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Financialization and the third sector: Innovation in social housing bond markets

1. **Introduction**

In 2008 it became clear that the US subprime crash had spread to create a global financial crisis (GFC). In contrast to previous crises, the GFC was unique in that it permeated a diverse range of spaces, from global financial markets to households, destabilising financial institutions deemed too big to fail, and tipping debt laden governments into fiscal crises. While the crisis was global in scale, its antecedents can be traced to geographically concentrated defaults of US subprime mortgages, following a series of interest rate rises. One distinctive feature of the GFC is rooted in financial engineering, as these subprime mortgages were restructured to 'remove' risk through a process known as securitization, which enabled the revenue streams of mortgages to be sold to institutional investors as bonds (Marshall et al. 2011). This practice led to the accelerated financialization of residential real-estate, connecting regional savings and mortgage lenders to capital markets, creating risk conduits that would connect global financial centres, governments, households and consumers more closely together, facilitating a deeper and wider contagion of the crisis.

Investor appetite for securitised real-estate bonds declined markedly since the GFC (Wainwright 2015). However, during the economic recovery a new residential bond market began to grow rapidly within the UK: housing association bonds. Subsequently, while the financialization of private real-estate through securitization has declined, the financialization of third sector real-estate has begun to grow. Housing Associations (HAs) receive government funding for development and maintenance, but since the Thatcherite governments of the 1980s, funding has been slowly reduced (cf. Aalbers et al. 2015). During this time, HAs obtained commercial loans from banks to meet their funding shortfall, which heralded the privatization of funding streams. However, post-GFC austerity politics have accelerated reductions to this government funding, while increased funding costs and

regulation has reduced the availability of bank loans for HAs, leaving them to turn to global capital markets and bond funding programmes.

Global investors who previously purchased securitised bonds, for example, pension and insurance funds began to include regionally embedded HA bonds in their portfolios, which has privatised the funding of HAs and in doing so, has financialized these organisations. However, the financialization of HAs is not clear cut. While many private sector organisations experience negative outcomes through financialization (Pike 2006), many HAs have a non-profit status, with social aims to house vulnerable and low income tenants, and support the local community. It can be argued that these core objectives are diametrically opposed to the politics of financialization and the provision of bondholder returns. Subsequently, this study provides a unique opportunity to examine how financialization has begun to permeate into the third sector, while initiating spatial and organisational change.

This paper has 3 aims: First, it seeks to investigate the deepening of financialization into a new sphere of society and the economy: third sector HAs. In doing so, the paper will examine how localised spaces of HAs have become connected to global capital markets and investors, through London as an international finance centre. Second, we explore the tensions between financialization's return seeking politics, and the charitable and local missions of HAs, in addition to the risks that can emerge through the development of bond programmes. Third, the paper seeks to examine the difficulties and potential solutions to managing these contradictory politics, while examining how the challenges in financializing HAs are inherently spatial.

The remainder of the paper is structured as follows: Section 2 will examine recent research on financialization, particularly concerning real-estate markets and increasingly the public and third sector. This review will be used to frame the paper's analysis. The section will also outline the research design of the study, from which the findings are drawn. Section 3 will investigate the emergence of a nascent bond market to provide HAs with access to capital markets. In this section, we then examine how bond market transactions grew after the GFC connecting local HAs to global capital markets through London, while unravelling the geographies of production and the effect of space in developing HA bonds. Section 4 will then explore some of the tensions between the politics of the third sector and financialization, while exploring new innovations that attempt to manage these issues. The final section will conclude the paper.

2. Financialization: wider and deeper?

The GFC has had a profound effect on global economies and societies. Although the crisis began to unfold in 2008, its effects have continued to ripple through the global financial system, with delicate recoveries propped up through a precarious combination of austerity and quantitative easing. It has become clear that prior to the crisis, financialization was successful in permeating everyday life (cf. Martin 2002), infiltrating individual (Langley 2007), household (Finlayson 2009) corporate (Pike 2006; Muellerleile 2006; Faulconbridge and Muzio 2009), regional, national and global spaces (Wainwright 2012; French at al. 2011; Krippner 2005; Stockhammer 2014). The deepening of financialization's processes began to accelerate in the 1980s (Krippner 2005), connecting new actors and spaces to global circuits of capital, in addition to financial risks. In doing so, the deep and sustained impact of the GFC, has illustrated how wide and deep financialization's politics have spread. As such, scholars have become increasingly concerned with how the mundane spaces of everyday life have become integrated within the realm of high finance and international capital (French et al. 2011). In particular, this has led to the growth of literature that examines the financialization of real-estate space, connecting household spaces to global investors, spurring researchers to advance research on financialization through housing markets (Aalbers and Engelen 2015).

2.1. Private sector: From equity markets to housing markets

While researchers have sought to apply theories of financialization to real estate, this has become increasingly complex due to the proliferation of contested definitions concerning financialization (Engelen 2008). French et al. (2009) suggest that there are two particular framings of financialization. First, it is a term that describes growing power of finance over the economy and society. Second, it can be viewed as a conceptual tool to focus on the processes and role of technologies, metrics and values of financialization in shaping change across space. Even within the second, more critical approach, there are variations as to how financialization is viewed. For example, it can be viewed as the increasing role of financial motives in markets actors and institutions (Epstein 2005), or the increased power and dominance of financial actors markets and narratives, resulting in the reorganisation of firms, households and states (Aalbers 2015). In positioning our paper within these debates, we seek to drawn upon French et al's. (2009) second identified sphere, utilising a softer sectorial, case study approach following other recent studies (Langley 2007; Leyshon and French 2009; Wainwright 2012; Froud et al. 2006; Krippner 2005). This will enable us to focus on the actors

involved in HA bond markets and to provide deeper insight into the power and processes of financialization that reshape the organizations and spaces of the third sector.

This is important as earlier work on how financialization focussed on how its politics were applied through shareholder value metrics and the subsequent disciplining of executive management through corporate governance (Froud et al. 2000; Pike 2006). In short, executives' remuneration and the security of their future employment was contingent on their ability to increase shareholder value, through increased stock prices and dividends. While research on the financialization of real-estate has grown considerably (Aalbers and Christophers 2014), studies have not been sufficiently critical in highlighting how financialization functions in the context of bond markets, despite much of the focus on securitised bonds. Shareholder value in equities can be enhanced through increased dividends and share prices (Froud et al. 2000; Wainwright 2012; Muellerleile 2009). However, real-estate bonds, such as medium term notes (MTNs) or residential mortgage backed studies (RMBS) (Langley 2006) tend to offer a fixed, or floating return, where the latter is based on interbank rates, not asset performance. Subsequently, bond holders cannot engage in corporate governance to shape organisational behaviour and performance through voting rights, they can only receive bond yield, making them passive in contrast to equity investors. Arguably, an alternative approach is required to understand the processes of financialization in real-estate markets.

This paper suggests that the financialization of real-estate can be viewed in two alternative ways. First, an 'equities-based' approach to financialization would view mortgage lenders or commercial landlords as using bond programmes, such as securitization, to realise profits from asset revenue streams, that can be passed on to shareholders (Marshall et al. 2011; Wainwright 2012). Bond sales liquefy assets, providing a mortgage lender or landlord with profits that can be passed on as enhanced dividend returns for shareholders (Clark and Monk 2014) and capital market intermediaries (Folkman et al. 2007). In this approach, shareholders through voting rights alter management behaviour by influencing mortgage lenders or landlords to issue bonds. Second, we suggest a new 'bond-based' approach to gain deeper insight into the practices of financialization in real-estate. As highlighted earlier, bond holders cannot influence the corporate governance of financial organisations, once they have bought a bond as they do not have shareholder voting rights. However, they are able to influence organisational behaviour in the event of a bond default, but also before bonds are issued. As will be explored later, potential bondholders can become involved in the design of

bonds; as they will only purchase the securities if bonds issuers follow certain rules and covenants which prescribe how they must behave (Cook et al. 2014).

In order to access capital markets and raise finance, bond issuers such as HAs may need to redesign or reorganise their operations and activities, following the demands of potential investors and intermediaries. To achieve this, new metrics and framings are developed (Froud et al. 2000), and changes can be made to issuer's operational and business plans, creating immutable mobiles, which an issuer's management must not deviate from, otherwise they risk triggering a default. Consequently, the financializing power of institutional investors and subsequent organisational change takes place through the formalization of risk management plans, prior to bond issuance, implemented through frozen discourses that discipline the bond issuer into maintaining a particular set of behaviours (Miller and Rose 2008; Beunza and Garud 2007; Bowker and Star 1999). In this second approach the financialization occurs before bonds are issued, where fixed boundaries constrain the issuer's future behaviour over time, in contrast to an equity-based approach, where security owners can exercise their power at different times, voting on multiple changes and strategies while the security remains in circulation. Subsequently, it can be argued that real-estate financialization and the processes that change organisations do not occur throughout the lifetime of the issued security, like with equities, but before the bonds are issued. This is a useful approach, as it can be used provide insight into how organisations without shareholders, become entangled with the politics of financialization, providing further insight to address the dearth of how residential real-estate is integrated within the political economy (Aalbers and Christophers 2015; Schwartz and Seabrooke 2009).

2.2. Third sector: From equity markets to non-markets

While a more critical approach is required to understand the specific mechanisms of real-estate financialization, a further shortcoming of recent studies has been the limited examination of how financialization has begun to penetrate the third sector. Earlier research has provided insight into how financialization permeated the public sector. For example, French et al (2011) have been careful to point out that while state institutions designed regulation to be compatible with financialization, the state too has become increasingly financialized. Since the 1980s, the implementation of new public management paradigms, performance management (Manville and Broad 2013) and the roll-back of the state, facilitated transactions in public finance initiatives (du Gay et al. 2012; Froud and Shaoul

2001; Froud 2003; Strickland 2013). More recently, researchers have drawn attention to how arms-length state infrastructure has also been undergoing financialization, through full and partial privatizations of utilities, healthcare and infrastructure (Aalbers at al. 2015; Ashton et al. 2014; Acerete, et al. 2011; O'Neill 2013), where the equity politics and knowledge of financialization are redeveloped to create new financial innovations through bricolage (Engelen et al. 2010).

Despite this emerging body of work on non-market public sector financialization, researchers have only recently turned to explore how third sector organisations are also engaging with financialization. The third sector consists of social enterprises that have primarily charitable and social aims, and can take the legal form of: industrial and provident societies, mutuals, community interest companies and charities, for example. These organisations sit between the private and public sectors, do not often have shareholders, and are invariably controlled by independent trustees for the benefit of the community. Social enterprises need to be financially sustainable to meet their social aims, drawing upon a mixture of government funding, donations and their own commercial activities. However, in contrast to the politics of financialization, economic returns are secondary to the attainment of their charitable aims (Emerson and Twersky 1996; Nicholls 2008). While recent work has begun to examine the financialization of mutuals in finance and educational providers as charities, research in this field remains underdeveloped (Wainwright 2012; Marshall et al. 2011; Engelen et al. 2014; Jakovljevic at al. 2008; Aalbers et al. 2015).

What is perhaps surprising about this nascent area of study, is how third sector organisations began to undergo financialization in the 1980s, although the process has begun to accelerate and deepen, particularly for social housing providers in Germany, Netherlands and Sweden, as governments are withdrawing their influence and funding from these organisations (Lennartz 2011; Rolnik 2013). This has seen the widespread adoption of performance management metrics and market-orientated narratives, where HAs have begun to displace social and regulatory frameworks with a private sector agenda, focussing on 'asset management', valuations and risk modelling (Gruis 2002; Kok and Driessen 2012; Manville and Broad 2013) making the sector more compatible with financialization. This compatibility is enhanced further by the public sector funding received by HAs which provide them with substantial revenue streams, which lend themselves well to financialization. This explains why the social housing sector in particular is undergoing financialization, in contrast to other

smaller charities in the third sector that have a limited asset and revenue base. Subsequently, research into the social housing sector will contribute to providing more integrative understandings of the role of housing in the political economy (Aalbers and Christophers 2015; Bryan and Rafferty 2014).

Aalbers et al. (2015) provide one of the first studies into the financialization of social housing in the Netherlands through their examination of Vestia's 2011 bailout. HA Vestia nearly collapsed following extensive speculation in financial markets, inadequate financial supervision and poor understandings of financial products. The Dutch experience is very similar to the near collapse of the UK's Cosmopolitan Housing Association in 2013, which was subject to a rescue take over by the Sanctuary Housing Group (Altair 2014). In this case, accounting errors and strategic overextension funded through bond market liquidity led to the failure of the Cosmopolitan Housing Association and its subsidiaries (Altair 2014). This illustrates how financialization in the HA sector can undermine its primary social objectives, as losses on financial markets lead to the disposal of housing units and increases in rents for tenants (Aalbers et al. 2015). Despite these risks, post-GFC reductions in state funding, stemming from programmes of austerity and reduced tax receipts, have accelerated the financialization of HAs, as they seek to top-up their funding shortfalls through capital markets. A steady reduction of state funding since the 1990s, means that private financing in the sector is not new (Dieleman 1999), but the politics of austerity have deepened the role of capital markets in the day-to-day operations of HAs.

As highlighted earlier, financialization through bond issuance can restructure the power relations of organisations, with external actors gaining indirect influence and power over their internal operations. This can affect organisational behaviour, strategies and practices (French et al. 2001; Pike 2008; Froud et al. 2006) that must become realigned with bond covenants (Cook et al. 2014), if bonds are to be issued. It can be argued that the politics and processes of financialization contradict the social purposes of HAs and it becomes less clear if meeting social objectives is ranked ahead of financial returns, since investors aim to deliver financialized returns for shareholders, often institutional investors supporting an asset-based welfare regime (Erturk and Solari 2007; Froud et al. 2002; Finlayson 2009; Langley 2006). In contrast, HAs aim to provide affordable, or below market rent accommodation, to vulnerable or low income tenants which include the disabled, elderly, and those on low incomes (Malpass 2000), while often providing wider community development and social

programmes for tenants (cf. Lang and Novy 2014). These social objectives run contrary to the aims of financialization raising questions as to how these competing sets of politics may affect HAs, in addition to the spatial implications, in connecting them to global financial markets.

2.3 Research design

This paper draws primarily upon primary semi-structured interviews, and uses additional secondary sources to contextualise this data within a wide economic context. The empirical data was collected between 2014 and 2015 and consists of 30 interviews conducted within the UK. The interviewees consist of directors, associates, analysts and managers that work in investment banks, commercial banks, boutique finance houses, policy-makers, industry representatives, investors and HAs, large and small in addition to management consultants. These respondents work within the UK HA bond market sector in issuing, placing and consuming bonds backed by revenue from HA rents.

The HA bond market was limited in size until the GFC, and is still managed by a small number of financial institutions, and a growing base of investors. As such, key participants could be located through systematic searches of the internet. Records of registered HAs held by the Homes and Communities Agency (HCA), provided insight into registered HAs. Further searches revealed the largest and smallest HAs by turnover and housing unit portfolio, whose websites provide insight into their use of capital markets through available bond prospectus documentation. Snowballing and initial interviews, in addition to searches of financial institutions' websites, revealed which financial services firms are active in the market, supplemented by bond fund documentation, to identify investors and the financial and sector press (e.g *Financial Times and Social Housing*). Participant names were then located through corporate websites and reports.

The research interviews were semi-structured to enable the interviewees to provide additional information and flexibility in their answers, and to account for their own experiences and specific expertise. The questions sought to examine the history and initial formation of the bond market, but also the rapid growth after the GFC, in addition to how innovations occurred and how new HAs and investors have begun to enter the market, and the conditions that required this development. The questions also examined the strategies, practices and difficulties that emerge in reconciling the different aims and politics of the

different stakeholders. The duration of the interviews ranged between 45 minutes at 2 hours. Each interview was digitally recorded and transcribed. The transcripts were then thematically coded, prior to their analysis. The analysis was also supported by materials and documents suggested by interviewees, including bond documentation and market reports for further triangulation.

3. Financializing housing associations

In 1979, the ruling Conservative government in Britain sought to privatise the public housing within its political economy (Crook 1986). The 'Big Bang' in 1988 assisted in facilitating this plan, as newly liberalised financial markets were permitted to release funding for the privatization of Britain's housing. These two key changes set the scene for the financialization of Britain's political economy of housing (cf. Aalbers and Christophers 2014). Financial liberalization lifted restrictions on mortgage issuance for existing financial providers, which increased competition and mortgage availability, extending homeownership to households who would have previously been denied credit (Wainwright 2012; Malpass 2000). New consumer finance products funded the transfer of state owned assets to individuals, through a series of new programmes, including the 'right to buy' initiative which provided substantial subsidies to tenants to help them buy their home from the council. In addition, HAs and local councils were able to develop shared equity/ownership schemes, to assist households in buying a share of ownership in their rented home (Crook 1986).

Despite this initial wave of privatization, many tenants continued to live in social housing. However, a second wave was more complex and provided HAs with a deeper role in the political economy's housing provision (cf. Aalbers and Christophers 2014). This would radically change the structure, geographies and funding of HAs. The history of HAs is rooted in the 19th century, when they were developed by wealthy Victorian philanthropists and religious organisations (see Emsley 1986 and Tickell 1996). Initially, they provided quality housing for the working classes, were small in scale and supported local communities. In the 1990s they began to grow rapidly in scale as the government began to transfer council housing stock into HA ownership (Malpass 2000). This phase also witnessed the development of new HAs to enable the removal of stock from local councils, while smaller associations began to merge throughout the 1990s and 2000s to provide them with economies of scale and operational efficiencies (Malpass 2000), while disposing of stock that did not fit within their geographical area. Consistent with the roll-back of the state and

introduction of private finance initiatives at the time (Froud and Shaoul, Froud 2003; Strickland 2013; Ashton, et al. 2014), the government began to view the HA sector as a strategic partner that could increase social housing provision with limited state involvement. Furthermore, the government turned to reduce HAs' funding, with the expectation that they could use their substantial assets as security to access private sources of finance from liberalised financial markets. This plan stimulated the development of a new financial ecosystem and markets that would begin to financialize the third sector.

3.1 Housing association financing

This new ecosystem consisted of new and existing capital market intermediaries (Folkman et al. 2007) and institutional investors (Clark and Monk 2014). The first, an organisation called The Housing Finance Corporation (THFC) was established in 1987, and co-owned by the National Housing Federation, a representative body for HAs, and a regulatory body: The Housing Corporation. THFC was known as an aggregator platform that would issue bonds to institutional investors, and supply loans to participating HAs, to enable them to develop new housing stock or to refurbish transferred stock. The collateral behind the loans was secured on the housing assets of participating associations, with investor returns paid from rent surpluses. THFC was supposed to act as a new capital market intermediary (Folkman et al. 2007), connecting HAs to institutional investors facilitating, financialization into a new sphere (French et al. 2011; Engelen et al, 2014), but this particular bond market was slow to develop.

As with any new market, investors seek high yields due to uncertainty, while due diligence processes required investors to check on the finances and business models of each participating HA – a cumbersome process. For HAs, bond markets and the realm of high finance were unfamiliar, making the process less desirable, but it did not take long for additional competing financial institutions to enter the market of social housing finance. Following the Big Bang, London's financial services sector had access to deep interbank money markets with low interest rates, which witnessed the entrance of high street banks, who began to recycle cash into 25-30 year long term loans, as illustrated below:

> "And the interest fell away during the '90's, then the banks started looking at this and saying "This looks a bit like a residential mortgage, and we understand that its property based, 25 year term finance" so the banks

> started piling in. And then two things happened really. The banks came in, but also there was the stock transfer movement as Government started transferring stock…The banks started pricing those, and that started the influx of bank finance. So late '90's/early 2000's the banks are providing more finance into the sector" (R15 regulator)

High-street banks viewed HAs as a market straddling residential mortgages and commercial loans, and through financial bricolage (Engelen et al. 2010) they came to dominate social housing finance. High-street banks were keen to enhance shareholder returns in a competitive, deregulated financial services market (Marshall et al 2011), although their mechanism of funding was unsustainable, facilitated by low LIBOR rates. In order to increase returns, banks began to sell interest rate swaps, derivatives and other services to capture profits from the low cost loans to HAs, placing high-street banks with substantial exposures to HAs real estate, which coincided with the GFC:

> "…banks were blatantly mis-pricing the loans they were making to the housing associations on the basis that however tight the pricing to Libor, they could then make significant additional amounts of money out of fixing derivatives on the loans, and other general services provided to housing associations…That left us with a position in 2007 where five banks in particular had around about, now I'm trying to think back here to find the specific figures, £45 – 47 billion of lending, the capital markets were by that stage a marginal provider" (R20 financial services)

The GFC created considerable problems for high-street banks as LIBOR rates increased, but 25-30 year loan rates had been fixed. Capital adequacy regulation viewed long commercial loans unfavourably, especially when governments began to stress-test banks, so they became keen to get HAs to refinance their debt. In some cases, lenders would search loan contracts to look for breaches of contract, to try and increase interest rates or force refinancing. As such, the collapse in liquidity from the GFC closed development finance for HAs, which created a new funding gap:

> "The [funding] gap as far as the supported sector is concerned is huge. But the huge funding requirement from the sector; they are looking at

probably about continuing to raise £5 billion or so a year…And this fledgling market we are working on is only going to grow" (R22 financial services)

Following the GFC, HAs began to turn to capital markets, in order to close the funding gap between state subsidies and demand for new housing. Some larger HAs had already issued their own bonds directly to institutional markets in the 1990s. For example, a HA raised £130 million in bond finance in 1998, providing investors with a semi-annual coupon of 7.93%, with BNP Paribas in London as the arranger.[1] These 'own label' bonds, in addition to THFC bonds ensured that capital market intermediaries and investors retained knowledge of the nascent market, which enabled it to grow, following the GFC. While the market for residential securitization and property bonds had all but vanished in Europe and the US (Wainwright 2015; Aalbers 2015) the niche HA bond market began to develop rapidly, connecting socially-orientated HAs directly to capital markets and exposing HAs to new pressures and expectations (cf. Engelen et al. 2014; Marshall et al. 2011; Pike 2006).

3.2 Placing local assets in global markets: geographies of production and spatial implications

The issuance of new social housing bonds involves the cultivation of new networks that connect local housing assets and revenue streams to a global investor base (cf. Marshall et al. 2011; Wainwright 2013). Smaller, or first time bond issuers, will often enrol the support of specialist consultants to calculate the costs of potential government welfare changes and arrears on their business models, and the impact of bond repayment schedules to establish the most appropriate form of financing, whether it is to use an aggregator, private placement, own 'branded' issue, or drawdown facility. Larger experienced HAs will often complete this task themselves. The HA will then contact a specialist financial services provider, established high-street bank or investment bank that will arrange the financial transaction, the development of bond ratings and legal documentation. The arranging banks will then work to establish pricing and investor demand, before HA executives begin to promote the deal:

"I mean the process for us probably took about three months in total. So the initial part is working out your need to borrow money and how much

[1] http://www.lqgroup.org.uk/services-for-residents/about-landq/performance-and-finance/investor-relations/

> of that. And once you've done all that, the next stage is to choose the banks you want to work with. Then we did what is called a beauty parade. So you get the banks to come and present and say how would they sell the bond and how would they ensure we would get the best price…then you've really got a couple of months of working through the legal documentation. There's reams and reams of bits of paper you have to get sorted out and stuff. And then working on the investor presentation, and that takes a while making sure that the story is clear. Especially if investors don't know the group, the understanding of where the group is coming from, what it's drivers are and where it's going and that sort of stuff…And then also, I mean, the other thing that we spent quite a lot of time working on was just thinking about the pricing" (R10 HA)

Social housing bonds are often acquired by insurance providers as part of annuity funds and other insurance products. While the bond yields are low, they are rated has having a low risk, since the revenue stream is heavily underpinned by housing benefit from the government. The 25-30 year long maturity of the bonds also matches the liabilities of annuity funds, which explains why many of the early purchasers were fund managers for British insurers, located in London and Edinburgh. However, the market has recently attracted a wider body of investors as larger issues are listed on bond market indexes, which requires the managers of index tracking funds to acquire the bonds, attracting larger Canadian and US investors:

> "When you reach £250 million of issuance on a bond, especially a rated listed bond, it goes on the index, and then its benchmark bond. And once it's on the index, then a number of other insurance companies have to buy it essentially, because they track these indices…So then all of a sudden the market opens up to a good 20/25, and you see Canadian pension funds coming in as well; they like the product; they understand property and the social consequences. Who else buys this? You'll see some of the big funds nowadays as well, seriously coming over after the big deals from the States… this is actually a very attractive product as a Double A, Single A level, as most of these investors can't buy below investment rate" (R21 financial services)

While HA bonds are consumed globally, the underlying assets, revenue and risk are strongly influenced by local housing and labour markets, in addition to the wider economy. Subsequently, space is important to arranging banks and investors in determining the risk and pricing of bonds. Housing stock types and HA location can have a particular effect in determining risk profiles. For example, a recent change to welfare policy through the 'Bedroom Tax' has forced tenants on low incomes to pay additional rent for vacant rooms in their properties, increasing their risk of arrears. HA properties in the 'North' are often under occupied, due to an oversupply of larger properties, increasing the risk of default by bond issuers in the North, making investors of investing in HAs in particular spaces:

> "There certainly is perhaps a divide in some areas of this in terms of north and south because its averse to the dreaded bedroom tax. Well in the northern parts of the country there is quite a lot of under-occupation; what's been built over the last 40 years is mostly family homes as well. You know, there could be under-occupation of one or two rooms, so people have been receiving benefits and they are having been asked to pay, and they will find it a struggle" (R22 financial services)

The geographical risk inherent in local markets and the business models of HAs is also taken into account in valuing real-estate assets. Technically, in the case of a bond default, the housing assets could be repossessed by bondholders, although this scenario is considered unlikely, but provides reassurance to investors.[2] Investors and arrangers indicted that in the past this has also affected the risk and pricing of bond purchases, with HAs located outside of London paying a premium in contrast to a London based association, as their stock, if repossessed, would fetch a greater price if sold to private developers (cf. Wainwright 2012).

The location of HAs can also influence the complexity of their business models, which can also increase bondholder risk and pricing. Due to the higher operational and development costs of being based in London, HAs are often larger and more likely to be participate in more speculative activities such as building properties for private sale and rent, to cross-subside

[2] There have been limited failures of housing associations. Following the example of the Cosmopolitan Housing Association (see Altair 2014), it is likely the government would attempt to find another housing association, or a group of associations, to take control of the property and manage the assets and tenants. This would protect BOTH investors and tenants. Due to political risks, it is unlikely that the government, or an investor, would seek to evict social housing tenants, although in an extreme scenario, this would be legally possible.

their social housing activities. While investors perceive greater security in these bond issues, owing to high real estate values, speculative operations can be viewed negatively, increasing funding costs, as highlighted below:

> "From a wider point of view there were certainly, and I think there still is, from the markets a London/South East bias. People are very comfortable with the valuations and demand characteristics in London, and you get more and more uncertain as you move further into the regions, Scotland being its own question…In terms of our targets, I think we've always been looking for not necessarily simple associations, but ones which have a proven business model. Obviously simple makes that an easier process…And certainly for smaller ones, HAs, as we mentioned before, their charitable desires might mean that the management has a less economic focus in the way they run the business. And because of that you would want a simpler business model, and those seem to work fine. For the larger associations, we do get control with them. I think greater exposure too. And again, particularly in London with the other additional things they might do that the markets dislike, have been with their shared ownership, those types of products" (R25 asset manager)

In this sense, diversification to cross-subside social housing, while creating social value by participating in shared ownership, can be viewed negatively by investors and arrangers, as this introduces more risk by moving away from stable revenue streams provided by social welfare spending, which is perceived to be low risk.

4. Reconciliation? Managing contradictory private-public politics across local and global space

As discussed earlier, one shortcoming of research on financialization is the limited insight into how non-equity investors can influence organisations without shareholders. In the context of the third sector, bond investors do not have the voting rights enjoyed by shareholders (Froud et al 2000; Pike 2006; Muellerleile 2009) and are unable to directly influence the behaviour of HAs to enhance returns, or protect their investments. As such, they cannot influence HA behaviour once a bond has been purchased, but by implementing

bond covenants and introducing calculative frames and performance metrics through capital intermediaries (Froud et al. 2006; Miller and Rose 2008; Beunza and Garud 2007) they are able to influence them before an issue, through suggestions to change business plans, to limit future drastic changes to their operations.

It must be emphasized that this power is soft as investors cannot force issuers to change their activities, but they can indicate what future activities they would view negatively, which could dissuade them purchasing bonds for that issue, but also in the future. The combination of metrics and soft power disciplines HAs and in doing so can restrict their activities and undermine their social aims (Emerson and Twersky 1996; Nicholls 2008):

> "Someone asked me the correct question quite early on in the deal about "What is the right level of surplus we should be making, given our social purpose?" and that's a really difficult question…The types of things that the rating agencies and the investors are looking for are things like margin performance or operating surplus, operating margins, margins etc. Now fundamentally those are all geared to be more profitable...So on the one hand they would like all those things to improve, but how do you get more profitable? Well there's a number of ways, one of them is you spend less on repairs, that's probably the easiest one; obviously less staff etc.etc. So there are some tensions there, but as I was saying earlier, you have almost got the reverse to that, which is we don't really want you getting into anything other than social housing, so I know you'd like to do all that build for sale stuff, but that makes us a bit nervous" (R7 housing association)

Interviewees indicated how investors were not keen on complex business models which deviate from social housing due to the higher risk, despite the opportunities to grow returns, invest in community programmes, and provide housing for key workers, meeting social objectives (cf. Nicholls 2008). The metrics developed by bond rating agencies and used by investors can also be problematic in that they do not accommodate the diverse and strategic activities of HAs. Interview 5 below, outlines how attempts to become more sustainable and efficient, which should reduce risk to investors and enhance performance, contradicts the standards and metrics:

> "And the other thing that you do get with a credit rating is you can have a scenario where the rating actually cuts against your strategic objectives. So for example, one of the objectives that we've got, is to rationalize our stock base and get out of areas that are not strategically important to us anymore; so for example we are moving out of London. But one of the measurements that the credit rating agency use in balancing their assessment of risk is the extent of which your business plan is predicated on asset sales. Now our business plan isn't particularly predicated in that sense, so it just happened that we are doing it for strategic reasons. But what the credit rating agencies do is they actually measure your activity, not the purpose behind it…therefore they will look at your asset disposals and say "Oooh, you are shedding a lot of assets. You are getting a lot of money through assets disposals, therefore you are a higher risk organization" and "By the way, we've dropped your credit rating." "(R5 housing association)

Organisational change, even for legitimate strategic purposes can trigger bond market downgrades, which increases the cost of future bond issues, removing future cash that could be deployed in creating more social and affordable housing, or supporting communities. Subsequently, limitations in the assessment of risk and unique characteristics of HAs can undermine their activities, highlighting the tensions with financialization in the third sector.

Interestingly, financialization within the sector has stimulated new innovations and practices to reassure investors, but which have also been beneficial for tenants. Recent changes to welfare payments including the Bedroom Tax, incoming Universal Credit and direct payments have created new potential risks to timely rent payments, reducing available revenue, which could trigger a bond default. Despite initial concerns by stakeholders in the social housing sector, new innovations to reassure investors that this risk is being managed have been successful, while limiting the difficulties for tenants struggling to pay their rent, while providing additional training and support:

> "Well, the whole welfare reform has in fact led to a beneficial impact on our cashflow, because we have put a lot more effort into collecting the rents. So we have spent quite a lot of money on automating processes,

> bringing in things like text messaging, so the people get an automatic text…We have also invested in benefit advisors so we find that quite a lot of people are getting more benefits than they were before because we have put the effort into helping them optimise their income. We have also spent money on employment and training programmes, which are helping tenants get employment, because once you are working, the caps and everything else become less relevant...And also, we've been spending money on effectively supporting people to move to a new home…And quite interestingly, the number of people in under-occupation is pretty well the same number of people in over-occupation, albeit they are not necessarily in the same towns, because we have quite a big spread of geography. And obviously it requires people to want to move… we support, we help fund the cost of the house swaps, because it's a win-win situation. One finds it easier to pay the rent, and the other finds that they've got a home that's big enough for them" (R2 housing association)

However, these innovations have not always been positive for tenants, and in some cases HAs have begun to undermine their own social objectives in providing housing for low income households. These associations have begun to undertake close analyses of their tenant portfolio, investigating what proportion of tenants are supported living, working families on low incomes, and the unemployed. In order to reduce the likelihoods of future arrears and defaults, some organisations are actively managing new applications to reject households deemed high risk, moving towards practices employed in the private rental sector:

> "There is evidence that there are changes both in allocations and then practice towards arrears in the tenancies. So we are increasingly seeing housing associations not accepting nominations, as I say, the Council nominates a household to go into housing association property, if they are on benefits the housing associations increasingly are trying to just reject the nomination. We are seeing safeguards against bedroom tax, working tenants who are paying their rent in themselves, being told that they can't take properties where they would be under occupying and liable for the bedroom tax if they did lose their job" (R16 stakeholder)

The adoption of sharper commercial practices has emerged from the growth of HAs through mergers and diversification, making them more complex, especially in their use of financial markets. This has led to a transition towards a more corporate culture through financialization, focusing on finance-led growth, returns and organisational performance. As illustrated below, the financialization of HAs has begun to demote the importance of social objectives in supporting local communities in some organisations:

> "I mean big housing associations, sadly they've lost their focus on the social bit, I would argue…I am thinking of Association X in London. I forget the name of the people that did that but they seemed to have completely dismantled a local community by shifting them all over London and uprooted them, just to build some new cutting edge state of the art social housing and new private build next to a train station. That will be snapped up by bankers" (R6 housing association)

While the financialization of HAs has enabled them to bridge a funding gap left by the withdrawal of state funding, it has also introduced new politics to the sector to protect investor returns. While accessing international capital markets has been successful for meeting finance needs, it is clear that the financialization of the sector has developed new pressures that have seen larger associations begin to drift from their social objectives. Subsequently, some organisations are focussing on protecting their reputations in the eyes of investors through performance management metrics and standards, while constraining their ability to create organisations that can assist local communities.

5. Conclusion

Following the GFC, there has been a marked increase in the growth of study into financialization and real-estate. However, two important shortcomings have emerged within the literature. First, researchers, with a few limited exceptions, have overlooked the financialisation of third sector organisations such as HAs (Engelen et al. 2014; Aalbers et al. 2015; Jakovljevic 2008), which have begun to make extensive use of capital markets. Second, scholars examining financialization in real-estate have underestimated the complexity of the processes that (re)shape real-estate organisations and their activities, through bond programmes. In addressing these two research gaps, we argue that financialization utilises a

different set of practices to discipline organisations involved in the funding and provision of housing, through capital market participation. In doing so, we have sought to provide deeper insight into how HAs have become deeply entwined in capital markets, and how they have undergone organisational change, developing new plans and processes to enable them to access bond markets, which have had some positive, and less positive, impacts on HAs and their tenants.

Specifically, we have uncovered how the social objectives of the third sector have been challenged by the power of financialisation, capital market intermediaries and asset managers, a wider consequence of the roll-back of the state. As such, the paper provides new insight into how financialization has begun to permeate the third sector, and the processes through which it can do so. This provides new insight into how financialization processes differ outside of private sector financialization, particularly in the context of real-estate, and builds upon the current literature (cf. French et al. 2011; Aalbers and Christophers 2014). In addition, our paper also draws attention to the spatial implications of HAs and financialization. Our study demonstrates how regional labour markets and demand for accommodation, tenure and land price can shape the activities of HAs, but also how local dynamics can shape the risk perceptions of investors, affecting the cost of social housing funding. As such, it can be more expensive for smaller HAs outside of London to obtain funding to (re)develop their housing assets. The paper also disentangles the geographies of capital market intermediaries and investors that constitute the market which enables the financialization of HAs (cf. Lennartz 2011; Folkman et al. 2007), through a mixture of London based high-street banks, boutique financial companies and investment banks, through to Edinburgh-based asset managers and increasingly North American investors, extending the networks of investors, who are able to discreetly influence the business plans and strategies of HAs, to protect their investments and to secure their returns. Interestingly, the paper revealed how investors have been seeking replacement real-estate investment opportunities, that offer low risk and steady returns which can replace substantially reduced securitization markets (Wainwright 2015).

The paper raises broader questions about the impact and extension of financialization and its introduction and modification of new management techniques, metrics and knowledges (Engelen et al. 2010; Beunza and Garud 2007), which reshape the activities of the third sector through a more commercial lens, which has begun to challenge the supremacy of social value over economic value creation for HAs. While an emergent HA bond market has

filled an investment gap developed by the roll-back of state investment, it is questionable that these organisations are able to raise cheaper capital independently, than if the state was to issue treasury bonds to support the financial needs of HAs. This shift to an off-balance funding approach for the government, facilitated through financialization, has created new opportunities for capital market intermediaries, but has increased funding costs and fees, resources that could have been used to support vulnerable households, while more questionable practices which have emerged can have a direct negative effect on vulnerable households (cf. Emerson and Twersky 1996; Nicholls 2008). The outcomes for different stakeholders are mixed: the government has reduced its funding costs; capital intermediaries earn fees, while risk is transferred to asset managers and vulnerable households, where the former can absorb risk (Folkman et al. 2007, but the latter cannot, exposing vulnerable households to risks of eviction, waiting lists and rent increases.

We argue that further research is needed to explore how financialization has begun to permeate the third sector and challenge the social objectives of non-private organisations. While earlier studies of financialization have been applied to the private sector (Muellerleile 2009; Langley 2007; Pike 2006), which is more closely aligned with the politics of financialization, the permeation of high-finance into HAs, which prioritise social value creation have arguably had a deeper impact on the strategic orientation, values and practices of these organisations. This has required the translation of market knowledges, cultural change and financial performance metrics (Manville and Broad 2013; Miller and Rose 2008; Engelen et al. 2010), which remain understudied in the third sector context. Economic geographers and social scientists need to turn and seriously examine the permeation of financialization into the third sector, to examine the new spaces and institutions which it is beginning to reshape.

References

Aalbers, M. and Christophers, B. (2014) Centring housing in political economy, Housing, Theory and Society, 31(4): 373-394.

Aalbers, M. (2015) Corporate financialization, in Castree, N. et al. (eds.) The International Encyclopaedia of Geography: People, the Earth, Environment, and Technology, Wiley: Oxford.

Aalbers, M. and Engelen, E. (2015) The political economy of the rise, fall and rise again of securitization, Environment and Planning A, in press

Aalbers, M., van Loon, J. and Fernandez, R. (2015) The financialization of a social housing provider, International Journal of Urban and Regional Research, in press.

Acerete, B., Stafford, A. and Stapleton, P. (2011) Spanish healthcare Public Private Partnerships: the 'Alzira model', Critical Perspectives on Accounting, 22(6): 533-549.

Altair (2014) Cosmopolitan Housing Group Lessons learned, Altair: London.

Ashton, P., Doussard, M. and Weber, R. (2014) Reconstituting the state; City powers and exposure in Chicago's infrastructure leases, Urban Studies, 1-17.

Beunza, D. and Garud, R. (2007) Calculations, lemmings, or frame-makers? The intermediary role of securities analysts, in Market Devices (Eds) MCallon,Y Millo, F Muniesa, Blackwell: Oxford ,pp 13- 39

Bowker, G. and Star, S. (1999) Sorting Things Out: Classification and its Consequences, MIT Press: Cambridge, MA.

Bryan, D. and Rafferty, M. (2014) Political economy and housing in the twenty-first century – from mobile homes to liquid housing? Housing, Theory and Society, 31(4): 404-412.

Cook, D., Fu, X. and Tang, T. (2014) The effect of liquidity and solvency risk on the inclusion of bond covenants, Journal of Banking & Finance, 48: 120-136.

Clark, G.L. and Monk, A. (2014) The geography of investment management contracts: the UK, Europe and the global financial services industry, Environment and Planning A, 46(3): 531-549

Crook, A. (1986) Privatisation of housing and the impact of the Conservative Government's initiatives on low-cost homeownership and private renting between 1979 and 1984 in England and Wales: 1. The privatisation policies, Environment and Planning A, 18: 639-659.

Dieleman, F. (1999) The impact of housing policy changes on housing associations: experiences in the Netherlands, Housing Studies, 14(2): 251-259.

Emerson, J. and Twersky, F. (1996) New Social Entrepreneurs: The Success, Challenge and Lessons of Non-profit Enterprise Creation, The Roberts Foundation: San Francisco.

Emsley, I. (1986) The development of housing associations, Garland Publishing, London.

Engelen, E. (2008) The case for financialization, Competition and Change, 12(2): 111-119.

Engelen, E., Erturk, I., Froud, J., Leaver, A. and Williams, K. (2010) Reconceptualizing financial innovation: Frame, conjuncture and bricolage, Economy and Society, 39: 33–63.

Engelen, E., Fernandez, R. and Hendrikse, R. (2014) How finance penetrates its other: a cautionary tale on the financialization of a Dutch university, Antipode, 46 (4): 1072-1091.

Epstein, G. (ed.) (2005) Financialization and the world economy, Edward Elgar: Cheltenham.

Erturk, I. and Solari, S. (2007) Banks as continuous invention, New Political Economy, 12: 369-388.

Fields, D. (2015) Contesting the financialization of urban space: community organisations and the struggle to preserve affordable rental housing in New York City, Journal of Urban Affairs, in press.

Faulconbridge, J. and Muzio, D. (2009) The financialization of large law firms: situated discourses and practices of reorganisation, Journal of Economic Geography, 9: 641-661.

Finlayson, A. (2009) Financialisation, financial literacy and asset-based welfare, The British Journal of Politics and International Relations, 11: 400–421.

Folkman, P., Froud, J. Johal, S. and Williams, K. (2007) Working for themselves/ capital market intermediaries and present dy capitalism, Business History, 49: 552-572.

French, S., Leyshon, A., Wainwright, T. (2011) Financializing space, spacing financialization, Progress in Human Geography, 35: 798-819.

Froud, J., Haslam, C., Johal, S. and Williams, K. (2000) Shareholder value and financialization: consultancy promises, management moves, Economy and Society, 29: 80-110.

Froud, J. and Shaoul, J. (2001) Appraising and Evaluating PFI for NHS Hospitals, Financial Accountability and Management, 17(3): 247-270.

Froud, J., Haslam, C., Johal, S. and Williams, K. (2002) Financialization and the Coupon Pool, Capital and Class, 78: 119-151.

Froud, J. (2003) The Private Finance Initiative - risk, uncertainty and the state, Accounting Organizations and Society, 28(6): 567-589.

Froud, J., Johal, S., Leaver, A. and Williams, K. (2006) Financialization and strategy: narrative and numbers, Routledge: Abingdon.

du Gay, P., Millo, Y. and Tuck, P. (2012) Making government liquid: Shifts in governance using financialisation as a political device, Environment and Planning C, 30(6): 1083 – 1099.

Gruis, V. (2002) Portfolio Management in the social rented sector: valuation, risk analysis and strategy development, Housing Studies, 17(2): 245-265.

Jakovljevic, B., Hollingshaus, W. and Foster, M. (2008) Financialization of Education: Teaching Theatre History in the Corporatized Classroom, Theatre Topics, 18(8): 69-85.

Kok, R. and Driessen, P. (2012) Antecedents of market orientation in semi-public service organizations: a study of Dutch housing associations, The Service Industries Journal, 32(12): 1901-1921.

Krippner, G. (2005) The financialization of the American Economy, Socio-Economic Review, 3(2): 173-208.

Lang, R. and Novy, A. (2014) Cooperative housing and social cohesion: the role of linking social capital, European Planning Studies, 22(8): 1744-1764.

Langley, P. (2006) The making of investor subjects in Anglo-American pensions, Environment and Planning D: Society and Space, 24: 919–934.

Langley, P. (2007) Uncertain subjects of Anglo-American financialization, Cultural Critique, 65: 67-91.

Lennartz, C. (2011) Power structures and privatization across integrated rental markets: exploring the cleavage between typologies of welfare regimes and housing systems, Housing, Theory and Society, 28(4): 342-359.

Leyshon, A. and French, S. (2009) "We all live in a Robbie Fowler house": the geographies of the buy to let market in the UK, British Journal of Politics and International Relations, 11(3): 438-460.

Malpass, P. (2000) the discontinuous history of housing associations in England, Housing Studies, 15(2): 195-212.

Manville, G. and Broad, M. (2013) Changing Times for Charities: Performance management in a Third Sector Housing Association, Public Management Review, 15: 992-1010.

Marshall, J., Pike, A., Pollard, J., Tomaney, J., Dawley, S. and Gray, J. (2011) Placing the run on Northern Rock, Journal of Economic Geography, 12, 157-181.

Martin, R. (2002) Financialization of Daily Life, Temple University Press: Philadelphia.

Miller, P. and Rose, N. (2008) Governing the Present: Administering Economic, Social and Personal Life, Polity Press: Cambridge.

Muellerleile, C. (2009) Financialization takes off a Boeing, Journal of Economic Geography, 9: 633-677.

Nicholls, A. (2008) Social Entrepreneurship: New Models of Sustainable Social Change. Oxford University Press: Oxford.

O'Neill, P. (2013) The financialisation of infrastructure: the role of categorisation and property relations, Cambridge Journal of Regions, Economy and Society, 6: 411-454.

Pike, A. (2006) 'Shareholder value' versus the regions: the closure of the Vaux Brewery in Sunderland, Journal of Economic Geography, 6(2): 201-222.

Rolink, R. (2013) Late Neoliberalism: the financialization of homeownership and housing rights, International Journal of Urban and Regional Research, 37(3): 1058-1066.

Schwartz, H. and Seabrooke, L. (eds.) (2009) The politics of housing booms and busts, Palgrave Macmillan: Basingstoke.

Stockhammer, E. (2004) Financialization and the slowdown of accumulation, Cambridge Journal of Economics, 28: 719-741.

Strickland, T. (2013) The financialization of urban development: Tax Increment Financing in Newcastle upon Tyne, Local Economy, 28: 384-398.

Tickell, J. (1996) Turning hopes into homes, a history of social housing 1235-1996, National Housing Federation: London.

Wainwright, T. (2010) “It's crunch time": the 'lost' geographies of the crisis, Environment and Planning A, 42(4): 780-784.

Wainwright, T. (2012) Number crunching: financialization and spatial strategies of risk organisation, Journal of Economic Geography, 12: 1267-1291.

Wainwright, T. (2013) Finance’s outsiders: networks, knowledge, and power beyond the City, Journal of Economic Geography, 13: 1041-1058.

Wainwright, T. (2015) Circulating financial innovation: new knowledge and securitization in Europe, Environment and Planning A, in press.

Table 1: Key HA sector events

Year	Event	Effect
1113	Hospital of St Cross founded	Longest constantly serving HA founded
1980	Housing Act	Right to Buy and Shared Ownership begin privatization of public housing
1987	THFC established	Opening of bond market finance for HAs
1986	Big Bang'	Financial services able to develop new products
1988	Housing Act	Enabled lenders to take possession against HA property
1988	Large Scale Voluntary Stock Transfers begin	Increased demand for external funding
1998	L&Q HA launches first own label bond	Own label bonds emerge
2008	Global Financial Crisis begins	Reduced commercial loans for HAs
2009	Sanctuary HA issues new bonds	First own label issuance in 5 years - renewed activity
2012	Welfare Reform Act	Reduced tenant benefits through 'Bedroom Tax' and Universal Credit
2013	Cosmopolitan HA take over	Concern over leveraged HA business models

Source: Authors

Table 2: Main commercial loan providers and capital market arrangers

Commercial Loan Providers	Capital Market Arrangers
Lloyds	Lloyds
Barclays	Barclays
Santander	Santander
RBS	RBS
Tridos	Royal Bank of Canada
Nationwide	HSBC
	Trade Risks
	THFC
	GB Social Housing
	Canaccord Genuity

Sources: THFC (2016); Authors

Table 3: Growth and debt in the HA sector (2006-2015)

Year	Sector Debt (£Bn)	Debt per Unit (£)	HA Development Grant (£M)	Total Assets (£M)	Number of Homes Managed
2006	28.3	13,658	27,642	41,795	2,011,892
2007	30.9	14,111	30,383	45,946	2,127,082
2008	34.9	15,013	32,719	50,989	2,266,004
2009	40	16,588	35,628	57,415	2,337,286
2010	43	17,034	38,478	60,424	2,430,619
2011	44.5	17,226	41,118	65,404	2,527,082
2012	48.5	20,400	41,616	71,150	2,551,126
2013	55.7	21,313	41,602	72,788	2,613,275
2014	59.3	22,598	41,984	78,179	2,623,005
2015	63.4	23,931	42,487	83,611	2,647,395

Sources: HC (2007), TSA (2008; 2009; 2010; 2011) and HCA (2012; 2013; 2014; 2015)

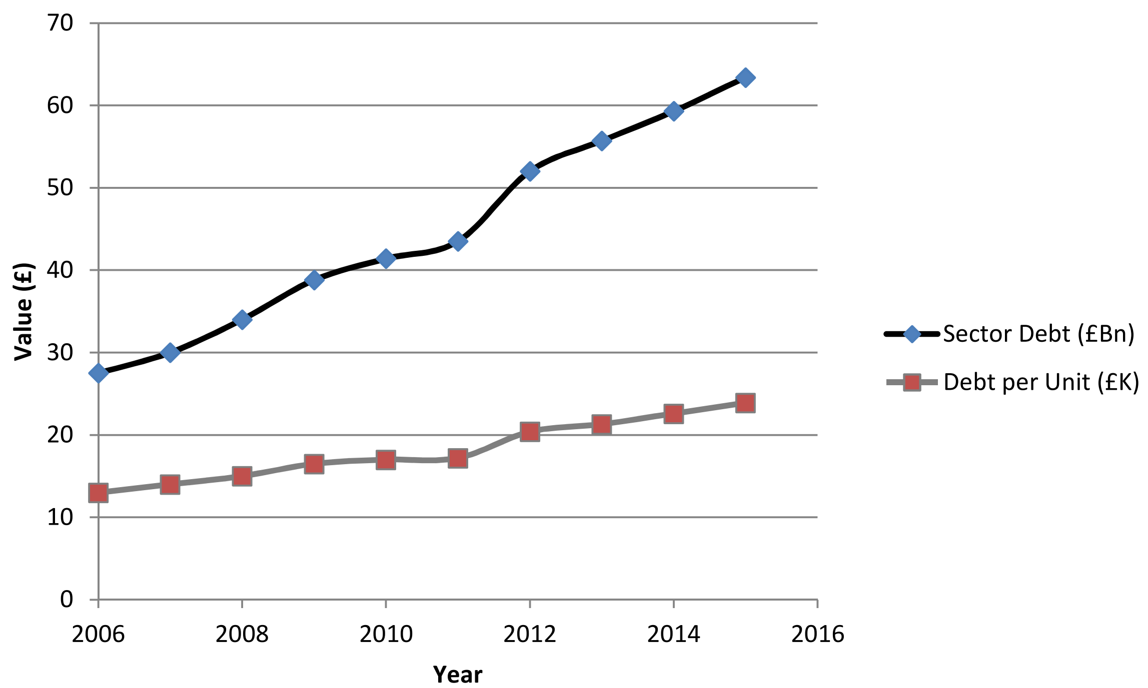
Table 4: Public Bond issues 2013-2015

Year	Issuer	Value (£)	Cost of funding (%)
2013	THFC	55,200,000	4.31
2013	Saffron	125,000,000	4.64
2013	THFC	81,500,000	4.5
2013	A2Dominion	150,000,000	4.5
2013	Sanctuary	150,000,000	4.2
2013	Grand Union	150,000,000	4.63
2013	Peabody	350,000,000	4.63
2013	Aster	250,000,000	4.6
2013	Chelmer	200,000,000	4.79
2014	Southern	50,000,000	5.36
2014	Southern	125,000,000	4.55
2014	East Midlands	200,000,000	4.6
2014	Notting Hill Housing	250,000,000	4.47
2014	Thrive	125,000,000	4.68

2014	BPHA	200,000,000	4.82
2014	GB Social Housing	47,700,000	4.82
2014	Radian	200,000,000	4.82
2014	Radian	100,000,000	4.82
2014	Affordable Housing Finance	208,000,000	3.76
2014	Town and Country	80,000,000	4.67
2014	Boston Mayflower	150,000,000	4.3
2014	A2Dominion	150,000,000	4.5
2014	Cross Keys	150,000,000	4.3
2014	Walsall	250,000,000	4.28
2014	Guinness	100,000,000	4
2014	Yorkshire	200,000,000	4.23
2014	Affordable Housing Finance	198,000,000	3.3
2014	Wheatley	300,000,000	4.4
2014	Herefordshire	120,000,000	4.19
2014	Riverside	25,000,000	4
2015	Paragon	25,000,000	3.63
2015	Richmond Housing	175,000,000	3.302
2015	Swan	250,000,000	3.63
2015	Affordable Housing Finance	194,000,000	2.92
2015	Orbit	250,000,000	3.61
2015	GB Social Housing	16,800,000	3.88
2015	Affordable Housing Finance	208,000,000	2.89
2015	Metropolitan	250,000,000	4.2
2015	L&Q	25,000,000	3.84

Source: THFC Market Data (2016)

Figure 1: HA debt by sector and unit



Sources: Sources: HC (2007), TSA (2008; 2009; 2010;