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Full length Article

A 'Distributional Apparatus' for real estate: Fair value accounting and the assetization of UK property

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ABSTRACT

Research on housing financialization argues that property assets are important stores of value that collateralise global systems of financial accumulation. Yet remarkably little is known about how those assets are constructed, valued and generate returns. This paper draws on the assetization literature to unpack how investment properties are constructed as 'assets', applying an accounting lens to locate their growing importance within the move towards a fair value accounting regime. We argue that property investors benefit from a generous 'distributional apparatus' - that is, a collection of rules, norms, reporting technologies and market-orienting devices that act as both a resource and an incentive to engage in practices of valuation that maximise potential distributions. In the case of property assets, accounting rule IAS40 determines how housing assets should be recognised in an annual statement; the RICS Red Book acts as a market device which articulates with IAS40, providing rules and principles on the techniques of valuation and revaluation; and the ICAEW provides guidance on whether revaluations amount to a 'realised profit' which can be distributed to shareholders legally. Together these three features underpin the assetization process in investment property. We use two case studies to show that this apparatus acts as a flexible resource as companies build different valuation and distribution strategies around the RICS Red Book revaluation process, with different risk implications. Our findings contribute to financialization, assetization and accounting scholarship.

1. Introduction

Over the past 20 years, scholars working across accounting, political economy, sociology and economic geography have documented the growing financialization of the global economy (van der Zwan, 2014 *passim*). One important strand focuses on the centrality of property assets to processes of financialization (Aalbers, 2008, 2017; Arnold, 2009; Botzem & Dobusch, 2017; Christophers, 2016; Heilpern et al., 2009; Smyth, 2019; Smyth et al., 2020). This literature has emphasised the link between subprime mortgage debt

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as the feedstock for securitisation markets that drove an unsustainable housing market bubble during the 2000s (Aalbers, 2008; Cooper, 2015; Engelen et al., 2010, 2011; Langley, 2008; Zhang & Andrew, 2014), as well as how post-crisis monetary, institutional and regulatory interventions were guided by the need to restore the link between housing assets and financialization (Aalbers, 2017). More recently it has documented the rise of the 'Build to Rent' asset class – purpose built blocks of residential properties designed to capture the rental income streams of tenants (Beswick et al., 2016; Brill & Durrant, 2021; Fields & Uffer, 2016; Goulding et al, 2023a, 2023b), and how this has changed the nature of real estate financialization from the short-term, speculative, transaction-oriented strategies of financialization 1.0, to the longer term, accretive logics of financialization 2.0, where financial actors such as Real Estate Investment Trusts (REITs) buy and hold property assets for rents (Wijburg et al., 2018).

However, despite this recognition of the link between housing assets and financialization, there is remarkably little written about the valuation and capitalisation processes around housing assets themselves. The emerging literature on 'assetization' provides a way of unpacking this process, given its emphasis on understanding asset construction, valuation and realization within a wider accumulation strategy (Birch & Muniesa, 2020; Langley, 2021). That literature presents a story that on the surface complements the financialization 2.0 thesis - that asset ownership rather than markets are core to capital accumulation and techno-scientific capitalist organisation (Birch, 2017; Birch & Muniesa, 2020). However, it also highlights the mutability of the asset form: its socially, discursively and materially contingent configuration and valuation (Muniesa et al., 2017) and its capacity to be employed as collateral as part of a more multifaceted financialised strategy (Kang, 2020).

Accounting scholarship has an important role to play in extending the assetization literature and thus in understanding the particular character of property-led accumulation. Accounting research is able to locate the growing centrality of the asset form within wider changes to the accounting regime and the collection of rules, norms and practices that comprise it. In particular it has the potential to understand assetization as a product of the shift from a historic cost to fair value accounting regime (Andersson et al., 2010; Baker et al., 2020; Bengtsson, 2011; Benston, 2006; Botzem & Dobusch, 2017; Bougen & Young, 2012; Cooper, 2015; Macintosh et al., 2000; Müller, 2014; Power, 2010) which elevated the importance of the balance sheet and provided new reporting rules allowing asset revaluations to be booked as profits. Accounting research can also *detail* the reporting outcomes of processes alluded to by assetization authors, but rarely shown: how assets go through perpetual valuation treatments to realise profits, how they anchor other forms of financial engineering and how they collateralise leveraged shareholder value strategies. Finally (and relatedly) accounting research has emphasised the importance of distributions - rather than accumulation *per se* – as a motor of corporate strategy, with implications for how we theorise and understand financialization and assetization.

To that end, this paper addresses two very simple questions: 'how do property companies account for their real estate assets in order to maximise distributions?' and 'what are the implications of that process for our understanding of financialization and assetization?'. Answering those questions requires an investigation into the market devices that orient valuation practices in the property market, the legal rules and accounting guidance which underpin shareholder distributions and the accounting practices engaged by firms to optimise those distributions.

We analyse the financial statements of two property investment companies operating in the UK, mainly the North of England, to show the different processes of valuation, accumulation and distribution around similar property assets. We show how the Royal Institute of Chartered Surveyors (RICS) Red Book acts as a market device (Muniesa, 2011; Muniesa et al., 2017), that confers considerable power to valuers, who may also be directors. When used in conjunction with accounting rule 'IAS40 - Investment Property' and the Institute of Chartered Accountants of England and Wales (ICAEW) TECH 02/17BL guidance on distributable profits, this forms what we call, a '*distributional apparatus*', facilitating payments to investors by intermingling non-cash asset revaluations with property income, and using borrowed money to make shareholder payouts. We also find more creative forms of accounting involving the releasing of funds from non-distributable to distributable reserves, which also facilitate shareholder payouts. We conclude that the fusion of the subjective and the techno-scientific, constructs an altogether more intangible, disembedded economy which may be deeply unstable.

Our paper makes three contributions to existing academic literature. First, it fills an important gap in the financialization literature, which has stressed the important role of property assets as market collateral, but has been somewhat incurious about how those property assets are valued and where property-based distributions come from. Second, and relatedly, it opens up a dialogue with assetization scholars, setting the process of assetization within the wider history of fair value reporting, and emphasizing the important rules around distribution. And finally, it contributes to the ongoing work within accounting about the virtualism and instability of fair value accounting. Our cases elucidate not only the reporting practices used to generate distributable profit, but the implications of those creative reporting activities for risk in the current period of global instability.

The remainder of the paper is structured as follows. A first section conducts a review of the assetization and critical accounting literature, setting the growing importance of the asset form within the wider context of the shift from historic cost to fair value accounting. A following section explains how property assets are (re)valued and accounted for, examining the centrality of the RICS Red Book as a market device for valuation, and rule IAS40 which permits revaluations of investment property to be distributed, following the logics of ICAEW TECH 02/17BL guidance on distributable reserves. We term the intersection of these three features the '*distributional apparatus*' of real estate assets. We then discuss our methods, before reporting on our empirical analysis of two cases where RICS Red Book revaluations appear central to firm profitability and distributions. A final section concludes.

2. Assetization: accounting for property assets

2.1. From real estate financialization to assetization

Accounting scholars (Arnold, 2009; Botzem & Dobusch, 2017; Engelen et al., 2010; Heilpern et al., 2009; Smyth, 2019; Westerdahl, 2021) and those in adjacent areas of the social sciences (Aalbers, 2017; Fernandez, Aalbers, 2016; Langley, 2008; Montgomerie & Büdenbender, 2015; Newman, 2009) acknowledge the centrality of property assets to processes of financialization. Real estate assets have been shown to collateralize a range of financialized activities, from bank lending (Botzem & Dobusch, 2017), to mortgage-backed securitization (Cooper, 2015), consumer-scoring (Poon, 2009), and corporate credit-rating (Smyth et al., 2020). Property assets also support a number of financial actors, from the growth of Real Estate Investment Trusts (REITs) (Haslam et al., 2015) to non-bank actors such as private equity funds who now invest heavily in ‘build-to-rent’ properties - large, multi-unit properties purpose-built for the residential rental market, owned and let at scale by commercial operators (Beswick et al., 2016; Fields, 2018; Goulding et al., 2023a; Nethercote, 2020; Wijburg et al., 2018).

This research is generative because it recognizes that financialization does not produce homogenous outcomes – that there are multiple financialized strategies that different actors pursue around ostensibly similar property assets. What remains underexplored, however, is how those different strategies become intertwined with discrete practices of valuation and capitalisation performed to increase returns to those investors. This requires a greater focus on the centrality of the asset form to economic processes and the generation of investor returns. And in recent years, this has been the primary interests of scholars writing about ‘assetization’.

The concept of assetization was originally coined to explain the disjuncture between the high valuation of life sciences firms and the apparent dearth of tradeable commodities and services produced by them (Birch, 2017). For Birch (2017) industries like biotechnology appeared to have abandoned the market and its principles, choosing instead to hold onto, and capitalize, their assets instead of selling them. The valuation and capitalization process, it was argued, formed part of a socially, discursively and materially contingent process (Muniesa et al., 2017), giving assets multiple uses: they could be valued, revalued, broken up, loaned, or pledged as collateral as part of a more multifaceted financialised strategy (Kang, 2020). This, for assetization authors, implied something novel about the nature of the post-crisis economy – that it elevated the importance of asset ownership over markets as core to capital accumulation and techno-scientific capitalist organisation (Birch, 2017; Birch & Muniesa, 2020).

The assetization approach builds on the pragmatist economic sociology of Çaliskan and Callon (2010) who refute the conventional economic notion that value reflects something objective and endogenous. Instead value is seen to be produced through the application of market devices (Barman, 2015; Muniesa, 2011; Muniesa et al., 2007; Muniesa et al., 2017), and conventions of valuation (Beunza & Stark, 2004) to produce a ‘value’ via an ongoing process of economisation (Callon & Muniesa, 2005; Muniesa et al., 2007). Value is thus an ‘active’ and ‘intermediated’ accomplishment which first separates items to make them calculable, before they are then priced (Langley, 2021).

Birch deconstructs this process, separating out the different activities of financialization, capitalization and assetization. Within this approach, financialization refers to the accumulation of profits through financial channels rather than commodity sale or exchange drawing on Krippner, (2005) and others; capitalisation entails the organisational practices through which value streams are priced and monetised from material resources, with a key role for the accounting techniques of discount cashflow and net present value calculations (Gilbert, 2020; Milyaeva & Neyland, 2020; Muniesa, 2011). Assetization occurs through the creation of revenue-generating objects from these processes, embedded within situated institutional practices through which an asset’s value is governed and managed (Birch, 2017: 470). For Birch, assetization is different to concepts of commodification and marketization that over-emphasise secondary exchange and speculative trading. Consequently, for Birch and other assetization authors, the asset rather than the market has become the central institution of capitalist organisation and is now an important source of accumulation.

2.2. Locating the assetization process within the fair value accounting regime

If assetization authors emphasise the growing importance of the asset form to capitalist organization and accumulation, an accounting focus has the capacity to locate that rise within the evolving accounting rules, practices and apparatuses that have historically governed the regime of valuation. Assetization authors do recognise that accounting techniques are deeply implicated in the processes they describe – notably the way net present value calculations are used to capitalise the future income streams that are expected to accrue to assets (Birch & Ward, 2022; Langley, 2021; Muniesa & Doganova, 2020; Nappert & Plante, 2022). But the discounted future cashflow calculation as a valuation technique became salient only within a particular context: the financialization of the valuation regime itself (Chiapello, 2015).

The financialization of valuation involved the shift from a backwards looking, transaction-oriented ‘historic cost’ accounting regime to a ‘fair value’ regime that is more market-based, forward-looking, and shareholder-oriented. Under historic cost principles, a company would account for all assets at the original cost or purchase price on their balance sheet (i.e. an entry price). Fair value principles on the other hand, under accounting rule IFRS13, state that a company must record values at market prices - i.e. the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date (i.e. an exit price). This change in the accounting regime led to the extension of market pricing to objects that had not previously been understood as assets, thus swelling the balance sheet of many modern financial and non-financial firms (Arjaliès and Bansal, 2018; Arjaliès & Gibassier, 2023; Cooper et al., 2016; Harvie et al., 2021).

The drivers of that shift are well documented in the critical accounting literature and emanate principally from the growing epistemic importance of financial economics and the proprietary view of the firm within accounting (Müller, 2014). Supporters of fair

value argued that this market-based model of reporting would produce information that was more 'value' or 'decision' relevant to shareholders, and that by using market prices to mark assets up or down, managerial interference would be removed from the valuation process, agency costs would thus be reduced, forcing managers to instead act as better stewards of shareholders' equity (see Barlev & Haddad, 2003 for a clear exposition of this thesis). That argument informed draft standards written by supportive preparers who colonized the working groups of standard setting boards (Georgiou & Jack, 2011; Himick & Brivot, 2018; Walton, 2004), and were later internationalised by the transnational authority of the International Accounting Standards Board (IASB) (Bengtsson, 2011; Botzem & Quack, 2009; Perry and Nölke, 2006). These regulatory efforts had powerful industry advocates in the form of the financial services lobby with interests in marking their assets to market (Ramanna, 2015). These arguments were reinforced by new 'technologies of financialization' – narrative and numerical constructs that made a new market-based order appear operable to accounting practitioners (Chahed, 2021).

During the late 1990s and early 2000s this transition was institutionalised as fair value rapidly replaced historic cost accounting measures under the rubric of the IASC and later the IASB. Although there were previous experiments with lease accounting, this began with the introduction of IAS39 – *Financial Instruments: Recognition and Measurement* in March 1998, extending later to other items like investment property (Georgiou & Jack, 2011). These, and subsequent, changes effectively elevated the status of the balance sheet above the income statement, so that the movement of certain asset values would flow directly into reported profits or losses (Zhang & Andrew, 2022), providing a more central role for assets in processes of accumulation. This has raised three key concerns in accounting research which are pertinent to understanding processes of assetization in housing.

In terms of the *reliability and legitimacy* of accounting outputs, the changing temporal outlook of the accounting regime towards a more future-oriented system had implications for the artefacts that give accounting outputs meaning. If the historic cost regime was embedded in the juridical world of legal contracts which document transactions, fair value was instead built on less tangible foundations: the conceptual apparatus of economic theory and its technologies of valuation (Power, 2010). This introduced a more procedural concern that handed greater authority to assessments of the quality and robustness of the valuation inputs, parameters, comparators and economic models used to price an asset according to market principles (Bougen & Young, 2012). This concern with finding and reporting market prices, even when there was no active market, left open the accusation that fair value had the potential to construct an altogether more virtual economic world, invoking circular and self-referential logics as modelled outputs used other modelled outputs to produce prices. Fair value accounting techniques, in other words, risked becoming something akin to a Baudrillardian 'simulacra' where signs simply reference signs and become detached from economic realities (Macintosh et al., 2000).

This detachment can also be seen in the diminished authority of the 'realisation' concept which had anchored the historic cost regime (Power, 2010). The move from an income statement view centred around the transaction to a balance sheet view which reported shifts in the asset-liability relation as earnings, meant certain asset price movements could be recognized as profit without the need for a real transaction (Andersson et al., 2007). This effectively collapsed the distinction between capital gains and operating income, which were given equivalence in the income statement even though they had quite different implications for cash (Boyer, 2007).

Second, because economic futures are uncertain, the forward-looking nature of fair value necessarily *increased the subjective and speculative nature* of the valuation process. Contrary to Barlev and Haddad's (2003) expectations, implementing an objective market-based perspective has proved difficult in practice because preparers of financial statements often default onto entity-specific calculations, measures and assumptions, providing managers with some leeway to 'represent the market' in their fair value assessments (Barker & Schulte, 2017; Huikku et al., 2017). Hayoun (2019) goes further, arguing that the calculations prescribed by the standard setters themselves, *inherently* blurs the line between entity specific and market-based measures. Particular attention has been given to the valuations of 'level 3' assets such as investment property, where proprietary models and unobservable inputs are used for pricing in the absence of active markets for similar assets (Roberts & Wang, 2019). Market-based, future-oriented valuation systems are thus often 'managerialized', affording room for subjective and discretionary decisions (Mennicken & Millo, 2013).

Third, it has been argued that fair value accounting creates *volatility and instability* (Cooper, 2015; Kothari & Lester, 2012). If different accounting regimes construct different 'systems of socio-political management' (Miller & O'Leary (1987) it has been argued that fair value accounting embeds firm strategy within financial rather than productive circuits of capital (Müller, 2014; Skarbak & Tryggestad, 2010), encouraging short-termism and speculation (Ryan, 2008). This can incentivise managers to recognise profits through reporting- rather than productionist-channels, booking earnings through overly-optimistic asset (re)valuations rather than productivity increases (Benston, 2006). This can create problems of procyclicality when market conditions change. Companies may be forced to take impairment charges just as they are booking operating losses (Palea, 2015). These losses may compound to reduce equity buffers, triggering collateral calls from lenders which lock companies into a self-reinforcing spiral of asset sales, writedowns and covenant breaches (Arnold, 2009).

These warnings raise important questions about the way fair value accounting is implicated in the process of valuation and accumulation in housing assets. More poignantly, it asks what technologies provide the authority within the valuation process, what checks and balances exist to restrict discretionary, overly-optimistic property valuations, what is the balance between capital gains and operating income in profit and what risks may arise as a consequence of assetizing those imaginaries. Understanding the institutional maintenance and governance of value is important if we are to understand how valuations become 'settled', how objects become tradeable and how earnings become legally distributable. To that end, we now turn to the specific rules, technologies and practices which are involved in the assetization of property.

3. The distributional apparatus for real estate assets

In order to understand how investors make money from property assets, we need to extend the assetization interest in how representations of the future allow property to be converted into assets. We should consider how property assets themselves are embedded in an ongoing and carefully managed process of valuation and revaluation that collateralises multiple financialized distribution strategies (Botzem & Dobusch, 2017). To do this, we retain the assetization focus on the centrality of the asset form; but combine it with a critical accounting focus on the nuances of the valuation process under fair value, and how those valuation processes are used resourcefully to generate distributions. This follows burgeoning work at the overlap of assetization and accounting (Arjaliès & Gibassier, 2023; Biondi, 2022; Chiapello, 2023; Nappert & Plante, 2022) which we seek to extend by examining, what we call, the 'distributional apparatus' for real estate assets.

In our concept of the 'distributional apparatus', the apparatus is 'distributional' because, after financialization, the corporate governance and reporting logics of the corporation are geared towards increasing returns to shareholders, with senior managers financially incentivised to deliver this goal (Leaver & Martin, 2021). And it is an 'apparatus' because, in a Foucauldian sense, it is formed of a heterogeneous network of discourses, knowledges, technologies, measures, rules and so on that aim to orient human thought and practice (Foucault, 1976) – in this case towards the goal of maximising distributions. It is an apparatus that operates at the intersect of power relations (the concentration of wealth) and relations of knowledge (shareholder value ideology) and has the strategic function of (re)producing and governing subjects, who act on and through these constructed knowledges and identities. Hence, the idea that the duty of corporate management is to maximise shareholder value is embedded in the discourses of financial economics and the proprietary view of the firm which informs accounting rules (Müller, 2014), company law (Ireland, 2010) and corporate governance guidelines (Lazonick & O'Sullivan, 2000). This is not to suggest that the effects of the apparatus are over-determined – Foucault (1980, pp194-5) reminds us that the apparatus should be understood via the *nature of the connection* between its constituent elements. Hence, a particular discourse can, in one instance, unambiguously form part of an institutional programme, yet in another function as a means of 'masking a practice which itself remains silent'. Many strategies, practices and outcomes may proliferate within the apparatus, and some may not ostensibly be in the interests of shareholders, even though those practices are justified in their name (see for example, Knafo and Dutta, 2020 on how managerial interests harnessed the rhetoric of shareholder value).

For distributions to occur from UK real estate assets, three elements of the apparatus need to be in place. First, a formal set of reporting rules which explain how the value of certain assets should be recognised in an annual statement. Second, a market device which articulates with reporting rules, providing guidance on the techniques and practices of valuation, to create certainty around calculative outputs in order to orient and stabilise markets which depend on those outputs. Third, a wider set of discourses, legal rules and guidance around distributions, which determine whether the value recognised can be paid to shareholders morally and legally. Together, these three features make up the 'distributional apparatus' – a collection of rules, norms, reporting technologies and market-orienting devices that act as both a resource and an incentive to engage in practices of valuation that maximise potential distributions.

The idea of a distributional apparatus is of relevance to many asset classes, not UK real estate alone. Generally, if there is a choice between holding an asset at cost or fair value, there may be strong incentives to hold at fair value if upward revaluations are distributable; although there are notable exceptions (see Baker et al 2020 for a discussion of the accounting treatment of subsidiaries). We would also note that there is no definitive structure to a distributable apparatus – it is a mutable constellation of different elements which differ according to asset form. A distributable apparatus may, for example, cut across internal management accounting and reward systems. In MacKenzie and Spears' (2014) article on derivatives traders, they explain how a desire to book 'Day 1 P&L' - the net present value of a trade which formed the basis of the trader's annual bonus – encouraged the use of risk models and hedging strategies that appeared to remove all apparent default risks, allowing the full value of the future income streams to be treated as observable and riskless, and thus recognised on 'day one' of the trade. The combination of financial reporting rule IFRS9, banks' internal systems of accounting and reward, the Gaussian copula correlation models and the hedging risk management practices, formed a distributional apparatus, albeit one that blew up spectacularly in 2008.

The distributional apparatus for UK real estate also depends on the fixing of a consensus around an asset's value. Property valuation is notoriously uncertain and complex because of its heterogeneous and locationally-fixed nature (McCluskey et al., 1997) requiring an assessment of various internal (eg condition) and external (eg location) factors that can differ property by property (Shaw, 2020). Property valuation is further complicated because it can be measured in different ways for different purposes and users. For example, it can be measured at market price for the purposes of financial reporting, at a private investment price for investors looking to make a return, an insurable price for purposes of insurance, an assessed price for the purposes of taxation, a liquidation price – its value in a distressed sale, and a replacement price, should it need to be rebuilt from scratch (Shaw, 2020). The value of a housing asset, therefore, very much depends on the particular users, purposes and valuation technologies brought to bear upon it (Quattrone, 2015).

For the purposes of financial reporting (the primary interest in this paper), listed firms must follow IAS 40 - *Investment Properties*. Investment property is defined as 'property (land or a building or part of a building or both) held (by the owner or by the lessee under a finance lease) to earn rentals or for capital appreciation or both' (IAS 40.5). IAS 40, in its current form, permits one of two valuation methods: a cost method (with or without revaluation – where revaluations are recognised in 'other comprehensive income' and are not distributable) and a fair value method where revaluations are recognised in the profit and loss statement and are distributable. Consequently, there have been strong incentives in the industry to value at fair value in order to recognise asset price appreciation as a distributable capital gain (Quagli & Avallone, 2010).

The opportunity to distribute capital gains means the process of valuation and revaluation is of utmost significance. IAS40 outlines only the method of accounting; neither the IASB nor the Interpretations Committee provide guidance on how to support the consistent

application of the accounting standard, or what a valuation process should look like.¹ That process of valuation is instead effectively delegated to the Royal Institute of Chartered Surveyors ('RICS'). They provide *standards*, notably via the RICS Red Book Global Standards and the RICS Red Book UK Valuation Supplement which are recognised for the purposes of IFRS reporting. There is also *guidance* dealing with specific elements of the valuation process, including those that are sector specific – such as 'Valuing Residential Property Purpose Built for Renting', *training programmes* for valuers, as well as *codes of conduct* in the valuation process, including how conflicts of interest are to be handled and how integrity is maintained.

The RICS Red Book standard and its supporting infrastructure are more than just a valuation guide in that sense, they are a 'market device' - a material and discursive assemblage that intervenes in the construction of a market in order to mitigate uncertainty (Muniesa et al., 2007). Its authority to act as a market device reflects its entanglement with other high-status realms and its own professional structure and status. RICS are a Royal Charter body with a responsibility for regulating and overseeing their members. Members must pass a series of exams and have some work experience in order to value property as a RICS-accredited valuator. RICS also outlines mandatory practices for its members undertaking valuation services. This is buttressed by a code of ethics and a set of regulatory functions, which are delegated from RICS' Governing Council to an independently-led Standards and Regulation Board (SRB). These features build authority around the RICS Red Book, making it an instrument of assetization that mitigates the inherent uncertainties around property valuations, configures economic calculative capacities and adds confidence and legitimacy to RICS valuers' outputs. It thus shapes and controls the current and future potentialities of the international property market by circulating the shared knowledges, practices and ethical codes needed to settle - and build confidence around - property values, allowing the market to reproduce.

IAS40 and the RICS Red Book are also embedded within a wider system of company law, which governs whether profits booked can be distributed or not. These distributional aspects are a core, but under-investigated element of financialization (Leaver & Murphy, 2020). In the UK, the 2006 Companies Act provides guidance on the legal capital regime which seeks to protect creditors by ensuring distributions are made only from 'realised' profits rather than paid-in capital or other reserves that are considered un-distributable (Baker et al., 2020). However, section 853 of the 2006 Companies Act delegates the task of defining what is and isn't a 'realised' profit to generally accepted accounting practice; guidance upon which was most recently provided by the *Institute of Chartered Accountants of England and Wales (2017)* 'TECH 02/17BL: Guidance on Realised and Distributable Profits Under the Companies Act 2006'. That guidance provides considerable leeway to view assets that are 'close to cash' as distributable, blurring what constitutes a realised profit (Ferran, 2019). As noted, investment properties are included as assets whose revaluations are accounted for in the profit and loss and are hence distributable, provided they are held at fair value. If they are held at cost and revalued, gains are recorded in the statement of comprehensive income and held in a non-distributable revaluation reserve.

The ability to transform investment property revaluations into distributable reserves relies on an architecture of accounting, market devices and a system of company law which permits asset revaluations to be recognised as profits. This distributional apparatus provides no overall guidebook – it is a resource that is taken up and used by actors in different ways, depending on their interests, risk profiles, investment horizons and demands placed upon them – it is an apparatus, as we noted at the beginning of this section, that provides a governing rationale and identity for its subjects, but is not prescriptive about how the various elements of the apparatus are combined. Hence, we would not expect to see one-size-fits-all outcomes. As vanLoon's (2016) study shows, when there is multigenerational wealth looking for sustainable growth, this apparatus may not be used for short term considerations if the strategic focus of the fund is longer term profitability and certain non-financial considerations. But it remains a resource nonetheless and as Botzem and Dobusch (2017) show, it can be employed in a deliberate and highly managed way, supporting rising housing asset prices based around aspirational future profits from which management fees and transfer charges are extracted.

To understand how this distributional apparatus is used, and thus how processes of assetization and accounting combine in the property sector, we will analyse two case studies of very different property investment companies.

4. Methodology

In terms of methodology, we use an emergent case study approach (Lee et al., 2007), with an emphasis on abductive (Stake, 1995) rather than positivist (Yin, 2014) methods and reasoning. That is, we rely less on propositional knowledge and instead take an approach which explores processes of assetization in the real estate industry through an accounting analysis of company reports, including the notes. We did not have complete knowledge of that industry and its valuation practices before we began. Hence this was a discovery-oriented process. We then reflected on the pertinence of recent theories of financialization, fair value accounting and assetization going back and forth with our emerging findings to eventually distil an argument that we believe is consistent theoretically and empirically and helps explain the interweaving of assetization and accounting processes within this distributional apparatus. This analysis proceeded within a wider programme of research which examined the local and national contexts, histories and recent trends in the real estate industry and planning processes in Greater Manchester, UK.

Greater Manchester is an appropriate site for our empirical study: we needed a real estate market that was sufficiently deep to provide a diversity of development firms. Greater Manchester has one of the largest real estate markets in the UK, including the largest Build To Rent (BTR) sector outside London, and so provided an ideal site for finding enough companies to explore the process of property assetization. Our study, consequently, starts from an analysis of real estate actors operating in Greater Manchester's city-

¹ See <https://www.ifrs.org/supporting-implementation/supporting-materials-by-ifrs-standards/ias-40/>.

regional centre, the most financialised part of the metropolitan area and perhaps the UK outside of London.

In order to identify prospective case companies, we assembled data from a variety of sources: planning permissions, regional property market publications such as Place North West, local publications such as the Manchester Evening News, and the specialist trade magazine Inside Housing. We generated a dataset in early 2021 that covered real estate companies involved in property development in Manchester city centre, the Salford districts of Greengate and Blackfriars adjacent to the centre, in addition to the Salford Quays area and the adjacent Pomona (see Goulding et al., 2023a). The dataset incorporates three Local Authorities: Manchester, Salford and Trafford. It includes companies involved in the 'post-crisis' phase of development when the scale and intensity of approvals for, and subsequent building of, high-density apartment blocks increased dramatically after an immediate post-2007 lull. Our sample includes 155 residential development projects of over 15 units in size and covers 45,069 new housing units.

Following van Loon's (2016) finding that actors with longer term investment horizons pursue strategies that are less financialized, we designed our research plan to incorporate real estate actors with quite different ownership structures, business models, operating characteristics and risk appetites. It is important to note, that some of these firms operate in other UK cities outside Manchester, and across different real estate sub-sectors. In order to identify companies to include in our case study selection, we examined planning permissions to separate out those organisations involved in build to rent developments as these companies might offer case studies best suited to our research objectives. This is because we wanted to gauge the role of revaluations relative to rental income as a source of accumulation, and how the 'distributional apparatus' discussed above was integrated into their reporting strategies. Once we had separated out those companies involved in BTR, we identified a smaller set of companies where we could obtain their financial reports and accounts at Companies House.² We found a core group of 59 companies who submitted accounts in 2020 – our baseline year, with a complete set of accounts going back to at least 2018, reducing the total number of firms in our sample to 17. We then conducted a review of those companies, and selected two different types of real estate developer which epitomised different forms of assetization: a large multi-purpose developer with BTR interests but primarily operating in the commercial real estate sector (Bruntwood Group Ltd), and a closed end Real Estate Investment Trust (REIT) specialising in edge-of-city BTR developments for lower income households (Sigma Capital and their PRS REIT). Where possible, we tried to develop longer timeframes for our cases.

For each case, we then undertook an accounting analysis of the financial statements and notes to try to understand the process of assetization, and - in particular - how they draw on the distributional apparatus described previously to generate the distributable reserves required to make shareholder returns. Understanding this process also revealed some of the underlying risks attached to these newer forms of housing financialization.

Finally, we undertook 27 interviews with developers, national and local policy makers, investment managers, solicitors and other actors involved in the real estate sector. The aim was to develop an understanding of how a variety of different intermediaries involved in the assetization process considered their roles and functions, contrasting opinions, knowledges and as an opportunity to test our developing findings. The interviews also allowed us to generate a more qualitative interpretation that situates our research in the built environments in which these companies operate. The interviews are not formally part of our analysis, but do inform our understanding of some of the processes we describe.

Our approach has some obvious limitations. For example, we recognise it is impossible to make generalised claims about the nature of financialization from individual cases. Instead, following Botzem and Dobusch (2017) - which is the closest work in terms of approach and scope to this paper – our aim has been to explore reporting outputs to reveal how firms operating in the real estate sector differently operationalise the distributional apparatus in their strategic decision making and valuation practices; and their distributive effects. We thus address the relation between accounting, valuation and distribution which extends our understanding of the assetization process.

5. Mobilizing an asset from land and housing

5.1. Bruntwood Group Ltd

Brunwood are a family owned regional property development and renting company. It was founded in 1976, and now holds a portfolio of over 100 buildings principally focused on commercial property in Greater Manchester, Leeds, Liverpool and Birmingham, estimated at £2 billion in value by early 2023.³ In 2012 Bruntwood began to create specialist facilities for science and technology businesses, first as majority shareholder at Manchester Science Park and then through its ownership of Alderley Park. Bruntwood have used a number of joint ventures to expand and diversify, including the recent Bruntwood SciTech joint venture with Legal and General Capital in September 2018. In 2015 the company diversified further into the residential sector. This was in the form of two joint venture partnerships with Select Property: first, a large scale, mixed-use master-planned area in central Manchester, Circle Square,

² It should be noted that planning permissions do not easily reveal the companies legal title and their corresponding companies house registered company number for the submitted financial accounts and this we believe is something that city and regional planning agencies need to address with regards to increasing transparency and accountability. Larger companies granted development contracts are consolidating a range of activities and property portfolios across property types and UK regions and so regional control and influence is diluted. Alternatively, locally grounded smaller property developer companies operate within a myriad of company network arrangements where it is often impossible to discern the parent hold co and its subsidiary networks. This means that untangling complex intra company financing structures is problematic and also discerning the extent to which financial viability is just smoke and mirrors.

³ Source: <https://www.thebusinessdesk.com/northwest/news/2109761-bruntwood-posts-second-best-profits-performance-in-its-46-year-history>.

whose aim was to develop 1,700 housing units in the Purpose Built Student Accommodation (PBSA) and BTR sectors; second, in 2016 on the banks of the River Irwell with over 500 BTR units adjacent to an existing commercial property owned by the company.

Bruntwood is an integrated developer and all-service property company, and so generates earning streams from headline rental income but also from a variety of ancillary activities. In 2021, rental income's share of total sales was 60.5 percent, with the remaining revenue coming from a mixture of property service charges, property service income, utilities and development income (Table 1). The diversity of income streams can be understood as part of a process of territorialisation (Miller & Power, 2013) and assetization (Birch, 2017) which involves a set of choices about where the boundaries of entitlement and obligation begin and end (see Leaver & Martin, 2021). Activities that may have previously incurred a cost to an asset owner – the maintenance works that help preserve the value of the property asset, for example – have been separated, reterritorialized, valued and capitalised. Property service charges, for example, are now generally constructed as being outside the boundary of an owner's obligation; and are instead re-territorialised as a cost that is generally levied on captive leasehold or rental tenants, who effectively pay for the upkeep of an asset they do not own. The future income streams from this service charge, after the costs of maintenance have been deducted, have a net present value over and above that of the lease or rental income, producing an ancillary asset that is formalised contractually through a Qualifying Long Term Agreement and governed by the 1985 Landlord and Tenant Act. Accounting thus plays a territorialising role in this process of assetization, constructing new rentier frontiers designed to capture an increased proportion of the spend of captive tenants.

The process of 'jumbling up' (Boyer, 2007) operating income streams and capital gains is also evident at Bruntwood. Bruntwood's investment properties are held on a fair value basis, as is permitted under IAS40, with any change in value recognised in the profit and loss account. The company explain that in the absence of evidence of a quoted price for an identical or similar asset in an active or recent market, then fair value is estimated using a valuation technique (i.e. it is treated as a level 3 asset in the fair value hierarchy).

Botzem and Dobusch (2017) argue that the establishment of value creation through accounting is a carefully managed activity, which involves assessments of prospective cashflows to bring value into the present. The process at Bruntwood Group Ltd reveals the centrality of the RICS Red Book as a market device (Muniesa et al., 2007) which establishes the valuation rules, principles, methods and codes of conduct central to the assetization process. Red Book principles were used to value investment properties on an 'investment method' basis which involves applying capitalisation yields to current and future rental streams net of expected income losses arising from vacancies or rent-free periods and associated running costs. The process of valuation itself was undertaken by both external valuers Knight Frank LLP and Jones Lang LaSalle Limited, and internal valuers: an independent senior partner review by the Directors' Valuation Panel (effectively the CEO and CFO) using the same methodology as the external valuer. Although Red Book principles are followed, it is clear there is also room for discretion and professional judgement to 'represent the market' in the valuation process (Barker & Schulte, 2017), which rests on making estimates of 'capitalisation yields and future rental values...based on comparable property and leasing transactions in the market using the valuers' professional judgement and market observation' (Bruntwood Group Ltd 2021 annual report and accounts). There is no indication of how the 'negotiations...produced through apparently legitimate and powerful valuation techniques' (Smith-Lacroix et al., 2012, p.50) were managed to produce a final valuation, or how directors' conflicts of interest were moderated given they are involved in valuing the assets of the company they run. But the process of asset revaluation over a number of years is transformative for the company's distributive capacity.

Revaluations totalled £350.3 m between 2010 and 2021 (Table 2) – slightly more than operating profits from rentals and other income streams outlined in Table 1 after interest costs are deducted. Table 2 also shows that operating profit for the period (£458.9 m) effectively covers the interest charges (£338.8 m). Over the period 2010 to 2021 revaluations (£350.3 m) were 118 percent of the increase in shareholder equity reserves (£296.4 m) increasing the distributable capacity of the firm. Over that period £70.8 m was paid out in cash dividends, with revaluations boosting retained earnings.

The Bruntwood case shows the assetization processes of (re)valuation and capitalisation in action. An accounting lens shows that it is possible to hold an asset which generates multiple long-term income streams, whilst also revaluing those assets on the basis of expected future cashflows or current market exuberance. And under IAS40, there does not need to be a 'true sale' in order to recognise a capital gain, thus complicating the notion that we see a material shift from a short-term, speculative model of financialization to one more oriented towards longer-term yields, as observed by Wijburg et al (2018). Rather Bruntwood shows how processes of financialization, capitalisation and assetization combine to valorise particular assets that are governed by particular institutional and regulatory spaces. In the case of Bruntwood, processes of valuation are governed institutionally by the RICS Red Book valuation standards.

But under fair value rules, market prices can go down as well as up. Property asset impairments arise when prospective income streams fall in real terms or when discount rates rise, reducing the net present value of those assets or benchmark properties. The Covid

Table 1
Bruntwood Group Ltd revenue breakdown year ended September 2021.

	£mill	% of total
Rental income	74.135	60.5
Debtor Provision	0.385	0.3
Service Charges	22.963	18.7
Property Services income	4.892	4.0
Utilities income	15.659	12.8
Development income	4.529	3.7
Total	122.563	100.0

Source: Note 3 Turnover page 36 annual report and accounts year ended 30 September 2021
<https://find-and-update.company-information.service.gov.uk/company/02825044>.

Table 2
Bruntwood Group Ltd Income and revaluation impacts.

Year end	Revenue	Operating profit	Interest paid	Revaluation gains	Other Expenses/income	Net Income	Shareholder equity	Long term loans
	£mill	£mill	£mill	£mill	£mill	£mill	£mill	£mill
2010	100.2	41.5	-31.6	3.4	-9.7	3.6	310.1	587.3
2011	99	41.7	-32.5	0.4	-2.4	7.2	316.9	604.7
2012	104.6	42.1	-33.1	-35.7	4.9	-21.8	302.6	602.4
2013	106.3	46.2	-32.6	-25.7	-1.1	-13.2	288.4	489.3
2014	106.1	43.5	-33.4	69.2	4.6	83.9	358	427.8
2015	108.2	39.6	-26.7	56.5	-0.1	69.3	421.7	457.6
2016	118.4	40.3	-25.3	43.7	10	68.7	472.9	520.8
2017	131.5	29.8	-26.3	54.2	13	70.7	538.9	502.5
2018	137.6	24.3	-28.9	127.3	-15.8	106.9	570.1	455
2019	160	47.7	-21.3	31.9	-9.2	49.1	614.1	438
2020	134.3	35.7	-23.8	-21.3	31.1	21.7	588.6	548
2021	122.6	26.5	-23.3	36.9	-15.3	24.8	606.5	585
Totals	1428.8	458.9	-338.8	340.8	10	470.9		
Change 2021 on 2010							296.4	-2.3

Source: <https://find-and-update.company-information.service.gov.uk/company/02825044>.

Notes: Prior to 2015 the net income did not include revaluation gains from property and so these have been added back and net income adjusted to be consistent with the period after 2015. The year end is September 30th.

pandemic introduced one such moment. Table 3 considers three jointly owned subsidiaries listed within the Bruntwood accounts to illustrate this risk. These joint ventures: Trafford Bruntwood LLP, Trafford Bruntwood (Stamford Quarter) LLP and Trafford Bruntwood (Stretford Mall) LLP. The three joint ventures posted significant revaluation losses in 2020. These losses range from between 13.1 and 18.4 percent of the property asset values which were then charged to the joint venture (JV) LLP members. In the case of the Trafford Bruntwood JV the ultimate owners are shown as Trafford Borough Council and for Bruntwood a company K Site Ltd a 100 percent Bruntwood owned subsidiary. In 2020 this subsidiary reported its share of the valuation loss from the JV and Trafford Borough Council would report also a fair value loss on investments in their report and accounts.

This case shows the role accounting plays in processes of reterritorialization and valuation as assets are disaggregated into separable income streams. It shows how, by redefining boundaries of entitlement and obligation, service and maintenance costs could be separated as distinct from the housing asset and billed as a charge to tenants, producing a new income stream with a net present value. It also shows how this process of unbundling occurs simultaneously with a rebundling as rental incomes which accrue in linear time are amalgamated with capital gains which reflect speculative estimates of future states. Each illustrates the role of accounting in constructing new calculative spaces (Miller & Power, 2013) as the fair valuation of property and unrealised holding gains boost reported income and shareholder equity. These valuations are managerialized (Mennicken & Millo, 2013), based upon external and internal RICS-accredited judgements following the Red Book principles, whose representations of the market shape accounting outputs (Barker & Schulte, 2017) and influence the distributable capacity of the firm. Yet, some of these valuations are fragile and have become impaired post-Covid19. For Trafford Borough council recent property valuation impairments of between 13 and 18 percent have been recorded in the joint-venture LLPs with Bruntwood.

5.2. Sigma Capital

Sigma Capital is very different to Bruntwood. It operates in the private rented sector (PRS) and works predominantly with Countryside Homes to build residential properties which are then transferred into a closed end PRS Real Estate Investment Trust (REIT). This PRS REIT was financed by an IPO that raised £500 million in capital. This was supplemented with a £440 million debt

Table 3
Bruntwood joint venture LLPs with Trafford Borough Council.

Year end 30 September 2020	Trafford Bruntwood £mill	Trafford Bruntwood Stamford Quarter £mill	Trafford Bruntwood Stetford Mall £mill	Total for all companies £mill
Revenue	0	2.5	1.4	3.9
Revaluation Loss	-3.7	-4.5	-2.2	-10.4
Other expenses	-0.4	-0.9	-1.5	-2.8
Total loss	-4.1	-2.9	-2.3	-9.3

Sources:

Trafford Bruntwood LLP <https://find-and-update.company-information.service.gov.uk/search?q=OC421552>.

Trafford Bruntwood (Stamford Quarter) LLP <https://find-and-update.company-information.service.gov.uk/company/OC427930/filing-history>.

Trafford Bruntwood (Stretford Mall) LLP <https://find-and-update.company-information.service.gov.uk/search?q=OC427924>.

Notes: Given that this company is a Limited Liability Partnership the losses in the year would be treated as loss to members.

facility. This IPO funded the purchase of the residential property packages from Sigma Capital, which by 2021 had committed to sell roughly 5,000 PRS residential units to the REIT. Sigma is also distinctive in that it focuses on suburban, low-rise ‘single family’ housing close by to commuter transport links, in contrast to most UK BTR investors who prefer high-density apartment blocks in central urban areas. This difference is reflected in the REIT targeting young families alongside the urban graduates more familiar to the wider BTR sector (see [Sigma Capital Group, 2023](#)).

Whereas Bruntwood is a regionally embedded developer, Sigma attracts financial interest from investors who operate on a transnational scale. On the 11 June 2021 Six Bidco Ltd (“Bidco”) made a cash offer for Sigma Capital Group plc (“Sigma”), the parent company of the PRS REIT’s Investment Adviser, Sigma PRS Management Limited. The Bidco formed for the purposes of the acquisition was a wholly-owned indirect subsidiary of investment funds managed by PineBridge Benson Elliott LLP - a pan-European real estate private equity specialist who manage a diversified real estate portfolio, currently comprised of office, retail, hotel and residential assets in the UK, France, Germany, Italy, Spain, Belgium and Central Europe.

There are different valuation practices at different levels within the organisation, although the RICS Red Book remains a central market device in each. At the level of the group, Sigma Capital Group explain that their investment properties are considered level 3 assets, which means – like Bruntwood Group Ltd- internal modelled valuations are used. At group level, valuations are conducted wholly internally by the director Gwynn Thomson who is RICS accredited and Sigma’s Property Investment Director. His valuations are then approved by the Board. The accounts claim that valuations are prepared in accordance with RICS Valuation Professional Standards 2014 and include a number of unobservable inputs and other valuation assumptions. Fair values are thus informed by a mix of entity specific and market data ([Hayoun, 2019](#)) as well as historic and future oriented data ([McSweeney, 2000](#)): in this case market evidence of investment yields, expected gross to net income rates (ie how much gross income is realised as net income, as a ratio) and actual and expected rental values. Small movements in any of those inputs have important implications for profitability. For example, a 0.125 percentage point movement in expected yields increases profits by £3.2 m ([Sigma Capital Group Annual Report, 2020](#), p.67).

Embedded within these valuation processes are other valuation models, so that reporting outputs involve the articulation and tiering of different modelled futures ([Bougen & Young, 2012](#); [MacIntosh et al., 2000](#)). For example, part of the Red Book valuation process undertaken by Sigma Capital Group includes a figure for ‘Estimated Rental Value (ERV)’. ERV is normally employed to indicate to a prospective investor or buyer what the rental income stream *will* be (not what they currently are): i.e. the valuer’s opinion of the open market rent which, on the date of valuation, could reasonably be expected to be obtained on a new letting or rent review of a property. This calculation takes into consideration characteristics such as the condition of the property, amenities, location and local market conditions, which all involve some level of subjectivity – for example whether there is adequate rental supply and increasing tenant demand in the areas where properties are held. It is, in short, a value based on a value, where that secondary value is based on an informed, but still discretionary, estimate.

As at the end of December 2020 the completed number of PRS units amounted to 3,163 with an ERV of £29.4mill and under contract a further 1,963 contracted homes at varying stages of development, generating a healthy balance sheet ([Table 4](#)). Together these 5,126 homes were estimated to provide an ERV of £48.8million (Sigma Capital Annual Report, 2020:5). The business model, however, crucially depended on the process by which valuation was actioned within the financial statements of Sigma Capital, and the PRS REIT to which the packages of completed residential houses were transferred.

The PRS REIT is important because it holds the rental properties and therefore also the revaluation possibilities. The valuation process at the level of the PRS REIT is slightly different. At the PRS REIT the RICS Red Book orients the valuation process again. However, this is done independently by Savills (UK) Limited, acting in the capacity of External Valuers. Most of the fair value revaluation gains come from improvements in the ERV, which can be significantly different from actual rents received (‘passing rent’): ERV represents the valuator’s assessment of the likely rent in the coming year, given market and other conditions – not the rents received in the past year, or even the rents expected taking inflation-related rises in rents into consideration (‘anticipated rents’). The

Table 4
Sigma Capital Income and Balance Sheet Profile.

	Revenue	Revaluations	Other Expenses	Net Income	Total Tangible Assets	Of which Investment Property	Total Equity	Retained Earnings	Dividends
	£mill	£mill	£mill	£mill	£mill	£mill	£mill	£mill	£mill
2010	1.4	0	-5	-3.6	4.2	2.1	5.7	0.3	0
2011	2.4	0	-3.8	-1.4	2.6	1.5	3.8	-1.1	0
2012	2.3	0	-3.5	-1.2	3.4	0.7	2.6	-2.3	0
2013	5.8	0	-6.7	-0.9	3	0.5	2.6	-3.1	0
2014	3.9	0.2	-2.9	0.2	3.3	0.7	10.6	-2.7	0
2015	6.7	-0.1	-4.7	1.9	5.2	0.5	31.8	-0.7	0
2016	5.4	0	-1.8	3.6	32.1	24.8	36	3.5	0
2017	4.4	0.8	-1.5	3.7	36.6	29.2	40	7.5	0
2018	12.5	3.6	-4.6	11.5	34.3	23.6	51.9	18.9	1.8
2019	13.6	3.9	-7.3	10.2	67.3	53.8	60.5	27.5	1.8
2020	7.9	1.2	-6.6	2.5	72.9	66	61.1	28	1.8

Source: <https://find-and-update.company-information.service.gov.uk/company/03942129>.

Note: The for 2020 this is a 9 month accounting period from 31 December 2020 to 30 September 2020 prior to this the accounts are for 12 months ending 31 December each year.

difference between ERV and anticipated rent in 2022 was £2.7 m, where anticipated rent was itself higher than passing rent.

Table 5 shows the operating characteristics of the PRS REIT. The annual reports show that the entity operates with very thin rates of return. Rental revenues in 2022 were around 4 percent of total capital employed (loans + shareholder equity), with an average between 2018 and 2022 of around 2 percent. The REIT instead generated the majority of its net income from fair value revaluations. Accumulated revenues from rent and other services amount to £89 million between 2018 and 2022, but revaluation gains were more than double at £176.6 million. In this case most of the surplus net profit is derived from market value gains on property assets.

The revaluations draw on the distributional apparatus outlined previously. Dividends between 2018 and 2022 amounted to £101.8m, which is £12.8m more than rental revenues over the period, and a full £59.3m more than operating profit before revaluations are added. Revaluations of investment property under IAS40 can be distributed, and this was achieved in two ways. First, debt increased to provide the cash to make the distributions from the paper gains of asset revaluations. Second, the company established a capital reduction reserve within the shareholder equity reserves in the June 2019 annual report. Attached to the paid in capital was a share premium amounting to £495.5million of which £242.5 million was cancelled and transferred into the capital reduction reserve in shareholder equity – which is distributable (Annual Report June 2019 page 52) (see Table 6). The £242.5million transfer from the share premium, as a result of the capital reduction, was shown as transferred in the financial year ended June 2018 and so the opening balance for 2019 is after £8.7 million dividends paid in 2018 (£233.8m). The combination of asset revaluations in one phase, then share premia cancellation in another becomes the basis for converting non-cash gains into retained earnings which are then paid out to investors from borrowed cash. This increases the gearing ratio as more debt finance is taken on board.

However, there is another way that payments are taken out of the REIT – which is through fees, similar to the process identified in Botzem and Dobusch (2017). The PRS REIT appoints an ‘Investment Advisor’ - Sigma PRS Management Ltd. The Investment Advisor charges a tiered annual asset management fee based on the REIT’s adjusted ‘Net Asset Value’ (‘NAV’): i.e. they receive 1 % of adjusted NAV per annum up to £250m, 0.9 % p.a. in excess of £250m and up to £500m, 0.75 % of NAV in excess of £500m and up to £1bn and so on. NAV is assumed to equate to the net assets reported in the annual accounts, which include revalued property assets – and so is also sensitive to ERV estimates. Revaluations therefore also feed into current fees, even though they are based on *expected* rents. This is, therefore, both a temporal and material transformation – from non-cash revaluations based on future expectations into cash fee payments to advisors in the present.

This case study illustrates how the distributional apparatus can generate dividends and fees from asset revaluations based on future expectations which are borrowed against. It thus highlights the centrality of the asset form in collateralizing a range of income streams, including through revaluations (Birch & Muniesa, 2020), but also how the plasticity of that form can be converted into payouts via share premium cancellations and management fees based within the distributional apparatus.

However, these revaluation gains can turn into losses, particularly if inflationary concerns affect expected future discount rates – pushing net present values down. In these circumstances, impairments can erode equity very quickly, and debt covenants can be breached, initiating spirals of collateral calls and fire sales which can create liquidity and solvency problems akin to that seen in the financial crisis (Cooper, 2015). It is debatable whether these actions are in the long-term interest of shareholders, even though they may be executed in their name. Foucault’s emphasis on illuminating the relations between heterogeneous elements is therefore crucial. Outcomes are not over-determined; and pro-shareholder discourses may simply ‘mask’ managerial motives and strategies.

6. Conclusion

Our paper shows that processes of assetization are deeply embedded in the evolution of the fair value accounting regime which prioritised the balance sheet, leaving the income statement residual (Power, 2010). And we show, through our accounting analysis of two property investment companies, this has encouraged the use of asset revaluations to generate capital gains that are borrowed against and distributed. This process, we argue, is only possible because of the presence of a particular *distributional apparatus*: that is, a collection of rules, norms, reporting technologies and market-orienting devices that act as both a resource and an incentive to engage in practices of valuation that maximise potential distributions. In the case of property assets, accounting rule IAS40 determines how housing assets should be recognised in an annual statement; the RICS Red Book acts as a market device which articulates with IAS40,

Table 5
PRS REIT key operating financials.

Year	Revenue from rentals	Operating Profit	Of which revaluation gains	Interest received / paid	Other residual expense or income	Net Income	Shareholder Equity	Loans	Dividends
	£mill	£mill	£mill	£mill	£mill	£mill	£mill	£mill	£mill
2018	1.7	2.7	5.5	0.6	-0.1	3.2	486	0	8.7
2019	5.9	14.7	15.6	0	-0.1	14.6	474.3	100	27.2
2020	12.9	19.9	15.8	-3.7	0.2	16.4	470.9	145.2	19.8
2021	26.6	53.7	38.9	-9.6	0	44.1	490.3	345.8	24.7
2022	41.9	127	99.7	-11.1	0	115.9	639.2	346.5	21.4
Totals	89	218	175.5	-23.8	0	194.2			101.8
Change							153.2	346.5	

Source: <https://find-and-update.company-information.service.gov.uk/company/10638461/filing-history>.

Notes: The revaluation gains are included in the operating profit.

Table 6
Notes on capital reduction reserve.

	2020	2019
	£000	£000
Balance at beginning of year	206,559	233,800
Dividend paid 2.5p per share for the period ended 30 June 2019		–12,382
Dividend paid 1.0p per share for the period ended 30 September 2018		–4,953
Dividend paid 1.0p per share for the period ended 31 December 2018		–4,953
Dividend paid 1.0p per share for the period ended 31 March 2019		–4,953
Dividend paid 2.0p per share for the period ended 3 June 2019	–9,905	
Dividend paid 1.0p per share for the period ended 30 September 2019	–4,953	
Dividend paid 1.0p per share for the period ended 31st December 2019	–4,953	
Balance at end of year	186,748	206,559

Source: PRS REIT Accounts 2020: 107 note 25 <https://find-and-update.company-information.service.gov.uk/company/10638461/filing-history>.

Notes:

Note 25 in the annual report and accounts discloses that: The capital reduction reserve is a distributable reserve to which the value of share premium as a result of the IPO, has been transferred, and from which dividends can be paid.

providing rules and principles on the techniques of valuation and revaluation; and the ICAEW provides guidance on whether revaluations amount to a ‘realised profit’ which can be distributed to shareholders legally. Together these three features connect the assetization process to a distributional outcome, ensuring, in this case, that property remains an anchor asset for global financialization.

We view the concept of the distributional apparatus as opening up a new agenda for scholarship across accounting, financialization, assetization and valuation studies. Different asset forms are governed by different accounting rules, market devices and valuation practices, yet the selection of particular enumerative techniques is often viewed as either a purely technical choice, or as a cultural manifestation of particular communities of practice. Our concept draws attention to the importance of distributions in shaping the valuation practices around assets of different types. The concept therefore has relevance beyond housing. By identifying and analyzing features of the “distributional apparatuses” around particular assets, researchers could provide a more informed understanding of the motivations behind particular valuation - and even strategic and operational - strategies.

The concept of the distributable apparatus therefore raises interesting questions about causality. The commonly held assumption is that distributions are residual - that they fall out of the end of a transformation or service provision process. But if the desire to distribute takes strategic precedence, then the distributional apparatus has the potential to shape operational action. For example, the long-standing strategic question about whether to insource or outsource could be shaped as much by the revaluation opportunities and distributional affordances available under the accounting rules for the asset in question, as by traditional Coasian transaction cost motivations. Hence, a retailer may operate more like a developer if they hold their buildings as investment properties at fair value, leading to the development of in-house property-management expertise and strategies of land hoarding.

Our findings also have implications for current financialization research. We find that housing is still central to the process of collateralising financial rather than productive income streams (Müller, 2014) and hence is still central to the broadening and deepening of financialized processes. However, an accounting lens complicates the view that we are moving from a form of financialization characterised by short-term, speculative imperatives to a more patient financialization 2.0 dominated by new actors like REITs with buy-to-hold sensibilities, who tolerate lower yields. With a distributional lens, the binary distinction between holding assets for long-term income and the speculative realisation of capital gains breaks down after fair value because it is possible to generate and extend income streams through processes of disaggregation, reterritorialisation and assetization - as for example when compulsory service and maintenance charges are levied on rental and leasehold properties or when speculative capital gains can be realised through a property asset revaluation without, necessarily, engaging in a ‘true sale’ of assets. This is clearly shown in our Sigma/REIT example, where the combination of asset revaluations and share premia cancellation become the basis for converting non-realised/non-distributable gains into retained earnings which are then paid out to investors. The impact of these strategies on housing management and the quality of homes is therefore an urgent area for future research (Ejiogu et al., 2021; Smyth, 2017), particularly given Sigma’s focus on housing young families alongside urban graduates and other professionals.

Our comparative exploration of real estate financialization also emphasises how financialization is shaping the reporting process itself: housing collateralises a series of creative accounting practices designed to increase the liquidity and thus distributable capacity of the entities constructed to hold property assets. This raises more profound questions about how the distributional priorities of corporations now contribute to the increasingly virtual nature of contemporary capitalism, taking us closer to earlier critiques of fair value and its ‘simulacran’ qualities (Bougen & Young, 2012; MacIntosh et al., 2000). This work emphasised how financial reporting can become self-referential when modelled inputs are used to produce modelled outputs. Whilst these processes are rule-bound, they can and do involve some subjective decision making in their interpretation, operationalisation and implementation. Our findings point toward the need for scholarship to engage with how distributional apparatuses may influence the interpretation and implementation of rules and practice, and offers a theoretical and methodological approach to undertake this work.

Finally, we would note that there are risks associated with strategies led by aggressive distributional practices. The current period of inflation and higher interest rates should - in theory at least - see significant and automatic impairments in investment properties and other fair valued assets as discount rates erode the time value of future income and thus net present values. Entities that borrowed

heavily against upwardly revalued assets in the boom years may be particularly vulnerable. In housing, we may well see a perfect storm of asset impairments, rising liability costs and debt covenant breaches in a self-reinforcing spiral. If that is the case, we might expect new, more predatory financial actors into the sector buying distressed property assets, with uncertain implications for residents. More generally, we might expect distributional apparatuses to have spillover effects into other areas of reporting. If, for example emissions are taxed as part of State-led green transition initiatives, we might expect some corporations to resort to reporting creativity and legal reorganisation to try to avoid booking emissions in order to preserve their distributional privileges.

7. Declarations

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CRediT authorship contribution statement

Goulding: Data curation, Writing - review & editing, Investigation. **Haslam:** Data curation, Writing review & editing, Investigation, Formal analysis, Methodology, Resources. **Leaver:** Conceptualisation, Funding acquisition, Writing - original draft, Writing - review & editing, Investigation, Formal analysis, Methodology, Supervision, Project admin. **Silver:** Writing - review & editing, Investigation, Methodology.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The data used is publicly available via company accounts. Our bespoke database is open access and available on the CRAFTiC Centripetal Cities website <https://www.sheffield.ac.uk/crafic/research/manchester-centripetal-city>.

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