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Abstract

Despite significant overlap, scholarship often distinguishes the concepts of financialization and assetization. While there are historical, ontological and conceptual reasons for this distinction, we argue that this may limit both perspectives' analytical potential. In this paper, we develop a shared research agenda that brings together analytical strengths and core insights of both perspectives. We propose to use three notions of financial power developed in financialization scholarship – instrumental, structural and infrastructural power – and apply them to different sites of power struggles that are linked to the asset form: the challenge to create durable returns, the challenge to calculate and distribute risks, and the distribution of wider societal power relations linked to the control of larger asset classes. We illustrate the proposed perspective in three

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vignettes on topics pertinent to scholars working within both strands of literature: green and impact assets, asset management and housing.

Keywords: financialization; assetization; financial power; green finance; asset management; housing.

1. Introduction

The past decades have seen significant research on the multifarious linkages between finance and the social world, including a burgeoning literature on financialization (Mader *et al*., 2020). Despite early recognition that the creation of assets is key to processes of financialization (Leyshon & Thrift, 2007), assets and their making have until recently remained a 'blind spot' in this literature (Langley, 2020). In the past few years, a distinct strand of scholarship has emerged that is concerned with assetization – that is, the processes through which objects are turned into assets (Birch & Muniesa, 2020; Birch & Ward, 2022; Muniesa *et al*., 2017). In this context, assets are understood as property that, through social and legal operations, can be 'capitalized' to allow for an extraction of durable returns (Birch, 2017, p. 468; Pistor, 2019). As their owners benefit from keeping rather than selling them, assets are an important addition to financialization scholarship that has often been concerned with financial market exchange (Langley, 2020).

Despite growing research interest, however, we believe there is more potential to bring scholarship on assetization in conversation with studies of financialization than has been done so far. While this may in part be due to the novelty of the assetization approach, we believe this is also reflective of a deeper boundary resulting from the differences between the theoretical perspectives present in the financialization scholarship, and the social studies of finance (SSF) approach central to many studies of assetization. As recently described by Neil Fligstein (2023) in a review of Michel Callon's latest book, a boundary remains between SSF's agencement perspective that builds on actor-network theory with its assumption of symmetric (human and non-human) agency and more politico-economic scholarship that centres on the interests, ideas and institutions shaping state-market-society relations across countries. The making of assets entails a relational transformation centred around the extraction of durable returns and an investor-centred valuation (Birch & Muniesa, 2020; Chiapello, 2015; Langley *et al*., 2021). But while assetization scholarship acknowledges the contestation and resistances during this process (V. Braun, 2021; Williams, 2020a), it is often less concerned with the conditions and resources that enable, fuel or hinder the imposition and maintenance of such investor-centred valuation and value extraction.

To bring financialization and assetization scholarship into closer dialogue, we propose a twofold conceptual move, building on the respective strengths of each perspective. First, we propose to focus discussions of assetization and financialization on the issue of power. For reasons of brevity, we restrict our discussion to politico-economic conceptualizations of financial power (instrumental, structural, infrastructural), either explicitly held by or benefiting certain (groups of) actors. We omit other important notions of financial power, such as the post-structuralist perspective that is often employed in the financialization of everyday life scholarship (Van der Zwan, 2014). Given that assetization scholarship is less explicit of actors' power resources, our own approach most closely resembles the nascent 'material political economy' perspective (MacKenzie, 2018). This perspective connects SSF and political economy by unearthing and delineating the complex interconnections between financial market infrastructures and power (B. Braun, 2016; Petry, 2021; Pinzur, 2021).

Second, we propose to take these insights one step further by redirecting such notions of financial power towards three crucial sites of power struggles that scholars have observed in assetization processes (Birch & Muniesa, 2020; Birch & Ward, 2022; Langley *et al.*, 2021): the creation of returns, the distribution of risks, and the wider reconfiguration of societal power relations. The ability to create and extract financial returns reflects actors' ability to instil capitalist discipline over human and non-human objects. It thus rests on an exercise of financial power, even if not exercised by financial market actors. The issue of risk, moreover, is often addressed through different sites and modes of power, as the ability to create a belief in the future profitability of an investment as well as the calculation and distributions of the associated risks are oriented towards the future (Beckert, 2016). These power struggles related to individual assets, finally, need to be differentiated from those related to wider asset classes. Here, power struggles often arise with regards to regulation and governance, where they may lead to a far-reaching reconfiguration of societal power relations.

We believe recasting scholarship on financialization and assetization towards such a situationist perspective may generate important new insights. On the one hand, leveraging perspectives of financial power to understand the concrete and diverse situations of creating assets and asset classes may help address the 'blind spot' of assets and assetization in financialization scholarship (Langley, 2020). On the other hand, understanding how the particularities of capitalist states and financialized capitalism affect, through power, the creation of assets and asset classes may help scholars of assetization to gain a more complete picture of how assetization succeeds, under which conditions and with what consequences. We thus emphasize that assetization cannot be subsumed to financialization, because it entails analytically distinguishable situations pertaining to the creation of individual assets and asset classes that may or may not involve financial market actors. Nevertheless, assetization occurs under the conditions of – and feeds into – financialized capitalism. As both assetization and financialization are deeply interconnected, we argue that furthering their analytical distinction is somewhat futile. It would be much more important, we posit, for scholarship to investigate the emergence, accumulation, exercise and contestation of financial power, as it becomes observable across sites and analytical levels through its engagements with the asset form.

In the following section, we provide an overview of how power has been discussed in financialization and assetization scholarship. Thereafter, we develop our conceptual perspective on financial power and apply it to the three sites of power struggles. In the fourth section, we provide empirical vignettes to illustrate our proposal. The first vignette illustrates the rise of green and impact assets and how their making is informed by power with regards to the performance of profit and risk. The second vignette is concerned with the various practices surrounding asset management and shows how financial actors may differ in their responses to the same power struggles. The third vignette investigates how the recent transformations of housing into an asset class galvanized manifold social and politico-economic dynamics across various analytical levels. We elaborate on these findings and sketch avenues for future research in the final section of this paper.

2. Power in financialization and assetization

Drawing on political science scholarship, political economists working on finance and financialization have identified different forms of financial power. Instrumental power refers to the possession of power resources that, when yielded, results in favourable decisions or non-decisions. According to Korpi (1985), power resources are defined as 'the attributes (capacities or means) of actors (individuals or collectivities), which enable them to reward or to punish other actors' (p. 33). Power resources can be material (e.g. financial resources) or immaterial (e.g. access to powerful actors) and differ with regards to the actors and activities susceptible to them. Since power is a relational concept, writes Korpi (1985), actors' attributes become power resources only in relation to others (p. 33).

The concept of instrumental power is broadly used in politico-economic studies of finance and financialization. It appears, for instance, in scholarship on the policymaking power of financial actors. The instrumental power of financial actors is associated with a variety of power resources, including their ability to form coalitions with other political interests (Pagliari & Young, 2014) or the successful mobilization of advantageous policy frames (Kastner, 2018). Equally important in this regard is the perceived technical nature of finance, which allows financial actors to gain access to policymaking circles and thereby yield influence over political processes by contributing knowledge and expertise (Dorn, 2014). Yet, financialization scholarship has also shown that instrumental financial power should not be overstated: its extent depends on, for instance, unity within the sector, the mobilization of non-financial actors, and the salience of the policy issues at hand (e.g. Culpepper, 2010; Pagliari & Young, 2014; Woll, 2013).

Second, scholars of financialization have shed important light on the structural power of financial actors in relation to non-financial actors. Here, scholars often draw on the broader scholarship on business power and interests to investigate whether the state's reliance on finance capital for investment purposes leads to a privileged position for the financial sector in politics and policymaking (e.g. Bell & Hindmoor, 2017; Culpepper & Reinke, 2014). A distinguishing feature of structural power is that it manifests itself regardless of the ideological orientation of the political party or parties in government (Culpepper, 2015). Moreover, once structural power is in place, it acts as a reinforcement of finance's existing power resources (James & Quaglia, 2019) – Trampusch and Fastenrath (2021) call this 'the augmented power mechanism'. That said, like instrumental power, finance's structural power is not without limits. Trampusch and Fastenrath (2021), for instance, find that the state's receptiveness of financial interests is shaped by its own monetary and fiscal capacities, while James and Quaglia (2019) identify considerations of statecraft, institutional constraints and collective action problems with the financial sector as additional factors that render the structural power of finance contingent.

More recently, scholars have also questioned the very foundations of financial actors' structural power in the context of financialized political economies. Observing the decline in productive investment by financial actors across political economies, Dafe *et al.* (2022) ask the important question why states would still cater to the needs of finance, given this changing role of the financial sector in the domestic economy. The answer lies, the authors argue, in other politico-economic factors that render the financial sector politically important to policy-makers, such as its role in economic development strategies (Dafe & Rethel 2022) and its geopolitical importance (Massoc, 2022). Dafe *et al.* (2022, p. 538) conclude that, despite the overall reduction in productive investment, 'if anything, the power of finance has increased as financial institutions and profits take on an ever more central role in growth, development, and geopolitical strategies'.

Straddling some of the divide between SSF and political economy is recent scholarship on infrastructural power. Understood as the power that financial actors gain from the control over important infrastructures (B. Braun, 2020; Pinzur, 2021), research on infrastructural power explicitly addresses calls for a stronger connection between SSF and political economy approaches (B. Braun, 2016). The notion of infrastructural power furthermore links a structural perspective – i.e. the power resulting from a particular structural position – to a conception of power resources – i.e. the ability or threat to weaponize that position. Initially describing the power that financial institutions gain as the success of central banks' monetary policy is dependent on them (B. Braun, 2020), the notion of infrastructural power is fuelling interactions between SSF and political economy scholarship concerned with the structuring importance and politics of financial market infrastructures (Bernards & Campbell-Verduyn, 2019). But although scholarly interest in the role of various financial infrastructures – ranging from pricing (MacKenzie, 2006) to settlement (Krarup, 2019) and clearing (Genito, 2019) – has been bourgeoning, these studies have thus far mostly focussed on infrastructures of market exchange (with the role of digital infrastructures being an important exception, see Kemmerling and Trampusch (2023)).

In contrast to these three notions of financial power, the assetization perspective is less explicit regarding the conditions, forms and resources of power. This does not mean that the assetization perspective is ignorant of power – quite the opposite. Indeed, as Birch and Muniesa (2020) hold, focussing on the asset condition 'brings us to the emergence and consolidation of new forms of power –

assetization power – as a central challenge to future assetization studies' (p. 297, emphasis in original). As the authors note, classical economic theorists (John R. Commons, Irving Fisher, Thorstein Veblen) already observed that the value of an asset reflects its expected future earnings, i.e. its 'earning power'. This logic is at the core of various 'financialized valuation devices' such as the discounted cash-flow model that have subsequently been developed by financial economics (Chiapello, 2015). Key to this mode of valuation is that it represents the interests of capital owners using their power to extract continuous returns from these assets (Nitzan & Bichler, 2009). The assetization perspective thus builds on the 'constitutive power of valuation' (Muniesa *et al.*, 2017, p.15) and stresses its relationality: Assetization resembles a relational 'unbundling' of an object from its previous social environment and a 'rebundling' into a 'device of obligation' that privileges the creation of returns for investors (Tellmann, 2022). To understand how such processes unfold, assetization scholars draw on insights from actor-network theory and investigate how all sorts of human and non-human objects are implicated in financialized valuation devices (Birch & Muniesa, 2020; V. Braun, 2021; Chiapello, 2020).

From this perspective, assetization *is* the performance of power. Noting that the entrenchment of financialized valuation represents an 'enabling engine', Muniesa *et al.* (2017, p. 132) implicitly draw on the famous insight developed by Donald MacKenzie (2006) that financial models are performative in the sense that they are 'an engine, not a camera'. Indeed, Muniesa *et al.* (2017, p. 132) note that power 'is not the power that investors have, but the enabling capacity that capitalization has as a process'. In this sense, the assetization perspective concords with actor-network theory that power can only be observed as an outcome of socio-material networks or agencements (MacKenzie *et al.*, 2021). However, the assetization perspective also hints to instances where power can be seen as a resource of particular agents. For example, Muniesa *et al.* elaborate that 'the parts of the social configuration that have the power in the plot of capitalization are the institutions that control its meaning' and list financial market actors as key examples (p. 132). Birch and Muniesa (2020, p. 298f.) take this further as they conclude that power in assetization is all about 'who "owns" the future and, more importantly, how they end up owning it and what that means for everyone else'. This points to two different instances in which power is exercised: the struggles over controlling the future and those geared at the present that enable control over the future in the first place.

In sum, assetization hints to three sites of power struggles: the present challenge of creating cash-flows, the challenge of future risk-return distributions, and those challenges in which control over the asset form constitutes a source of power. While important in their own right, each of these can also be productively linked to notions of financial power developed in political economy scholarship. In particular, we maintain, productive tensions arise when the political economy insight that financial power is highly concentrated is juxtaposed with the view of Muniesa *et al.* (2017, p. 132) that 'investors are everywhere', including 'all of us' who hold money in a bank account, as 'no particular class of people that would be granted the anthropological exclusivity of that identity'. In the next section, we show that these different notions of power can be brought into fruitful dialogue when studied through the three challenges of assetization identified above.

3. Assets as challenges

We distinguish three challenges related to the asset form in which the sources, distribution and exercise of power differ (see Table 1). Note that this is an ideal-typical, analytical distinction that may be less clear-cut empirically. The first challenge concerns the creation of cash-flows, where conflict arises from the divergent material interests of the involved actors. While the agencement perspective holds that the most powerful agencies can 'impose' their view on others (Çalışkan & Callon, 2010), this ability depends on the distribution of power resources and the structure of power relations. From the view of investors, the challenge is to instil capitalist discipline on those things that are to be assetized. Following Max Weber, the social and moral institutions underlying capitalist societies are a vital power resource in this process, as they grant legitimacy to such demands and thus create near automatic discipline. More

Table 1 Three sites of financial power struggles

	Return extraction	Risk distribution	Asset class struggles
Object of contestation	Financial returns of individual assets	Distribution of risks of individual assets	Regulation and governance of larger asset classes
Partaking actors	Investors and investees that may or may not be financial market actors, sometimes government as de-risker	Investors and investees that may or may not be financial market actors, sometimes government as de-risker	Asset owners (e.g. households, financial investors) and their interest group representation, various government bodies
Examples of key power resources	Economic, legal and symbolic resources bestowed by financialized capitalism	Discursive framing, calculative devices and financial expertise	Ownership of or control over strategically important asset classes, access to politicians and policymakers
Exercise of financial power	Control relations (e.g. board seats, earnings calls), exit and voice	Negotiations of term sheets and risk tranches	Political decision-making and policy-making
Temporal orientation	Present	Future	Present and future

recently, scholars have stressed the role of law (Pistor, 2019) and its use by densely networked wealth managers (Harrington, 2016) as a vital power resource *vis-à-vis* investees and tax authorities. The emerging debate surrounding the presumed rise of 'small de-risking states' (Gabor, 2023) is equally important in this regard, as reduced rates of public investment paired with growing subsidies for private investment serve as a case in point for growing investor power.

Scholarship on assetization adds to the core finding that financialization has led to an increasingly uneven playing field in favour of financial investors in two important ways. On the one hand, the notion that 'investors are everywhere' (Muniesa *et al.*, 2017) implies that the creation of assets and the extraction of durable returns from them is not necessarily tied to financial market actors. As the assetization of data or intellectual property rights shows, assetization can occur independent of financial markets (Birch & Muniesa, 2020). And even where financial assets are created, as in the case of green or impact assets, non-financial actors such as philanthropists play a crucial role (Kumar & Brooks, 2021; Langley *et al.*, 2021). On the other hand, the assumption of symmetric agency that underlies some (but not all) work on assetization shows how human and non-human entities may have crucial veto power (V. Braun, 2021). Assetization thus needs enrolment into financial devices, which puts the challenges of *interessement* and the overcoming of resistances into the analytical spotlight (Callon, 1986). But while scholars have focussed on the processes and strategies of how this is achieved (Birch & Muniesa, 2020; Chiapello, 2020), less attention has been paid to the conditions under which such projects succeed or fail. Doing so would empirically assess how and when the power to assetize is more or less evenly distributed across human and non-human agencies – rather than assuming a symmetric distribution *ex ante*.

Bringing both politico-economic and SSF approaches together is thus a perspective that investigates the power struggles over rent extraction by opening up power resources and power relations to empirical research. A case in point are the highly differentiated power struggles over the terms of financial investments across various asset classes, as these define the extent to which investors are able to extract returns from investees. While investors' power resources are a key determinant, investees' power resources play – partially dependent on the macro-financial environment – an equally important role. As economic sociologists have long argued, a number of factors influence corporate financing costs, including a firm's status position (Podolny, 2010). However, not only economic power resources affect struggles over the creation and extraction of cash-flows. The financialization of corporate control as well as the transformation of business knowledge and professionals that came with it critically facilitated investors' exercise of power (Van der Zwan, 2014). As a large literature on moral markets has shown, creating financial products as well as revenue streams more generally often requires previous moral acceptance (Quinn, 2008; Zelizer, 1979). Likewise, conventionalist scholars have stressed the justificatory and compromise-building work that precedes the creation of new financial products (e.g. Chiapello & Knoll, 2020). However, less is known regarding the conditions in which moral objections do or do not hinder assetization projects. A power resource perspective could thus be equally helpful here, as it would treat moral arguments as a symbolic power resource and investigate their distributed availability and variegated exercise.

The second challenge is the power struggle over risk. This is fundamentally different from the power struggle over returns as it is not concerned with the continuous maintenance of power relations that enable the extraction of profits in the present, but is fundamentally oriented towards the future. Although the struggle over risk does have a material dimension – i.e. the definition of whose investments will be served first, usually understood as risk tranches – the materiality of risk is also tied to a point in the future. Struggles over the future usually take a narrative form (Beckert, 2016). In the case of investments, these narrations take the form of promises regarding future returns made with the goal of having investors 'buy into' them (Knorr Cetina, 2009; Leins, 2018). Investors, in turn, will use their calculative capacities to evaluate these promises. But although the outcome of these negotiations may be a compromise, the process is nevertheless a power struggle: convincing others to invest rests on resources of discursive ('noumenal') power (Forst, 2015; Golka, 2023). Vice versa, investors' control over material resources enables them to define what risks are assessed and through the use of which evaluative devices.

One important aspect of financialization is that the struggle over risks takes a financialized form that is shaped by financial instruments and geared at financialized valuation devices. A key expression of investor power is the ability to translate qualitatively different investment proposals into a single quantitative measure of discounted cash-flows (Chiapello, 2015). Indeed, as Birch and Muniesa (2020) note, this is the heart of the 'narrative transformation' of things into assets. Yet importantly, these financialized valuation devices are, at the same time, remnants and resources of investor power. Such quantification often goes hand in hand with processes of qualification, whereby individual investment opportunities are related to established asset classes that serve as key quality conventions in financial markets (Chiapello & Godefroy, 2017; Langley *et al.*, 2021). This creates a situation where suppliers of new assets can either stress their relation to standards and established asset classes or, as in the case of many new 'green' investments, seek to position themselves as a new asset class in the hopes of avoiding competition from established providers (Birch & Ward, 2022; Lovell, 2014). Another important aspect is the role of regulation regarding risk, which can give financial professionals a considerable advantage over non-financial actors and can thus lead to a growing displacement of other forms of expertise and an entrenchment of financial logics (Golka & Van der Zwan, 2022).

The third site refers to those struggles in which power is an outcome of assetization. As asssetization corresponds to a transformation of social relations, this inevitably means that it, where successful, alters power relations. As a large literature on the transformation of land, agriculture, public infrastructures, social services, or housing into financial assets has shown, assetization magnifies the power of asset owners and their financial interests over the various interests of its non-financial stakeholders (Birch & Ward, 2022; Cooper *et al.*, 2016; Ouma, 2020). Less attention, however, has been paid to how assetization alters power relations beyond the social relations constitutive of the individual assets. This raises the question to what extent the emergence and transformation of larger-scale asset classes are informed by and give rise to distinct power struggles. One aspect worthy of scholarly exploration is the extent to which the proliferation of asset classes increases asset owners' 'oracular power' (McGoey, 2019), understood as the capacity to create discursive and epistemic ignorance over certain issues. For example, it would be interesting to explore to what extent the proliferation of housing-as-asset reduces the salience of housing-as-shelter within housing policy discourses, and to what extent this would explain transformations in housing policies. This could also inform debates regarding the structural power of finance by shifting the focus from investors to asset owners and asking whether larger-scale assetization dynamics affect whether structural power is exercised deliberatively or automatically (Dafe *et al.*, 2022; Kalaitzake, 2022). Finally, understanding power as an outcome of assetization also opens the question whether and how ownership of and control over assets can serve as a power resource in and of itself. One example is the observation that asset price inflation increases the economic power of asset owners which, as Adkins *et al.* (2020) argue, can lead to a transformation of class power and boundaries, but whether similar dynamics can be observed with regards to other asset classes remains an open question for future research.

4. Power in practice

In this section, we present three vignettes to illustrate the potential of a shared research agenda of financialization and assetization scholarship revolving around financial power. The first example is the creation of green or impact assets and exemplifies the associated power struggles. While a growing literature has investigated the metrological and justificatory work that surrounds these processes of assetization, this literature has not always made the role of power explicit. We show how an explicit focus on the sites of power struggles can further our understanding of how and when the proliferation of new assets succeeds and how it may also fail despite financial actors' power. The second example is the case of asset management, which shows how the socio-materiality of the respective assets shapes how financial actors exert their power. It also shows how financial actors may differ in their response to shared challenges over the extraction of returns, depending on their relation to assets. The third vignette demonstrates how the large-scale transformation of housing into an asset class is informed by financial power and can lead to a wider transformation of power relations within and across societies.

4.1. *Green and impact assets*

The transformation of social and environmental issues into financial assets demonstrates the potential of the perspective proposed here. These ‘impact assets’ include a variety of financial assets, ranging from more well-known cases such as green bonds (Langley *et al.*, 2021) to less common ones such as Social Impact Bonds (Chiapello & Knoll, 2020; Williams 2023) and experimental ones such as Rhino Bonds (Hughes-McLure, 2022). Transforming various things and issues into assets, these are paradigmatic cases of assetization. However, decades of financialization have made their emergence and proliferation more likely, as it has shifted key sites of power struggles in favour of assetization. At the same time, successful cases of impact assetization are a distinguishable source for wider financialization dynamics. Focusing on the three sites of power struggles described above helps to understand these dynamics and interconnections.

Bridging the ‘hostile worlds’ of finance and social or environmental initiatives, the creation of impact assets has received considerable scholarly attention (Chiapello & Knoll, 2020). Common to all these impact assets is a relational form through which the various assetized things are valued based on their expected future returns, thus mirroring the perspective of financial investors (Chiapello, 2015). However, this metrological work of financial valuation rests on important social conditions that enable the production of financial returns in the first place (Golka, 2023; Langley *et al.*, 2021). Investors’ control over financial capital as well as the subordinate position of the Global South in the global financial system are crucial structural factors that often make the recipients of capital dependent on terms set by resource-rich investors in the Global North (Alami *et al.*, 2023; Jafri, 2019; Mader, 2015). In the struggle over returns, the structural power of financial investors gives them an important advantage.

However, this does not mean that assetization is merely a corollary of structural power. Scholarship has stressed the considerable work required to build the subjectivities and entrench the discipline necessary for the production of financial returns, as well as the distributive consequences that come with it (Cooper *et al.*, 2016; Neyland, 2018; Wirth, 2020). This also entails considerable ideational and institutional work to create organizational ecosystems in which, to paraphrase investor language, the ‘laser focus’ on the production of a ‘double bottom line’ is motivated and reciprocally normalized (Chiapello, 2023; Golka, 2019). One vital aspect of these ecosystems is the role of philanthropic and public organizations that provide an important source of legitimacy by giving third party approval and often make the ‘business case’ of impact assets financially viable through various forms of financial de-risking (Gabor, 2021; Kumar & Brooks, 2021; McGoey, 2021). The importance of these actors for the creation of new assets thus mirrors the statement of Muniesa *et al.* (2017) that 'investors are everywhere' and points to important forms and sources of financial power beyond the power of financial markets. Despite financial actors' structural power, support from these pivotal actors is far from certain as exemplified by the sluggish growth and only limited success of Social Impact Bonds (Golka, 2023; Maron & Williams, 2023; Williams, 2023). The lens of power struggles can thus also help gain a comprehensive and comparative understanding of the enabling conditions under which investor attempts to turn things into cash-flows succeed or fail.

The distribution of risks is an equally important site of power struggles in the creation of impact assets. As financial intermediaries compete with more established asset classes over investment capital, risk becomes a key site of contestation. Investors benefit from structural power by making future capital investments contingent upon de-risking from public and philanthropic sources (Gabor, 2023; Kalaitzake, 2022). Where investor returns are contractually dependent on the achievement of particular social or environmental outcomes, investors also leverage their power position to suppress more rigid, external evaluations of achieved outcomes as these would pose another source of risks (Al Dahdah, 2019; Williams, 2020b). However, this does not mean that investors always prevail. Again, the case of Social Impact Bonds, particularly in the United Kingdom, is a telling one, as the definition and distribution of risks is a key site of contestation (Williams, 2020a). While for the British central government, resistances from HM Treasury had been overcome following considerable lobbying (i.e. the use of instrumental power) from financial intermediaries (Golka, 2019, p. 176), in local government, these resistances often prove insurmountable and hinder a further proliferation of Social Impact Bonds (Maron & Williams, 2023; Williams, 2023). This indicates that financial actors' power over the distribution of risks varies considerably across sites and assets. To gain a comprehensive cartography of this variety as well as a better understanding of the explaining factors represents an important question for future research.

Although many individual projects of creating impact assets face significant obstacles or fail altogether, on the societal level, the growing proliferation of impact as an asset class may act as a power resource to investors and asset owners, and shift power relations with regards to development and global governance. As addressing social, developmental and environmental challenges is increasingly framed as a matter of finance, the voice of financial investors in various arenas of global governance is magnified. One important consequence of assetization is therefore that investors may gain positional advantages even beyond the assets they control. This has particularly been the case in international development, where financial investors as well as philanthropic donors play an increasing role in setting agendas and defining approaches (Gabor, 2021; Kumar & Brooks, 2021; Mader, 2015). As known from other policy domains such as pensions, the growing importance of investors may lead to a displacement of other actors, fuelling epistemic closure where expert authority is granted and increasingly confined to financial market actors (Golka & Van der Zwan, 2022).

4.2. *Asset management*

Asset management plays a key role in both financialization and assetization dynamics and therefore illustrates the value of a shared perspective. Constructing, maintaining and selling funds, asset managers create new assets (the funds) from existing assets (the individual financial instruments) and are at the same time financial market participants. This means that power struggles surrounding asset management are informed, on the one hand, by the socio-material particularities of the respective financial assets, but on the other hand also by asset managers' market environment. While scholarship has recently applied such a shared perspective for the case of exchange-traded (ETFs) and index funds (B. Braun, 2016; Petry *et al.*, 2021), more research is needed to investigate the heterogeneity of asset management approaches and their differences with regards to power.

The rise of the Big Three asset managers – BlackRock, State Street and Vanguard – is arguably one of the most important financial market transformations in the past decades (B. Braun, 2022). Various factors have contributed to the rise of the Big Three, but a particularly important one has been the emergence of socio-technical agencements around ETFs that allowed asset managers to provide fully diversified investment opportunities capable of absorbing huge pools of capital for relatively low implementation costs (B. Braun, 2016; Fichtner *et al.*, 2017). While power arises as a property of these networked agencements, the fact that asset managers and index providers can control their socio-technical infrastructures also gives them considerable power resources (B. Braun, 2022; Petry *et al.*, 2021).

Asset managers' power struggle over financial returns demonstrates the implications of the rise of the Big Three. Providing fully diversified, passively (i.e. often index-tracking) managed products, asset managers usually charge flat fees as a percentage of assets under management. This means that asset managers earn money either from raising new capital or by benefitting from asset price inflation. In the power struggle over asset manager profits, the portfolio firms are therefore only of little importance (although asset managers may advocate the use of corporate profits for share buybacks rather than dividends). This can be seen, for example, in the case of shareholder voting for ESG that is increasingly left to clients, as asset managers fear a loss of market share due to the recent anti-ESG backlash. From the perspective of fully diversified asset managers, the nitty-gritty struggles over corporate governance are of less importance than those pertaining to larger asset classes, such as regulation and expansive monetary policies, which are a focus of their considerable lobbying activities (B. Braun, 2022).

The power relations that shape the struggles over returns and risks in private equity markets differ considerably from those of the Big Three. Private equity providers compete less over their capacity to absorb huge pools of liquidity than over their capacity to deliver returns, usually over a fixed timespan. As performance fees are the main source of their profit, return extraction from portfolio companies is the key site of contestation. Private equity funds differ in the strategies they use, ranging from the growth and market share strategies of venture capital (Cooiman, 2023) to strategies such as corporate restructuring or asset sweating in buyout funds. But in all cases, corporate control is a key site of power struggles in private equity. *Vis-à-vis* portfolio firms, private equity funds benefit from their position as owners that grants them considerable structural power. In contrast to the Big Three asset managers, however, their power position *vis-à-vis* institutional capital is more dependent on macro-financial conditions. In the current high-interest, low-growth climate, demand for private equity dries up and debt-fuelled leveraged buyouts become more expensive, reducing private equity funds' opportunities to exit their investments. Private equity funds increasingly respond to this situation by resorting to 'net asset value financing' where they borrow against their portfolio (i.e. not the individual companies) to refinance their investments and gain liquidity (*Financial Times*, 2023a). In addition, a growing number of private equity funds is offering fee discounts as fundraising equity capital is also becoming more difficult (*Financial Times*, 2023b).

It therefore seems that private equity funds are, in the current macroeconomic climate, in a weaker power position *vis-à-vis* institutional investors than the Big Three, even if they may be in a stronger position *vis-à-vis* their portfolio firms than the Big Three due to their direct control relations. Nevertheless, private equity has been successful in leveraging its control over key sectors such as technology to mobilize considerable de-risking from EU policymakers (Cooiman, 2023; Mertens & Thiemann, 2018). Private equity has also successfully used its wealth and political connections as instrumental power resources (Benquet & Bourgeron, 2022). Although more research is needed to understand the differences between various asset management practices in more detail, contrasting the Big Three and private equity investors shows that asset management approaches differ not only with regards to their sociomateriality, but that these differences may translate into different responses to the same power struggles. Analytically distinguishing different sites of power struggles can therefore pave the way towards a comparative perspective on the actors and resources involved with exercising financial power.

4.3. *Housing*

A final demonstration of an integrated research approach pertains to the case of housing. Housing is central to financialization scholarship, due to the myriad ways in which housing markets increase household dependencies on financial markets. The expansion of homeownership has been a core feature of policy programmes around so-called asset-based welfare in 'ownership societies'. Made possible by the securitization of mortgages and other financial engineering, the expansion of homeownership has fed into growing rates of indebtedness (e.g. Montgomerie & Büdenbender, 2015). The financialization of housing has also been a driving force behind asset price inflation and speculative bubbles (e.g. Fuller, 2019). In other words, scholarship of housing financialization has drawn much-needed attention to the instabilities that occur, both macro-economically and within daily lives, when homeownership is realized through financial markets.

Financialized housing markets are also connected to the assetization of housing, or the process whereby owners come to derive regular income streams from their property. Desiree Fields' (2018) study of the 're-financialization' of foreclosed homes is illustrative of the integrated approach we have proposed in this paper. Fields shows how the mortgage crisis of 2008, a major manifestation of housing financialization, set in motion the transformation of foreclosed properties into a new asset class of single-family rental units. Similar dynamics are visible in so-called buy-to-let markets, whereby institutional investors purchase properties through real estate investment trusts (REITs) – a situation Aalbers *et al.* (2021) refer to as 'financialization 2.0'. Gabor and Kohl (2022, p. 3) report that 30 per cent of EU real estate assets are now owned by globally operating private equity funds. Noteworthy, is that these developments have not been restricted to countries normally classified by financialization scholars as 'homeowner societies' (Fuller, 2019; Schwartz & Seabrooke, 2008). The transformation of housing into an asset class thus illustrates how the expansion of transnational investment chains can alter societal power relations, even across different regimes of financialized capitalism.

The creation of cash-flows through the assetization of housing has been strongly supported by favourable rules and regulations. On the one hand, official support for assetized housing is an expression of the political weight of those holding housing assets. The influence of large financial players over national and transnational policy processes is well-documented by now, due to a wealth of financial and non-financial resources (Gabor & Kohl, 2022). Moreover, the power of property-owners also takes non-instrumental forms, as it is supported by ideologies of homeownership that privilege housing as private property instead of public ownership. Policymakers have frequently mobilized the ideal of the 'homeowner society' to justify lenient credit provisions and tax subsidies for property-owners. In his study of political party manifestos in 19 countries, for instance, Kohl (2020) finds that such policy preferences exist across the political spectrum, among both left-wing and conservative political parties.

The transformation of housing into an asset class also makes apparent the complex linkages between the structural power of property-owners to the broader institutional environment. The scholarship on macro-economic growth regimes has identified housing as one of the key drivers behind debt-driven growth (Stockhammer & Kohler, 2020). In political economies with these growth regimes, policy measures are taken to stimulate ever-rising housing prices, in other words asset-price inflation (Anderson & Kurzer, 2020; Reisenbichler, 2022; Schelkle, 2012). Reisenbichler (2022) adds that such politico-economic dynamics are not present in export-led growth regimes, that revolve around wage restraint. However, following Adkins *et al.* (2020) the suppression of wages could also provide incentives for those with means – whether institutional investors or private individuals – to seek out secondary streams of income from housing assets. In other words, the presence of an export-led growth regime does not necessarily pose an obstacle to housing assetization.

An integrated perspective on housing assetization and financialization brings attention to the profound implications for social relations, creating further divides between socio-economic and demographic groups. Fuller *et al.* (2020) show, for instance, that housing price inflation is an important driver for wealth inequality in European societies. In this sense, as Adkins *et al.* (2020) note, assetization has important ramifications for class divisions in society, creating a division between those who own housing assets – and thus benefit from rising asset prices and passive income streams – and those who do not. Housing scholars, for instance, note growing rates of private landlordism, whereby those with means purchase secondary properties to generate rental income (e.g. Aalbers *et al.*, 2021; Arundel, 2017). These forms of rentiership, as Adkins *et al.* (2020) alert us, should be seen against the broader reordering of power relations in contemporary capitalism, whereby rents have become more important sources of income than wages from labour.

5. Conclusion

Financialization and assetization are key research themes across political economy, sociology and economic geography. While financialization research has garnered significant scholarly attention, assetization is only beginning to move into the scholarly spotlight. Research on assets and assetization has long been a scholarly blind spot, prompting researchers to call for greater attention to these phenomena (Langley, 2020). While we strongly agree with this observation, our contribution in this paper goes one step further. In this paper, we have advocated for an integration of the assetization perspective developed by Birch and Muniesa (2020) with the politico-economic conceptions of power employed by scholars of finance and financialization. Key to this proposed research agenda is to bring together theoretical and conceptual innovations from both bodies of literature by applying notions of financial power to three key power struggles related to the asset form: the extraction of financial returns, the calculation and distribution of risks, and the regulation and governance of asset classes that may lead to a transformation of wider societal power relations. We hope that this may help bridge the gap between politico-economic scholarship on financialization and assetization scholarship located closer to SSF and science and technology studies (Golka, 2021).

The key lesson from linking financialization and assetization scholarship is that financial power has both entangled and entangling elements. As the assetization perspective, drawing on actor-network theory, suggests, financial power is the result of successful enrolment into financial valuation devices. This enables powerful assemblages to 'impose' financial valuation on others (Çalışkan & Callon, 2010, p. 13). The exercise of financial power rests on successful enrolment but cannot be equated to it. While we argue that scholars of assetization can be more attentive to how financialization tilts the balance in favour of investors, we also point to assetization as an important boundary condition for the structural and instrumental power of the financial sector.

Acknowledging that the struggles over risks and returns often involve different sites, actors, logics and temporalities is of particular importance for scholars concerned with the role of the state in financialized capitalism and its turn to de-risking (Gabor, 2023; Gabor & Braun, 2023). As the case of impact investing shows, considerable state subsidies geared at boosting investor returns did not result in a resolution of the risk challenge. Here, the boundary condition of the risk challenge constrained wider financialization dynamics, such as the entrenchment of a de-risking regime in social welfare. This important finding shows that the rise of de-risking is associated with distinct power struggles over returns and risks, respectively, in which differing power resources and relations may lead to variegated outcomes.

Furthermore, it is important to distinguish power struggles at the level of individual assets from those of larger, more established asset classes. As the case of asset management shows, not only do the ways in which asset managers earn profits shape their interests, but their control over asset classes is also an important power resource *vis-à-vis* the state. While large asset managers such as BlackRock may push states towards a 'weak' de-risking regime (Gabor & Braun, 2023), such power is limited to the few financial actors that are gatekeepers of the desired asset classes. As shown by European venture capital funds that receive considerable public support (Cooiman, 2023), this is less an issue of size than of control over strategically important asset classes. Pointing towards boundary conditions related to individual assets as well as larger asset classes, we argue that financial power has preconditions that necessarily span across and connect analytical levels, thus emphasizing a core insight of actor-network theory that 'scales aren't stable' (MacKenzie, 2008, p. 33). Distinguishing challenges over individual assets from those related to larger asset classes may, in our view, therefore be more helpful to understand financial power than a distinction of micro-, meso-, or macro-levels.

Rather than identifying with either financialization or assetization, we suggest that future research should address financial power held by financial and non-financial actors. It is a key insight of the assetization perspective that capitalist control does not need financial intermediaries to take a financial form.

Turning things into assets is a project of control for the sake of rent extraction. Financial intermediaries are key enablers of various new forms of assetization, but they are not the only ones. Other sources of assetization may exist, which researchers may have overlooked. One important aspect here, we suggest, is private wealth. This not only relates to the distinct and opaque chains of private wealth management that routinely bridge scales and geographies to preserve wealth and avoid taxation (Harrington, 2016). As the assetization of housing shows, rising wealth inequalities and assetization can be mutually reinforcing but also interact with changes in financing regimes, such as the shift from mortgage-backed securities to REITs. These transformations may lead to a wider transformation of societal power relations and have repercussions for policy as well as the broader public discourses and opinions regarding home ownership. Although more research is needed to understand these transformations in detail, distinguishing between different sites and forms of power struggles will prove more analytically helpful than distinguishing between the terms of financialization and assetization that are so deeply interconnected.

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