular - has survived the global financial crisis. The most significant development in bank lending over the past half century has been the shift, across most advanced and some emerging economies, from corporate lending to mortgage lending (Jordà et al., 2016; Bezemer et al., 2020). Investment banks, in addition to also being lenders, specialize in supporting other actors in the creation of financial claims, be it as underwriters of private security listings or as primary dealers for government bonds.

The remainder of the universe of financial corporations is made up of nonbank financial institutions, notably insurers, pension funds, and investment funds. These are institutional capital pools that, rather than creating money via loans, invest "other people's money." Investment funds, whose business model is to invest other people's money for a fee, can be subdivided into three broad groups. By far the largest pools of assets are mutual fund and exchange-traded fund companies, notably the "Big Three" - Blackrock, Vanguard, and State Street Global Advisors (Fichtner et al., 2017). These firms invest predominantly in listed equities and in public and private bonds. The second group comprises hedge, private equity, and venture capital funds, which are subject to far fewer regulations and whose business models generally involve high fees, high risks, and – or so they promise – high returns. Private equity in particular has emerged as a powerful driver of financialization across virtually all asset classes (Eaton, 2020; Morgan and Nasir, 2020; Benquet and Bourgeron, 2021; Christophers, 2021). The growth of institutional capital pools relative to the traditional banking sector is one of the most important developments in the global financial system over the past 15 years. Although already underway before, this divergence accelerated in the wake of the global financial crisis of 2008, as depicted in Figure 1.5.

Power and the creation, trading, and enforcement of financial claims

The central premise of this volume is that in order to study the various ways in which financial sector actors exercise power in the economy and society at large we need to focus on the claim relationship. From this premise follow two implications. First, the carriers and mechanisms of financial power differ across the different types of financial claims discussed in the previous section. For instance, bondholders lack the control rights enjoyed by shareholders, but when it comes to enforcing repayment, insolvency law puts bondholders at the top of the creditor hierarchy. Second, the carriers and mechanisms of financial power differ along the life cycle of financial claims. This is a cycle because the creation of claims has to start afresh once it has

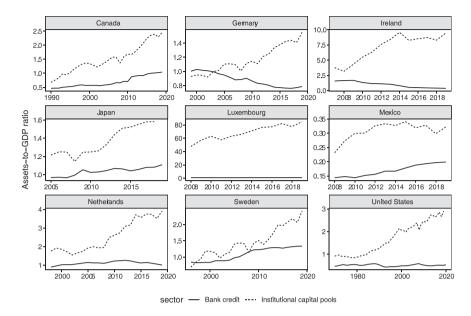


FIGURE 1.5 The growth of institutional capital pools relative to the banking sector *Source:* Data: BIS. World Bank.

temporarily come to a halt in repayment because of the capitalist compulsion to turn money into more money by having it move through commodity production.

This life cycle consists of three distinct stages – creation, trading, and enforcement. There are two main variants of claim creation. A financial claim is created when a bank issues a loan, which enters the bank's balance sheet both on the liability side (formally as a liability in the form of a newly credited customer deposit) and on the asset side (as a loan, which is a claim on the borrower). Alternatively, nonfinancial actors create financial claims when - usually with the help of investment banks - they issue debt or equity securities. Once they exist, financial claims are frequently traded. Traditional bank loans used to remain on the originating bank's balance sheet, but securitization has transformed loans into marketable instruments. Bonds and the shares of listed corporations tend to be highly liquid instruments that are frequently traded. This requires exchanges, actors that buy and sell securities, as well as payment and settlement infrastructures. Finally, financial claims must be enforced. Here, the central role of law is particularly visible, notably when creditors enforce their claims against non-compliant debtors via the court system and, eventually, the state's monopoly on coercion. Unlike domestic financial claims, cross-border claims exist in the shadow of national sovereignty and in the absence of a global judiciary. While never guaranteed, enforceability is therefore particularly fragile in the case of cross-border claims. The boundaries between these stages are blurry. For instance, trading is linked to enforcement in that it can help to "keep

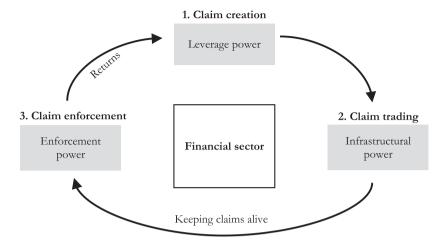


FIGURE 1.6 Three forms of financial power, mapped onto the claim life cycle

Source: The authors

claims alive" - claims that one investor has written off as unenforceable may be sold to a different investor, as is the case in the market for non-performing loans (Mertens and Metz, 2022, this volume). At each of these stages, creditors (and, sometimes, debtors) exercise power - leverage power, infrastructural power, and enforcement power (Figure 1.6).

Creating claims: leverage power

The contributions to this volume study claim creation through the conceptual lens of leverage power. Other approaches focus on "capitalization" or "assetization" and operate at a higher level of abstraction (Nitzan and Bichler, 2009) or through a micro-practical focus on how things are turned into assets (Birch and Muniesa, 2020; Langley, 2020). Our approach zeroes in on one specific financial practice leverage. When banks create a deposit or borrow in the wholesale money market, they exercise leverage power. While banks are the masters of the "art of leverage" (Sgambati, 2019, 2022), other actors, too, have leverage power. Hedge funds and private equity funds - so-called levered investors - rely heavily on debt to boost returns for their equity investors, while minimizing the latter's downside risks (Appelbaum and Batt, 2014). For multinational corporations, too, debt is a powerful instrument, while for some governments and central banks the capacity to issue liabilities is virtually unlimited. Traditional notions of "creditor power" tend to obscure that for financial actors, leverage is a resource more than a constraint. Therefore, we emphasize the crucial importance of "leverage power" for the study of the political economy of global finance. Simply put, actors enjoy leverage power when they are able to increase their balance sheets by borrowing cheaply in order to acquire profitable assets.

The financial system tends to revolve around the actors wielding the greatest leverage power. At the top of the monetary-financial hierarchy, leverage power is exercised by the issuer of the safe asset. The largest states and central banks are able to expand their balance sheets at will. Aaron Sahr's chapter explores the state's leverage power through the lens of Modern Monetary Theory (MMT). According to Sahr (2022, this volume), this power has been neglected due to the rule of a "technical imaginary" of monetary order. In this imaginary, money appeared as a universal, hence apolitical, tool. Many governments disarmed their own power to create money through unrestricted access to their own central bank's balance sheet. Today, this regime is challenged on a theoretical and political level, most prominently by MMT.

The ability of states and central banks to wield leverage power is highly unevenly distributed. The United States, as the issuer of the dominant global funding and reserve currency, continues to enjoy an "exorbitant privilege." Other large currency areas at the core of the international monetary system, such as the Euro area, Japan, and China, face relatively few constraints, especially if, as is the case with Japan and China, they have accumulated large foreign currency reserves. The situation is very different for most countries in the Global South, who still often borrow in foreign currency, and are exposed to the ebb and flow of a global financial cycle that is beyond their control (Rey, 2015; Naqvi, 2019; Ben Gadha et al., 2021). Nevertheless, as Andrea Binder argues in her chapter, states are not without leverage power, especially when borrowing in the Eurodollar market. Her comparative analysis of the experience of Brazil and Mexico shows that by navigating "the bifurcation of nationality, currency and jurisdiction," Brazil in particular managed to retain substantial autonomy vis-à-vis its foreign creditors. Binder's central messages are that creditors' power is not unidirectional but requires a relational understanding, and that leverage power exists also in the Global South.

The origins of large-scale sovereign borrowing from private international banks are closely intertwined with those same banks, as early as the 1960s, discovering the technique of liability management. This story is told in the chapter by Mareike Beck, Samuel Knafo, and Stefano Sgambati (2022, this volume), who show how liability management paved the way for a massive shift of leverage power toward the largest and most internationally active banks. The Eurodollar lending spree during the 1970s oil price crisis and the shadow banking system that collapsed in 2008 can both be traced back to the liability management techniques studied by Beck et al. (see also Wansleben, 2020; Braun et al., 2021). Beck et al. make a strong argument that the business model of (shadow) banking – "sourcing and constructing dollar-denominated assets that were at once liquid, safe and offered a high yield" – amounts to an "impossible task." European banks turned out to be particularly vulnerable to the pitfalls of this model.

Banks are not, however, the only actors playing the leverage game. As argued by Sahil Jai Dutta, far from being victims of financialization, states and non-financial

corporations have, in many cases, seen their leverage power greatly increase as a result of the liberalization of financial markets. As issuers of the "safe assets" that form the backbone of repo markets and, by implication, of the wider financial system, governments of large, advanced economies have been able to increase their power to govern the economy (Dutta, 2019). Similarly, corporate managers, rather than falling victim to aggressive outside shareholders, learned to wield leverage power as early as the 1960s (Knafo and Dutta, 2020). As a result, corporations have acquired the "capacity to source and capture funds and assets from others, which then form the basis for further borrowing in a recursive cycle" (Dutta, 2022, this volume). From a normative perspective, it follows that advocates of definancialization, rather than focusing on the redistribution of financial wealth, need to pay more attention to the redistribution of leverage power.

Trading claims: infrastructural power

Large parts of the financial system consist of actors who do not create, hold, or trade financial claims themselves but provide the services that allow these other activities to be performed. These are the providers of financial infrastructures such as exchanges, indices, payment services, or central counterparties (Quaglia, 2009; Petry, 2020; Westermeier, 2020). These infrastructure providers are profit-oriented actors with fee-based business models. Their power vis-à-vis those whose business model depends on creating or trading financial claims, and those who wish to issue debt or equity claims, is captured by the concept of infrastructural power. Specific financial actors exercise infrastructural power vis-à-vis state actors that depend on specific financial markets for governance purposes (Braun, 2020). More broadly, the infrastructural power of finance underpins the rise of private authority in financial standard settings, regulation, and the imposition of financial sanctions (Büthe and Mattli, 2011; Farrell and Newman, 2019). Infrastructure providers also exercise power vis-à-vis other financial actors whose business models depend on them.

The chapter by Jan Fichtner, Eelke Heemskerk, and Johannes Petry (2022) studies how index providers such as S&P and MSCI, without buying or selling securities themselves, act as "gatekeepers of financial claims." Index providers have become vastly more powerful as more and more investors have moved their money into index funds. Private index providers exercise infrastructural power by defining the criteria based on which firms or countries are included in or excluded from their indices. In one striking display of the infrastructural power of private index providers, the finance minister of Peru, together with other high-ranking officials, flew to New York to prevent the ejection of Peru from MSCI's emerging markets index. As highlighted by the authors, the conditionalities imposed by index providers during such bilateral negotiations bear a striking resemblance with the conditionalities imposed by the IMF or the World Bank.

The most fundamental financial infrastructure of all is the global payments system, examined in the chapter by Andreas Nölke (2022). Without payments, there can be no financial transactions, which is why the power to shut countries out of the global payments system is one of the most severe forms of economic sanctioning. The private-sector actors who run SWIFT, as well as the states in which they are domiciled, wield infrastructural power at a geopolitical scale – they can "weaponize" the network by opening or closing it to individual firms or entire countries (Farrell and Newman, 2019). This is powerfully illustrated by the experience of Iran, whose exclusion from the SWIFT network from 2012 to 2015 had a devastating economic impact on the country. Nölke focuses on countries' attempts to establish alternatives to the dominant SWIFT network, notably Russia's System for Transfer of Financial Messages (SPFS) and the China International Payments System (CIPS). His analysis shows that financial infrastructures, while often semi-invisible, can, under certain circumstances, become highly politicized.

The profitability of a private financial infrastructure is often a function of the absence or availability of alternative, public options. Matthias Thiemann's (2022) chapter on the rise of central counterparties as a solution to the derivatives clearing conundrum provides a powerful case study. Central counterparties are clearing houses that stand at the opposite side of derivative deals and serve to enforce crossborder claims of financial market participants even if their initial counterparty has declared bankruptcy (Lockwood, 2018). It shows that the web of financial claims and liabilities in a liberalized financial system creates systemic risks that are impossible to insure without some form of public backstop (Özgöde, 2021). Thiemann shows that the extraordinary profitability of central counterparties is the flipside of the incapacity, or unwillingness, of the state to directly assume the role of systemic risk manager and the decision to delegate that function, along with certain regulatory privileges, to private companies. In doing so, he renders visible the enormous, but usually hidden, political stakes involved in the institutional setup of financial infrastructures.

Enforcing claims: enforcement power

Different kinds of cross-border financial claims come with different practices and strategies of keeping them alive and, eventually, of enforcement. Whereas under imperialism, such enforcement routinely involved military coercion, today, creditors have access to an impressive variety of tools to enforce their claims through the legal system (Pistor, 2019). What is more, creditors can often count on the support of international institutions such as the IMF, whose evolution into an enforcer of foreign financial claims is well documented. The rise and spread of financial claims since the early 1970s took place in parallel to the IMF's developing of more intrusive conditionality policies that served to make the Global South "safe" for international bank lending and corporate investment (Kentikelenis and Babb, 2019: 1740). In his analysis of the relative absence of sovereign non-default in recent history, Jerome Roos (2019: 79) shows how the creditor cartels of the syndicated-loan era morphed into the underwriting cartels of today's bond era of sovereign lending, and how banking-sector concentration therefore remains decisive for sovereign debtors in the Global South. This is evident, for example, in those West African countries – Senegal, Ivory Coast, Ghana, and Nigeria - that have begun to issue Eurobonds in

the wake of the global financial crisis, and in doing so have been dealing with the same six to eight major international banks.

Claim enforcement requires that a financial claim is still alive when creditors seek repayment. Daniel Mertens and Caroline Metz make a powerful case in favor of the view that the expiry date of financial claims is ultimately a political question. Their chapter provides a comparative analysis of "how zombie debt claims are kept (profitably) alive - often to the detriment of debtors." Focusing on the Risk Mitigation Act in Germany in the early 2000s and of the EU's attempts at creating a market for non-performing loans after the global financial crisis, Mertens and Metz (2022) argue that these policies should be understood as attempts to keep creditors' claims alive by making them (more) tradable, thus delaying the moment of default indefinitely. Their detailed empirical analysis of the broader moral economy of debt reveals that under certain conditions - in the German case but not in the EU case - debtor resistance can thwart creditors' enforcement power.

Strategies to keep financial claims alive are not limited to households. The emergent infrastructure of investor-state arbitration has begun to offer services to creditors seeking to enforce their claims on foreign governments (John, 2018). 10 The chapter by Florence Dafe and Zoe Phillips Williams examines how international investment agreements and their adjudication have fostered a new investment strategy in the form of third-party funding for investor-state dispute settlement. This transformation of "the decisions of international arbitrators into a new asset class" (Dafe and Williams, 2022, this volume) constitutes a striking illustration of the "financialization of international law" (Kalyanpur and Newman, 2021). What is more, creditors seeking such third-party funding effectively "re-leverage" in order to keep financial claims alive well past their expiry date, namely the moment when a creditor without access to third-party funding would have decided that securing repayment through costly legal action was not profitable. This newly devised technique to extend the lifespan of financial claims constitutes a substantial increase in cross-border investors' enforcement power.

Whereas Dafe and Williams' investors actively seek payment from governments, the corporate actors in the story told by Arjan Reurink and Javier Garcia-Bernardo (2022) are masters of shielding their assets against government claims. They examine the power of multinational corporations to optimize their own corporate structure via cross-border FDI claims and liabilities. From this perspective, the global rise of FDI represents a "great fragmentation of the firm" that responds primarily to tax and regulatory incentives, as opposed to production or labor cost considerations. Transnational corporations (TNCs) adopt a range of legal-financial strategies to undermine the enforcement of these competing tax claims on the future value generated by their global subsidiaries. Crucially, these strategies revolve around the use of holding companies located in jurisdictions whose legal and tax frameworks confer on FDI investors certain privileges that have the effect of increasing the "firmness" of their claims vis-à-vis those of the tax authorities of the countries in which their productive activities are located. Effectively, then, TNCs use holding companies as vehicles for exercising financial enforcement power.

Enforcement power is rarely absolute, however, as debtors may resist repayment or enforcement. The source of debtors' power to resist is the threat of non-payment, or default. Benjamin Lemoine and Marie Piganiol (2022) show in their chapter how successive Greek governments navigated the power of foreign creditor institutions seeking to impose a radical privatization agenda. Based on data from interviews with key participants, they trace the politico-legal battle over the nature and activities of the Hellenic Republic Asset Development Fund. In the Greek case, a fundamental legal distinction with global relevance comes into view. Whereas domestic creditor—debtor relations are regulated by domestic insolvency law, cross-border financial claims are routinely subject to the law of the jurisdictions that underpin a particular security issuance, most frequently New York State or the City of London (Pistor, 2019). In essence, these legal regimes make it more difficult for sovereign debtors to default. Having organized claims under New York, London, or local law makes a difference. Sovereign bonds, for example, are either issued in domestic or foreign law.

Conclusion

Generating returns and making profits with the help of the financial sector is at the heart of private accumulation strategies in financial capitalism. This volume brings together a group of scholars who have been at the forefront of studying the various forms of financial power that underpin and stabilize the global network of financial claims. The most finance-specific form is leverage power, that is, the ability of financial actors, and banks in particular, to enlarge their balance sheets through ever new techniques of collateralized borrowing and liability management. States and central banks also enjoy leverage power - the question is what they decide to use it for. Infrastructural power is exercised by a myriad of institutions providing the financial, legal, and technological infrastructure for the uninterrupted circulation of claims across the globe. Offering quasi-public goods on a for-profit basis, firms such as index providers or central counterparties have come to wield enormous private authority over non-financial firms and states. When financial claims mature, enforcement power comes into play. Here, creditor public international organizations, such as the IMF, and private law are key. In addition, the financial sector has devised new ways of keeping claims alive by turning investment in investor-state arbitration lawsuits into an asset class.

Does all this amount to the financial sector exercising *autonomous* power – power that financial actors can wield in relative autonomy from the state? This is the question discussed by Katharina Pistor in her concluding chapter (2022, this volume). Pistor reflects and expands on the contributions to the volume by relating them to her own influential work on the legal theory of finance. The code of capital, she argues, has carved out spaces that are sufficiently fortified for financial actors to wield considerable autonomous power in the areas of claim creation, trading, and enforcement.

The main purpose of this volume is to showcase cutting-edge research on these forms of financial power. In our reading, the work collected in this volume points

toward three promising areas for future research in international political economy. First, we believe that the speed of developments in the financial sector has outpaced IPE scholarship. In order to catch up, there is a need for research on the various types of financial firms, their business models, and their sometimes conflictive, sometimes collaborative relationships with state actors. This volume gives a sense of the complexity of today's financial landscape and offers specific cues for how to study financial logics and actors as part of a larger, global system. Second, this volume offers a conceptual framework to study power dynamics in a deeply hierarchical global financial system. Leverage power, infrastructural power, and enforcement power provide the conceptual tools to take the complexity of novel financial instruments seriously but also, in a second step, to move to a higher level of abstraction in order to understand the political economy of creditor-debtor relations across the life cycle of financial claims. Finally, the financial claims perspective allows us to ask larger questions about current and future mechanisms of economic coordination - questions that political economy scholarship urgently needs to engage with in the context of the climate crisis and exacerbating withinand between-country inequalities. One way to think about financial claims is as the predominant mechanism under financialized capitalism to plan investment and thus steer economic activity. The promise of the "green finance" discourse is that if recoded via regulatory interventions, the private creation of financial claims and liabilities is our best hope for a swift decarbonization of the global economy. This is doubtful. The question is whether, after half a century of expanding the creation, circulation, and enforcement of private financial claims, the capacity still exists to envision ways of planning and coordinating economic activity that are guided by a logic of social and environmental purpose, rather than by the logic of private profit.

Notes

- 1 On the instrumental, structural, and infrastructural power of finance vis-à-vis governments, see Young and Pagliari (2017), Woll (2014) and Roos (2019), and Braun (2020).
- 2 The Politics of Money network funded by the German Research Council: www. politicsofmoney.org/network.
- 3 This volume is keenly aware of the systemic imperatives that come with the capital relation. However, in the interest of foregrounding specific empirical case studies, the individual chapters speak little about the ever-evolving relationship between capital, money, and finance (often approximating "credit" (Koddenbrock, 2019). For eloquent discussions of this question, see Ingham (2004) and de Brunhoff (2015 [1976]).
- 4 For recent reviews of the financialization literature, see van der Zwan (2014) and Mader et al. (2020). See also Godechot (2016).
- 5 For a discussion of the related concept of "wealth chains," see Seabrooke and Wigan
- 6 See https://unstats.un.org/unsd/nationalaccount/hsna.asp, last accessed on 24 January 2022.
- 7 Financial corporations comprise the following sub-sectors (besides the central bank, which in the SNA is classified as a public financial corporation): deposit-taking corporations, money market funds (MMFs), non-MMF investment funds, other financial intermediaries, financial auxiliaries, captive financial institutions and money lenders, insurance corporations, and pension funds.

- 8 FDI is defined as cross-border equity or debt claims held by non-financial corporations that reflect "a lasting interest and control by a foreign direct investor, resident in one economy, in an enterprise resident in another economy." In the SNA, this is operationalized as a holding of 10 per cent or more of the voting power.
- 9 The distribution is less unequal for the roughly USD30 trillion of pension entitlements, which are mostly invested in financial assets via pension funds. However, even here, the bottom 50 percent of households are almost entirely excluded from financial asset ownership.
- 10 National courts may come into play only relatively rarely. A high-profile case was the hedge funds that successfully sued the Argentinian government over sovereign debts in a New York court.

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