UK COLLABORATIVE CENTRE FOR HOUSING EVIDENCE

Why have the volume housebuilders been so profitable?

The power of volume housebuilders and what this tells us about housing supply, the land market and the state

Dr Chris Foye, Henley Business School, University of Reading

Dr Edward Shepherd, School of Geography and Planning, Cardiff University

September 2023

Economic and Social Research Council

Arts and Humanities Research Council

About the authors

Dr Chris Foye is a Lecturer in Housing Economics at Henley Business School, University of Reading. Previously, he worked at the UK Collaborative Centre for Housing Evidence.

Dr Edward Shepherd is a Senior Lecturer in Planning and Development at the School of Geography and Planning, Cardiff University. He has a professional background in planning and development consultancy.

Acknowledgements

We thank the following who kindly reviewed and provided helpful feedback on an earlier version of this report:

Dr Quintin Bradley, Senior Lecturer in Planning and Housing, Leeds Beckett University

Chris Brown, Managing Director at Climatise and former Executive Chair of Igloo Regeneration

Neal Hudson, Director at Residential Analysts Ltd and Founder of BuiltPlace

Prof Pat McAllister, Professor of Real Estate, University of Reading

Prof Craig Watkins, Professor of Town and Regional Planning, The University of Sheffield

We also thank the following for providing valuable data:

Neal Hudson, Director at Residential Analysts Ltd and Founder of BuiltPlace

Savills

The views expressed in this report do not necessarily reflect those of the reviewers. Any errors and omissions remain the responsibility of the authors.

Contents

Executive Summary

Research questions

In February 2022, British Petroleum (BP) reported annual profits of £23bn, more than double that reported the previous year, and equating to 30% return on capital employed (ROCE). Outrage predictably ensued, but as the Financial Times (Eley, 2023) pointed out, just two days later, Barratt Developments, the largest housebuilder in the UK, reported a similar ROCE for June-December 2022, and this was despite house prices falling over much of this period.

This was no anomaly. Since 2014, the largest housebuilders, and in particular the three largest housebuilders by volume (Taylor Wimpey, Barratt and Persimmon - herein, the 'big three') have consistently reported supernormal levels of profitability, with gross profit margins reaching 32% and never falling below 17% (see Figure 1). The questions guiding this report are: how have the big three been so profitable, and what does this profitability tell us about the nature of the housebuilding industry, the development land market and the relationship between volume housebuilders and the state?

Research design in brief

The research draws on comprehensive analysis of these publicly listed companies' earnings call transcripts[1], Annual Reports and performance metrics to develop a detailed understanding of their business model, and how this has changed over the decade post-Global Financial Crisis (GFC). This is complemented by analysis of government policy documents and media reports to explore the power-dynamic between the state and these three housebuilders, and its implications for policy and market outcomes. As this is primarily an empirical report it draws selectively on relevant academic literatures. Throughout the report our focus is on the big three in England, but our findings are likely to hold for much of the volume housebuilding industry, and are also likely to be relevant to Scotland and Wales, where the big three also operate, albeit in a different regulatory and political context.

Key arguments

How have the big three been so profitable? Post-GFC, it is well known that the big three successfully adopted a "margins over volume" strategy, allowing them to generate large amounts of cash, most of which has been returned to their shareholders (Archer and Cole, 2016). This strategy, we argue, was enabled by their structural power over the state and, perhaps more importantly, the perception of politicians and policymakers that volume housebuilders (VHBs) did indeed hold this power. By structural power, we mean the power that volume housebuilders enjoyed as a result of their dominance of new housing supply combined with the political, economic and symbolic significance of housing. This structural power (Hacker and Pierson, 2002) was significant in encouraging the state to introduce polices that benefitted the housebuilding industry, and particularly the largest housebuilders. Three interventions were critically important:

1. The first were the mortgage market support schemes targeted at new-builds, which disproportionately benefitted the largest housebuilders, (likely) inflating their sales prices, implying (mostly first-time) buyers overpaid for their properties, and allowing them to wind-down their own shared equity schemes, thus shifting their credit risk onto the balance sheet of the state.

1 Earnings calls are conducted by public companies and are used to present the financial results of the relevant reporting period. They are open to the public and are usually attended by investors and analysts who have the opportunity to interrogate senior management regarding the financial results. Where relevant, we have also analysed transcripts from Investor Day / Analyst Day presentations and discussions. These are used by companies to update investors about the company's finances and strategic vision.

2. The second was the renegotiation of Section 106 agreements, allowing housebuilders to preserve their profit margins at the expense of policy-required developer contributions, and the subsequent liberalisation of the planning system via the National Planning Policy Framework which increased their access to land.

3. To more fully explain the profitability of the VHBs, we also need to take account of their market power. As the big three repeatedly noted to investors in earnings calls, and as reflected in our two best quantitative indicators, from 2012 onwards, the price they paid for land did not keep up with the prevailing house price inflation, as we would expect in a competitive market.

The market and structural power of volume housebuilders have been significant, if not crucial, in underpinning their super-normal profitability post-2012. However, the VHBs mainly wielded this market power because, via the planning system, the state constructed the land market in a way that aligned closely with their interests. Likewise, the enjoyment and exertion of structural power by volume housebuilders is largely dependent on there being a receptive government which is prepared to recognise such power and cater to it in policy design.

Such conditions prevailed in the aftermath of the GFC, but are now changing somewhat in the context of an evolving political environment. This presents opportunities for state actors to recognise the extent of the structural power of the state over the housebuilding industry (e.g. via regulation such as planning, building regulations and taxation), and the potential for policy and legislative reform.

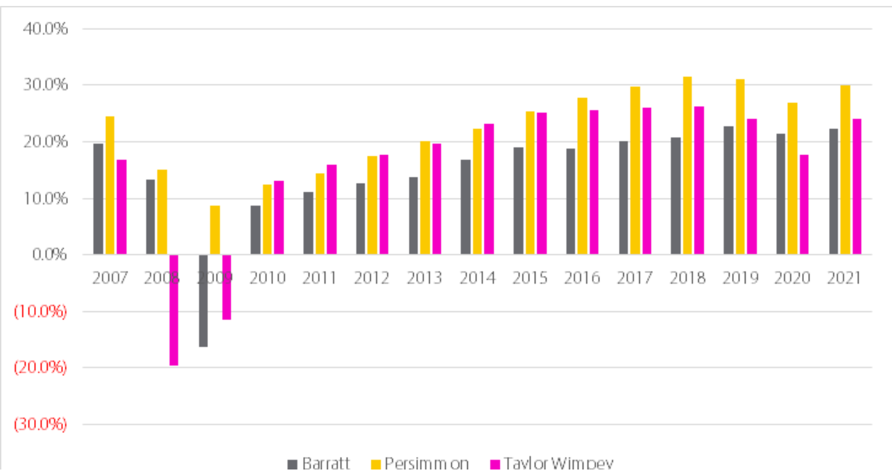
In order to expand housing supply in a way that aligns with social and environmental needs, we argue that the state should assume a larger and more positive role in the housebuilding and land market. This could take the form of: greater direct delivery of non-market housing (e.g. via housing associations or local authorities); a more active and expansive role in planning and acquiring large scale sites and then servicing them for SME and custom-builders; and a more coherent approach to capturing a greater proportion of land value uplift.

1. Introduction

England's housebuilding industry has come under increasing scrutiny over the last decade in the context of rising house prices, perceived undersupply and the increasing dominance of the sector by a small number of large and publicly listed housebuilders. Whereas it has traditionally been the planning system that has been identified as the main constraint on housing supply, with successive rounds of reform aimed at loosening supply-side regulatory 'constraints', policy attention is now also firmly on the suppliers themselves. Over the last few years there have been an increasing number of measures introduced to try and improve the diversity of the housebuilding industry and support smaller housebuilders and self-builders (DLUHC & MHCLG, 2019, 2021; DLUHC, 2021: para 69; MHCLG, 2021; Homes England, 2020; 2023), and to compel housebuilders to improve building safety (DLUHC, 2022; DLUHC & MHLCG, 2023; HMRC, 2021). The passage of the Levelling-Up and Regeneration Bill has been accompanied by proposed measures specifically intended to discipline housebuilders into building out their projects more quickly, including requiring developers to make annual reports of their build-out rates and empowering local authorities to refuse planning permissions to developers that have failed to deliver (Eckford, 2022). Perhaps most tellingly of all, the government has also recently requested that the Competition Markets Authority conducts a review into the competitiveness of the housebuilding industry (CMA, 2023).

These moves represent a significant shift in the regulatory environment and political context for the housebuilding industry, particularly its larger players (HBF, 2022), in comparison with the post-GFC political environment. Back then, the government was keen to provide support to the sector via adjustments to the planning policy environment for housebuilding and the introduction of various mortgage market support schemes. It was hoped that this would enable the housebuilding sector (particularly the volume housebuilders) to fuel economic growth by increasing housing supply. However, rather than increase supply significantly, the largest volume housebuilders instead increased their profitability. Indeed, since 2014, the three largest housebuilders by volume (Taylor Wimpey, Barratt and Persimmon - herein, the 'big three') have consistently reported supernormal levels of profitability, with gross profit margins reaching 32% and never falling below 17% (see Figure 1). This is not just an accounting quirk, but has fed through into the generation of real cash. Much of this cash has either flowed back to shareholders via dividends and buy-backs, or been used to build up substantial cash reserves (after covering pre-GFC debts). Comparatively little has been reinvested in the business through, for example, research and innovation, or the expansion of volumes. Consequently, as we move into what looks likely to be the next housing market downturn, the big three are strongly positioned: they are debt-free and with large cash reserves they are able reduce supply until the market stabilises.

Figure 1: Gross margins for big three between 2007-2021



Note: Data from Annual Reports.

This report examines some of the key drivers of the big three's profitability and what this can tell us about the nature of the housebuilding industry and the development land market. Drawing on comprehensive analysis of these publicly listed companies' earnings call transcripts, Annual Reports and performance metrics (via Refinitiv), we have gained a detailed understanding of their business model, and how this has changed over the decade post-GFC. Through analysis of government policy documents and media reports, we were also able to explore the power-dynamic between the state and the big three, and its implications for policy and market outcomes. Together, these sources present compelling insight into the strategies deployed by the big three to leverage state support and their dominance in local development land markets to protect and build back their balance sheets following the GFC, rather than significantly increase housing supply.

That housebuilders prioritise profitability over supply is by no means an original insight – indeed, it is this realisation that is behind many of the recent disciplinary moves by policymakers. However, the report presents a new analysis of how it was that the big three, in particular, were able to deploy this strategy even in the context of significant political pressure to increase their build-out rates. We theorise that this was, in part, due to their structural power (Hacker and Pierson, 2002) over the state and, perhaps more importantly, the perception of politicians and policymakers that volume housebuilders did indeed hold this power. By structural power, we mean the power that volume housebuilders enjoyed as a result of their dominance of new housing supply combined with the political, economic and symbolic significance of housing. We show how the perception of this power by state actors influenced the nature of the policy measures that were introduced in the post-GFC environment such that they were specifically aimed at supporting volume housebuilders in increasing supply, and that these housebuilders were able to exploit this to generate extra-normal profits. We show how this strategy was also enhanced by the degree of market power the big three have been able to exert, particularly in the land market.

The remainder of the report is structured as follows:

• **Section 2:** We discuss the rise of the big three volume housebuilders and the concentration of the housebuilding industry in England. We examine the significance of land to the volume housebuilders' business models.

• **Section 3:** We explore the potential for volume housebuilders to enjoy and exert market power in local residential development land and housing markets. We then introduce the concept of the structural power of volume housebuilders in the historical context of the withdrawal of the state from direct delivery of housing after the 1970s.

• **Section 4:** We detail the strategy of shifting from volumes to margins by the big three volume housebuilders in the immediate aftermath of the GFC. We also discuss why volumes and margins are, to an extent, in tension in the volume housebuilders' business model.

• **Section 5:** We analyse the support offered by the government to volume housebuilders in the form of planning policy and legislative adjustments, and the role of the volume housebuilders' structural power in bringing these about.

• **Section 6:** We analyse the government's mortgage market support schemes and show how these benefitted volume housebuilders and were a symptom of an ideational environment within government that was conducive to recognising the structural power of volume housebuilders.

Section 7: We explore the evidence for changing conditions of competitiveness in the types of local land markets preferred by the big three volume housebuilders. We show how the evidence available indicates that these land markets have become less competitive since the GFC, enabling the big three to keep land prices flat and enjoy abnormally large profits.

•**Section 8:** In this concluding section we summarise our findings and outline some key policy implications.

2. The housebuilding industry in England – before the Global Financial Crisis

Rise of the big three

It is well-known that the English housebuilding industry is increasingly dominated by larger 'volume housebuilders'. The market share (for completions) of the top 10 largest housebuilders, for example, increased from 18% in early 1970s to almost 50% in 2004, where it has remained (roughly) ever since (Wellings, 2008: 105; Archer and Cole, 2021; Yu et al., 2021). Whereas previous decades saw a great degree of churn in the top ten, the last two decades appear to indicate a greater degree of stability. As shown in Table 1, there were only 4 new firms (in bold) in the top-10 in 2019, compared with 6/7 in the previous decades.

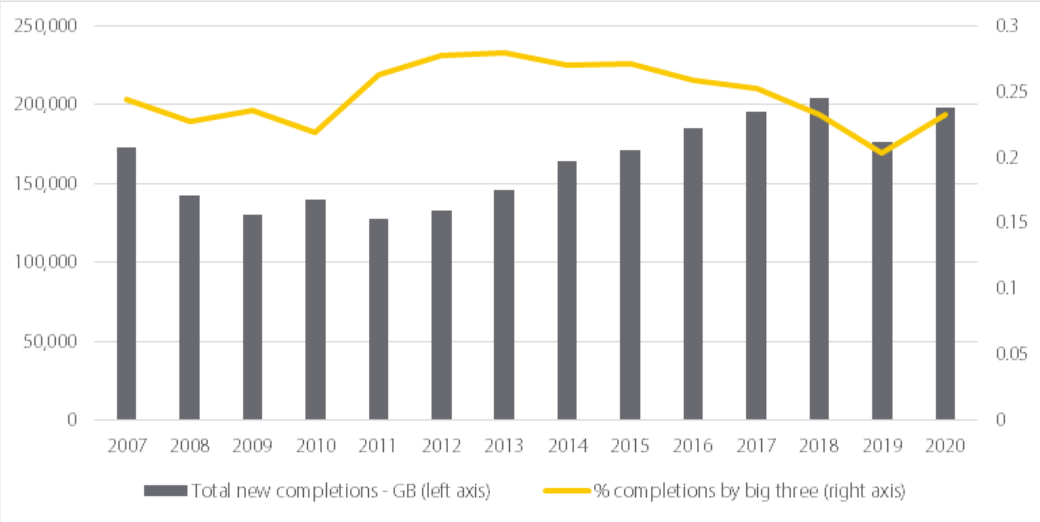
These trends towards concentration and consolidation are even stronger for the big three. Before the 2000s, volumes were spread relatively evenly among the largest ten housebuilders, but since then, the largest three housebuilders have strengthened their relative position, regularly producing between 20% and 30% of the total supply. Moreover, in contrast to previous decades when there was always a new-entrant into the big three (see Table 1), the only new entrant in 2019 was Taylor-Wimpey; a merger of the third and fourth largest housebuilders.

Table 1: Top 10 housebuilders by volume, 1965 – 2019 (new entrants in bold)

1965	1980	1995	2004	2019
Wimpey	Barratt	Wimpey	Barratt	Barratt
MRCE/Whelmar	Wimpey	Beazer	Persimmon	Persimmon
Ideal	McLean	Barratt	Wimpey	Taylor Wimpey
Janes	Broseley	McLean	Taylor Woodrow	Bellway
John Lawrence	Bovis	Wilcon	Bellway	Redrow
Hallmark	Leech	Bellway	David Wilson	Countryside
Davis	Bryant	Bryant	Berkeley	Galliford Try
Fell	Comben	Persimmon	Westbury	Bovis
Fletcher	Ideal	Raine	Redrow	Berkeley
Page-Johnson	MCRE/Whelmar	Lovell	Bovis	Crest Nicholson

Note: Sources are Wellings, 2006 (Table 7.2) and for 2019, MacFarlane (n.d.)

Figure 2: Total completions for GB vs % completions by big three



Note: Total New Completions counted via ONS (England), Stats Wales and Scottish Government. Completions by big three counted using Annual Reports.

Business model of the big three: the role of land

The business model of volume housebuilders in England has two key characteristics for the purpose of our analysis. First, they engage in speculative development, building houses for a demand they hope will exist once the homes are complete. Second, they tend to prefer a vertically integrated model, meaning that, while they do purchase a significant amount of 'short term' land with planning permission, they prefer to develop their own 'strategic land' i.e. land which they have piloted through the entirety of the development process, from land acquisition (whether via option agreement or freehold) to gaining planning permission, to the building[2] and selling of homes. Under this vertically-integrated, speculative model, housebuilders shoulder much more of the development risk (e.g. housing market downturn, rejection of planning permission) and therefore expect much higher profit margins than housebuilders in other countries (e.g. Barlow and King, 1992).

As the big three repeatedly remind shareholders and analysts in their earnings calls[3], land is foundational to this business model: buying land at the right price, in the right places, at the right time, and gaining planning permission, is fundamental to the profitability of these housebuilders. Indeed, these volume housebuilders see themselves, partly if not largely, as land investment businesses. As then Chief Executive of Taylor Wimpey, Pete Redfern stated:

> *"We said that we weren't just a house builder, we were a land portfolio company, that our main driving goal, our main way of adding value was adding value to the landbank, taking it through the planning process. We still believe that today."*
>
> ***(Pete Redfern, Chief Executive, Taylor-Wimpey, 17 May 2016)[4]***

There are various ways in which housebuilders can secure land. They may purchase sites already with outline planning

2 The big three outsource most of the construction processes, though since 2006 Persimmon have had a modular construction factory ('Space 4') and currently Taylor-Wimpey and Barratt both have timber frame/panel factories.

3 Most of these earnings calls were recorded and transcribed via Fair Disclosure Wire. We accessed these via the University of Reading library webpage. Some of the earnings call transcripts were only available on the respective housebuilder websites. Where a transcript was not available, we listened to the recording (where available on the housebuilder websites). Finally, for a small minority of quarters – particularly in 2013 and 2014 - there was no recording or transcript available at all.

4 The job roles indicated in the transcript references in this report refer to the roles the speakers occupied at the time of the event.

permission in order to feed their short term land bank. They may also gain control of longer-term strategic land by entering into option agreements with landowners. Under these agreements, housebuilders typically promote the site through the planning system and, once permission is granted, the site is sold to the housebuilder at a price determined by an independent valuer, typically at a discount from market value. Finally, housebuilders may purchase sites freehold and pilot these through the development process themselves.

Although purchasing short-term land is an important part of volume housebuilders' business models, gaining control of development land earlier in the process is fundamental. This is because as soon as a piece of land is granted planning permission for residential development, its value can increase dramatically. For example, planning permission for residential use may increase the value of a site from around £20,000 per hectare for agricultural use to more than £5 million per hectare in areas with high house prices (MHCLG, 2018). By bringing strategic land through the planning system, whether by outright purchase of the freehold or via an option agreement subject to the granting of outline planning permission, housebuilders can capture a greater proportion of this value uplift (although they would capture less by way of option agreement).

For this reason, while volume housebuilders require short-term land to maintain production, it is strategic land which generally makes up the majority of the big three's land banks (see Figures 3-5). And it is on strategic land that the housebuilders make their highest margins: through gaining planning permission on the land, bringing it into their short-term land bank, and then building it out, they can capture a larger proportion of land value uplift (for Taylor-Wimpey, between 40%-65% of their short-term land bank originated as strategic land - see Annual Reports, 2011-2017). Further, the type of land preferred by the volume housebuilders has tended to be larger greenfield sites. Although these sites come with significant development costs (e.g. infrastructure requirements and delays from utility connection) they are typically less constrained than brownfield or infill sites. Post-GFC, the big three mostly avoided the latter as they shifted away from urban markets (especially London).

How, then, do the big three gain control of such greenfield strategic land? If the most valuable tangible asset of the big three is their land[5], then the most valuable intangible asset is probably their knowledge of local land markets and planning systems, generated and reinforced by their extensive social networks with landowners and planning officers (e.g. Calcutt Review, 2007; Adams et al., 2012), which allows them to purchase this land. Crucially, these networks and local knowledge also allow them to purchase land off-market which, by definition, exposes them to less competition, in theory facilitating a lower price.

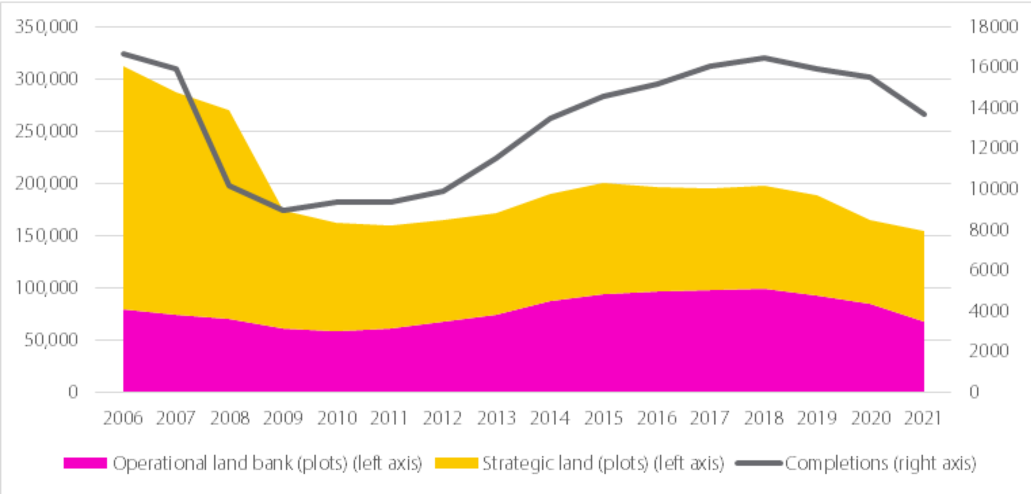
> *"By far the bigger proportion of what we're doing at the moment is closer to the one to one conversations than it's ever been before. The norm is most sellers, unless we have a very strong relationship or an existing ransom strip, or we own part of the site already, most will talk to at least one or two others, to make sure they're not being misled. But there's a big difference between that and a sealed bid competitive process designed to eke out every last penny."*
>
> ***(Pete Redfern, Chief Executive, Taylor Wimpey, 3 August 2010)***

Of course, bringing strategic land through the planning and development process involves considerable time and uncertainty, involving the risk, for example, that strategic land fails to achieve planning permission, or that the market deteriorates. This risk, together with the opportunity cost of holding land, means there is limited incentive for housebuilders to engage in 'land banking', where they hold land purely for the sake of speculation[6] . As illustrated in the graphs below, the big three's land-holdings broadly correlate with their number of completions, implying that the main reason why VHBs buy more land is to build more homes. That said, it is certainly the case that housebuilders benefit from the asset value of the land they own increasing over time, and that (as this report explores) they are incentivised to manage build-out rates to maximise the value of the land component of the price of new homes.

5 For example, in 2020 about half of Persimmon's total net assets consisted of land holdings (Persimmon Annual Report, 2020).

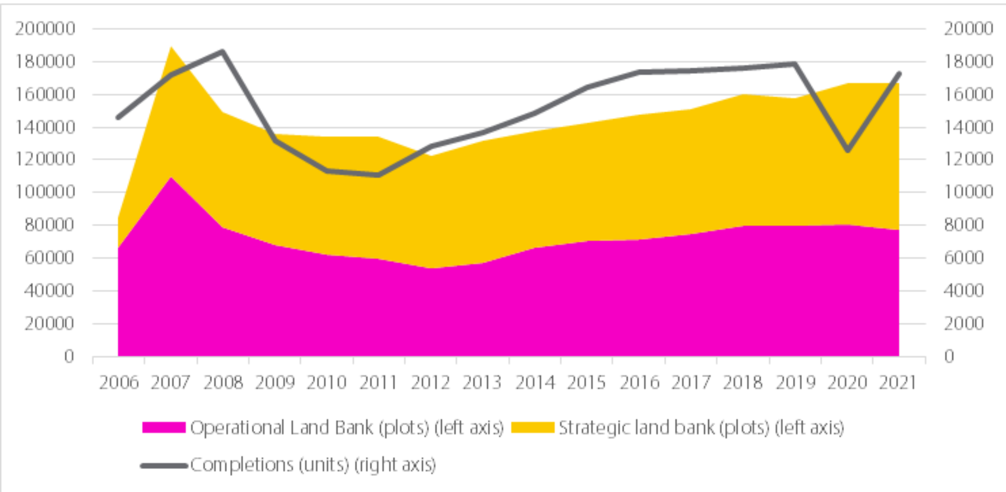
6 This opportunity cost could also be reflected in a lower return on capital employed (ROCE) which, some argue, is one of the key metrics on which investors judge a housebuilder's performance (see Nathaniel Lichfield and Partners, 2017), though others argue against this static interpretation (see Aubrey, 2017).

Figure 3: Persimmon land bank and completions, 2006-2021



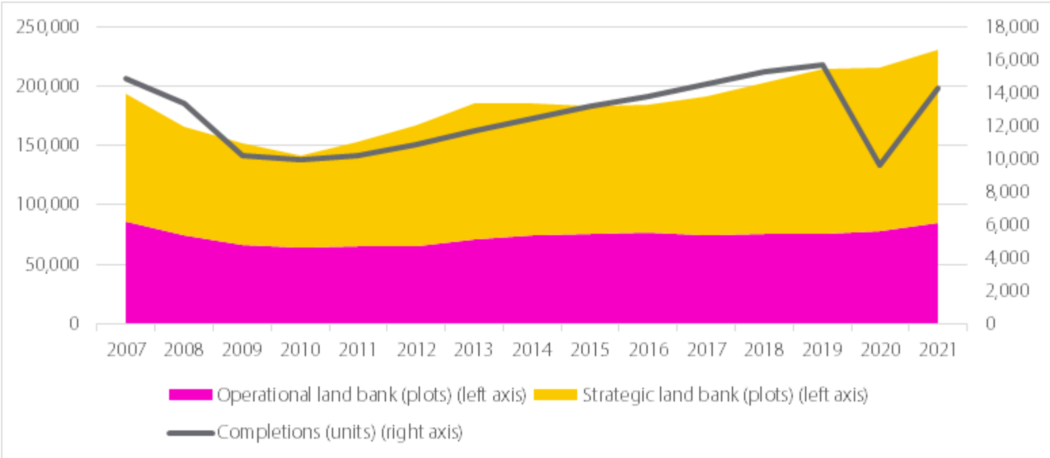
Note: All data taken from Annual Reports. Data on strategic land is provided in acres which we have multiplied by 6 to get the approximate number of plots. This is based on 2016 Annual Report when 16600 acres were equated to c. 100000 plots

Figure 4: Barratt land bank and completions, 2006-2021



Note: All data taken from Annual Reports. Data on strategic land is provided in acres which we have multiplied by 6.5 to get the approximate number of plots. This is based on 2015 Annual Report, when 11100 acres was equated 71600 plots

Figure 5: Taylor Wimpey land bank and completions, 2007-2021



Note: All data taken from Annual Reports. Taylor Wimpey typically provide the number of plots in their total land bank and short-term land bank (both GB only) – the difference between these two we assume to equal their strategic land bank.

Given the significant risk inherent in this speculative, vertically integrated model of housebuilding, we should not be surprised that volume housebuilders go through the occasional period of supernormal profitability. What is striking about the last 15-years though is, first, that the big three survived the GFC and retained their position as the dominant producers of housing in England, despite (at least in the case of Barratt and Taylor-Wimpey), having over-extended themselves in the land market, and, second, that in the subsequent decade or so, the big three went onto report sustained levels of supernormal profits. This is not what we would expect to see a competitive market where firms alone must bear the substantial risk on their balance sheet. To explain this, we need to examine the power that the big three possess both in relation to the market (market power) and the state (structural power).

3. Structural and market power of volume housebuilders

In this section, we introduce two dimensions of power enjoyed by volume housebuilders in the post-GFC period: market power and structural power, showing how these are connected to the role of land in the volume housebuilders' business models. In subsequent chapters, we demonstrate that these forms of power helped shape the terms in which policies were introduced by post-GFC governments that were aimed at supporting volume housebuilder in increasing housing supply. However, it was paradoxically these forms of power that enabled the housebuilders to confound policy expectations by adopting a strategy of prioritising profit margins over volumes.

Market power

The first aspect of power that volume housebuilders potentially possess is in relation to housing and land markets. The 'textbook' definition of (monopoly) market power is *"a firm having the ability to influence the price at which it sells its product(s)"*, with the connotation being that *"the firm uses this ability to hold the price above marginal cost"* such that the *"magnitude of market power is tied to the size of the gap between price and marginal cost at the firm's profit-maximizing level of output"* (Syverson, 2019: 25). While monopoly market power refers to the ability of a housebuilder, or group of housebuilders (oligopoly) to influence the price at which they sell houses, monopsony market power refers to the ability of a housebuilder or group of housebuilders (oligopsony) to influence the price they pay for key inputs such as materials, labour, and notably, land. Discussions of 'market power' or 'market competition' are sometimes presented in neat, binary terms, whereby a market is either competitive or not. In reality though, perfectly competitive markets are mere theoretical abstractions – every market is imperfectly competitive (Robinson, 1969), due, for example, to the widespread existence of barriers to entry. The question is one of degree.

Given new housing supply in England each year only makes up a tiny proportion of total supply (<1%), one might assume that the price housebuilders are able to charge will be dictated by the price of the existing stock (the other 99%), thus precluding any significant price-setting power. However, while it is true that the wider second-hand housing market is a key determinant of new build house prices, the highly localised nature of housing markets means that in particular areas – most likely rural/suburban areas preferred by volume housebuilders – the geographic scale of the neighbourhoods in which people want to live can be quite small. Consequently, it may not take much of an increase in new supply to deflate overall prices, or at least diminish the price difference between existing homes and new-build homes i.e. new-build premium. It is for this reason, that housebuilders look to manage supply in line with absorption rates: rather than building out land as quickly as possible they try and build out at a (typically slower) rate so as not to 'flood the market' (Letwin, 2018; Adams et al., 2009; Payne et al., 2019). As a government note put it in 2016: *"Home building companies see themselves as interdependent because local markets are viewed as having finite capacity at a reasonable return rate"* (DCLG, 2016). Thus, as the Office of Fair Trading (OFT) (2008: 57) recognised, *"homebuilders clearly have some price setting power"*.

The ability of a particular housebuilder to control build-out rates, and thus manage pricing, is conditional not only on the geographic size and boundedness of the market in which they are operating, but also their relative dominance in that local market. The more land a housebuilder controls in a given local market, the greater their ability to be price-makers, thus the greater incentive for them to build out more slowly to maximise prices[7]. This logic is backed up by evidence from both the US and UK showing that local housebuilding markets with less competition (i.e. greater concentration of market share) tend to build out more slowly (Yu et al., 2021; Quintero, 2022). It also aligns with Persimmon's own account of the GFC, that they were able to achieve higher prices in areas where there was less competition in the local land market:

7 Notwithstanding the significant costs/risks associated holding land on the balance sheet.

> *"Smaller Charles Church sites, you're less competition so again you're able to demand slightly better pricing in those locations…"*
>
> ***(Mike Farley, Chief Executive, Persimmon, 21 August 2012)***

How much local market concentration is there? In term of local markets that are concentrated to the degree that they are controlled by a single developer, the answer is not many. In their report, the OFT (2008) found that between 1998 and 2006, approximately 10% of all UK LPAs granted permission to a single firm to build 50% or more of their private new build homes. More recently, Yu et al. (2021: 156) noted that whilst there were *"a few large sites, where the developer has a (near) monopolistic market share of up to 100%"* on the *"vast majority of site locations [10 km radius around a given development], the corresponding developer has a local market share of below 20%"*. There is no public data on the proportion of local markets that are dominated by two or three volume housebuilders, but it is likely to be significantly higher. This could potentially raise issues of oligopolistic behaviour, particularly in the case of volume housebuilders.

Volume housebuilders have two key characteristics which means they are likely to have greater pricing power, and control over build out rates, than SME housebuilders. First, they tend to hold relatively large, greenfield sites, meaning that, almost by definition, they will control a greater proportion of local market supply in those kinds of local markets. Second, because they build out sites across multiple geographies, and have greater access to finance, they are less reliant on a single development for immediate cashflow, allowing them to adjust local build out rates to maximise prices. This wider geographic presence also enables them to diversify development risk in a way that smaller housebuilders cannot.

When it comes to the market power of the volume housebuilders, the overwhelming concern of the academic literature, as partially reviewed above, has been with their monopolistic ability to charge consumers prices above what may prevail in a competitive market. Considerably less attention, however, has been paid to their monopsonistic power to pay their producers less for their inputs than would prevail in a competitive market. In Section 7, using evidence from earnings calls transcripts and modelling of land prices provided by Savills and Neal Hudson of BuiltPlace, we show that this monopsonistic power in the land market has been fundamental to explaining the post-GFC profitability of the big three: despite the prices of new build homes rising over this period, faced with limited competition in local land markets the big three were able to keep the average price of land relatively flat.

Structural power

In October 2008, the Royal Bank of Scotland (RBS), the largest bank in the world, was running out of money, but the then Chancellor of the Exchequer Alistair Darling judged the bank was too big to fail: *"If the markets could give up on RBS, one of the largest banks in the world , then all bets on Britain's and the world's financial system were off"* (Darling, 2011: 153). The state poured capital into the firm, and as of 2020, the UK taxpayer was judged to have made a net loss of £32 billion on the RBS bailout alone (Crow, 2020). The reason why RBS was bailed out was because it possessed structural power in relation to the state. We argue that the same could be said of the housebuilding industry.

Without delving into theoretical detail[8] we can broadly define structural power as the power that a firm, or group of firms, possesses in relation to the state as holders of capital in a particular economy and society (Culpepper, 2015). By threatening to undermine a service that society is dependent upon (e.g. the banking sector), a firm or group of firms can coerce the state into providing it support. Structural power can be usefully contrasted with instrumental power (Babic et al., 2022), which emphasises the more tangible ways in which individual agents can wield power through meetings with government, membership of government institutions etc. The two forms of power are also likely to be mutually reinforcing, so while our emphasis is on the structural dimension, we also identify instances where the big three potentially exerted more instrumental forms of power.

8 Our forthcoming academic papers will do this, or see Culpepper (2015) for a general review of the concept as we operationalise it.

To understand why the housebuilding industry wields structural power, we need to think first from the perspective of the state, and then from the perspective of housebuilders. In the decades following the second world war, there was a largely mixed model of housing provision whereby the state would supply a large proportion of Britain's new housing supply each year. However, this changed following the decay of the post-war consensus in the 1970s and the rise of neoliberal ideas concerning the role of the state in relation to markets. For housing policy, the main implications were twofold. First, there was an almost complete reorientation of housing subsidies from the supply-side (capital grants for social housing) to the demand-side (housing benefits), which dramatically reduced the levels of public housebuilding, leaving a deficit in overall supply which the private sector has since failed to fill (e.g. Bramley, 2007). Second, there has been sustained tenure bias towards home-ownership (over private/social renting), in both material (e.g. taxation) and symbolic terms (e.g. Gurney, 1999).

These ideological and policy moves represented a ceding of power and direct influence over the delivery of much of the UK's new housing supply by the state. Housebuilding and rates of delivery have, since the late 1970s, largely been under the control of a dispersed network of private landowners, housebuilding firms and their advisors who lobby for adjustments to the planning policy environment to support their business activities either directly, or via their industry body, the Home Builders Federation (HBF). This has contributed to a contemporary context in which approximately 80% - 90% of new homes delivered annually since 1990 have been from the private sector housebuilding industry (with the remaining share largely accounted for by 'third-sector' housing associations), compared with broadly 50% - 60% in the 1960s and 1970s (ONS, 2022).

These structural features of the UK housebuilding industry, combined with the trend towards industry concentration, means that the state is reliant on a relatively small number of private businesses to supply a product that is of significant importance economically, politically and symbolically. Private supply is important symbolically because of the discourse of the home owning democracy which has shaped housing policy of successive Conservative and Labour governments as converting individuals into homeowners supposedly gives them a stake in society (e.g. Gurney, 1999). Economically, maintaining a sufficient supply of new homes has also been framed by policymakers as a crucial component of economic growth, jobs, and tax revenues (e.g. DCLG, 2013). Finally, housebuilding is also important politically because, since the two Barker Reviews in the early 2000s, undersupply of housing has been framed as being a key contributor to long-standing affordability issues (Bramley, 2007).

We can view structural power of housebuilders over the state in two main ways, both of which stem from economic, political and symbolic importance of new housing supply. First, they possess productive capacity – labour, works in progress, local knowledge, finance – without which there would be a large decline in annual supply, at least in the short-run. The second relates to their ownership or control of developable land. Because developable land is finite (land release by the planning system notwithstanding), and spatially fixed, the ownership of a piece of land (whether by absolute control, or a contractual agreements with landowners) confers a monopoly over that particular space: if a landowner does not build out that specific piece of land then nobody else can. This means that if a local authority wants to maintain market housing supply, or secure Section 106 contributions that often come with the building out of a planning permission, or even just ensure that a site is built out rather than mothballed (with all the associated negative externalities), then a significant proportion of them will be largely dependent on a select group of vertically integrated housebuilders (or landowners) to achieve that in particular local markets.

Housebuilders of all sizes potentially wield both forms of structural power, but there are two reasons why the largest housebuilders' structural power was likely to have been greater in the post-GFC period. First, simply by virtue of controlling a greater proportion of land and productive capacity, they will also have greater stocks of both forms of structural power, meaning they are more likely to be perceived as 'too big to fail' or being capable of withholding land from development. Second, because of their superior market power, plurality of sites (and therefore cashflows) and access to finance (see Sections 2 and 3), they are in a stronger position than smaller housebuilders to withhold land from development or manage supply, thus enhancing their ability to exert both forms of structural power. In the following sections, we seek to demonstrate how the big three signalled this structural power to secure concessions from the state that were crucial to building their dominance today. Before doing so though, we need to add two important caveats to the above discussion of structural power. First, we must recognise that structural power acts only as a 'signalling device' (Hacker and Pierson, 2002) from firms to the state, and hence, it is up to policymakers how they interpret or respond to these signals. If policymakers perceive firms as wielding structural power, and are willing to introduce policies that accommodate such power, then we can think of those firms as exerting structural power (Bell and Hindmoor, 2014). Second, we must recognise that the state also has the potential for structural power over firms because, through changes to the planning system, building regulations and taxation, it is the state that largely sets the regulatory rules by which 'the market' has to abide (Culpepper and Reinke, 2014). The state can exert this power such that housebuilder interests are protected or challenged. In sum, structural power, as we understand it, is not a one-way street, nor a static, perennial feature of state-market relations. It is, rather, dynamic and responsive to the prevailing ideational and political environment.

Clearly, the wider political environment is of crucial importance here as evidenced in the change in political 'mood music' regarding volume housebuilders in recent years. The structural conditions of housing delivery have not changed significantly, but the willingness of politicians and policymakers to treat volume housebuilders particularly favourably has declined as the political and ideational context has evolved. This has resulted in a policy shift from an environment that has been largely supportive of volume housebuilders and did little to challenge their structural power, to a contemporary situation where there are increasingly policy moves that are designed to discipline and challenge the structural power of volume housebuilders (some of these are discussed in the opening paragraphs of this report). We return to the question of shifts in structural power relations towards the end of the report.
Much of the rest of the report focuses on the structural power of volume housebuilders and the related policy support provided to them by state actors. In particular, it is the big three with which this report is concerned.

4. The big three and the Global Financial Crisis

Volume housebuilders were in serious trouble in the immediate aftermath of the GFC. In the context of the 2007-8 mortgage credit crunch, demand for new homes was constrained and the three housebuilders saw the value of their land banks collapse (Ball, 2010). Taylor-Wimpey and Barratt were both forced to renegotiate their loan covenants because their cashflow had dried up (Reuters, 2009; Pignal & Sakoui, 2008). It was far from clear at the time when the wholesale money supply would re-start to enable mortgage lending and therefore release pent-up demand for housing. Things certainly looked bleak for housebuilders.

However, it is important not to exaggerate the plight of the big three. All three maintained their land banks, with only Taylor-Wimpey selling off about 10% of its land[9] . Further, all three were profitable again by 2010 – with Persimmon reporting profits even during the depths of the GFC (see Figure 1) – and by 2015, were reporting gross profit margins in excess that of their pre-GFC (2007) levels. Such a recovery is impressive, but even more noteworthy is the fact that they were able to sustain this. In every year from 2016-2021, the big three reported gross profit margins in excess of their 2007-levels, pre-GFC. These profits have flowed back to shareholders in the form of dividends and share-buy backs, and allowed the big three to accumulate significant cash-reserves which puts them in a strong position currently. But what drove these profit margins?

Undoubtedly, the sustained house price inflation observed since the GFC has been a fundamental factor driving the profitability of the largest housebuilders: since mid-2011, house prices have increased every year, powered by declining interest rates (and constrained supply), which also lowered the borrowing costs of the big three, at least when they had debt. However, with the exception of the post-pandemic boom, in historical terms this price inflation has been relatively 'modest' – adjusted for RPI, house prices only recently returned to their pre-GFC peak in 2022 (UK Housing Observatory, 2023) - and certainly insufficient to explain the sustained super-normal profitability of the big three. Rather, in the sections below, we argue that the sustained supernormal profitability of the big three cannot be fully explained without incorporating their structural and market power, which have allowed them to secure concessions and support from the state, whilst keeping down the price they paid for land.

Margins over volumes

With demand rapidly contracting, and profit margins shrinking, the first step for the big three was to reduce supply. At the local scale, this involved slowing down the rate at which sites were built out to maintain prices – *"We're trickling out the build to match what we're currently selling at."* (Pete Redfern, Group Chief Executive, Taylor Wimpey, 13 January 2009). This option that was more feasible for the big three than smaller housebuilders, given their superior market power, as discussed below:

> *"depending on the competition in one area, if there's four or five competitors there's obviously a lot more price pressure. If you have a site on its own, Charles Church will have less competition, because they have less price pressure…"*
>
> ***(Mike Farley, Chief Executive, Persimmon, 21 August 2008)***

At the national scale, meanwhile, it involved a dramatic, and ultimately sustained, shift away from ramping up volumes to increasing margins:

9 Between 2007-2010, Taylor Wimpey reduced its land bank by 53k plots while completing 34k units, implying a net selling off of 19k plots – approximately 10% of its landbank in 2007 (see Annual Reports).

"It used to be about volume, I think, in the olden days, in a different market. It's now very firmly about did we hit the numbers, did we deliver the prices that we expected."

(Mark Clare, Chief Executive, Barratt Developments, 23 September 2009)

"I want to re-emphasize this, our focus is on growing those margins, so we're not out for volume for volume's sake. And I think if you follow Persimmon, it's not our sales that we focus on, it is those margins that we are focusing on. So that is a clear direction of the business and we will continue that trend."

(Mike Farley, Chief Executive, Persimmon, 5 July 2011)

"we do believe, compared to our history, we sold too fast in the past. It did drive a lower margin. We don't have to cut our business for the next two or three years to drive a sales rate of 0.8 or 0.9; 0.6 or 0.7 is okay."

(Pete Redfern, Group Chief Executive, Taylor-Wimpey, 5 August 2009)

Indeed, it is notable that not only did the big three reduce their completions in absolute terms, by about a third compared to the pre-GFC peak (see Figures 3-5), but they also reduced their volumes relative to the overall industry – as reflected in their declining market share in the bottom of the housing market (2008-2010) (see Figure 2).

It is worth dwelling for a moment on why these two objectives are seen as being in tension with each other: why can housebuilders not increase margins and significantly increase volumes? Ultimately, the answer comes down to four key factors. First, because each local market has a finite local absorption rate (see Section 3), if housebuilders want to expand output then they must either increase sales rates on their existing sites, or they must increase the number of outlets (and sites) they take on overall. The shortcomings of the former approach is that building out more quickly compromises prices. As Mark Clare, Group Chief Executive of Barratt, put it "*the challenge of putting more volume out is -- on so few outlets is that you do start compromising the prices you charge*" (23 September 2009). On the other hand, the problem with opening more outlets (and sites) is that they have to then spread themselves geographically, thus incurring significant diseconomies of scale. Presumably for this reason, we can see from Figure 6, that the big three – or at least Taylor-Wimpey and Barratt – have avoided expanding their number of outlets, despite their much improved sales rates post Help to Buy.

Second, increasing volumes also heightens the inventory risk of the VHBs, specifically the risk that, come a housing market downturn, they are left with land and housing stock they cannot sell at prices required to hit profit expectations. After being burned once in the GFC, the big three were acutely aware of the cyclicality of the housing market, and this meant keeping tight control over volumes, as Pete Redfern recognised in 2016:

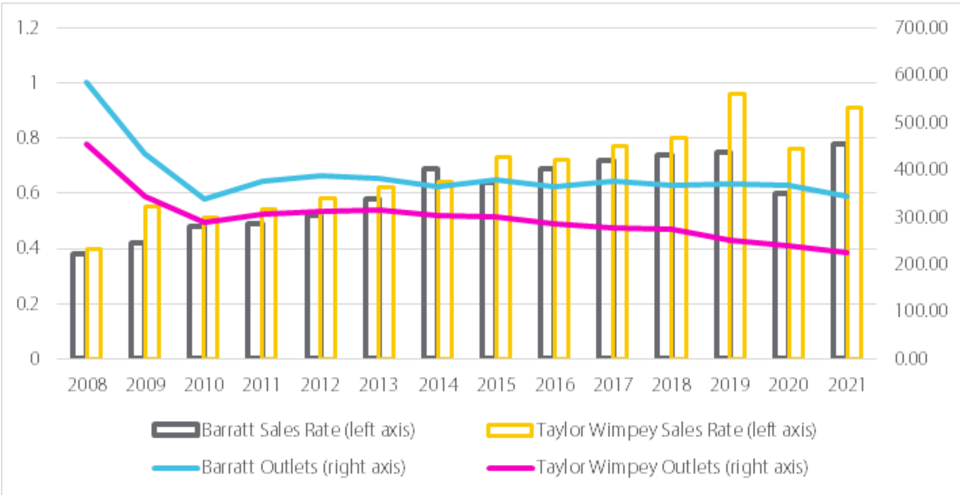
"House building is still a cyclical industry, that hasn't changed. The cycle may be slightly different… but targeting maximum growth each year will lead to bad decisions sooner or later."

(Pete Redfern, Group Chief Executive, Taylor Wimpey, 17 May 2016)

The third explanatory factor relates to the land market. If the big three want to expand volumes then this necessarily involves acquiring more land (and labour[10]). Not only does this expose them to greater inventory risk but it also potentially exposes them to higher land prices and land at lower margins. This is because the supply of land is relatively inelastic, so increased demand for land will potentially feed through into rising land prices, thus squeezing the margins of the big three. This latter logic implies that certain sections of the land market are oligopolistic – something we discuss in Section 7.

10 The supply of labour, and particularly construction workers, is of course a limiting factor on overall new supply, especially given the labour intensity of the housing production process. However, there is little evidence that this was a major constraint in the period we studied. The number of construction jobs, and construction wage levels, was below GFC levels until 2019, implying that there was significant labour market capacity if the housebuilding industry wanted to expand supply (Migration Advisory Committee, 2023).

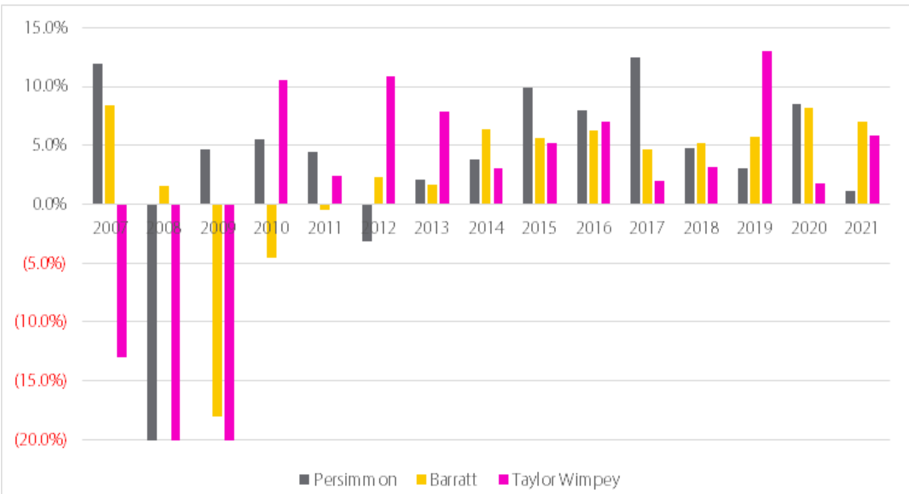
Figure 6: Sales rate and number of outlets for Taylor Wimpey and Barratt, 2008-2021



Note: All data points taken from Annual Reports. Data was not available for Persimmon.

Finally, expanding volumes means reinvesting profits back into the business, leaving less for shareholders. As shown in Figure 7, since the GFC, the reinvestment rate for all three firms – that is the total capital expenditures in a year divided by the total earnings before interest and taxes – has rarely exceeded 10% and has only risen very modestly in line with their overall profitability. Instead of investing profits on research and development or expanding production, as the government repeatedly urged them to do, the big three used these profits to pay off their debts, build up cash reserves, and reward their shareholders via increased dividends and share buy-backs (see Archer and Cole, 2021). The senior management were encouraged to do so by their Long-Term Incentives Plans (LTIP), whereby their bonuses were linked to the amount of capital returned to shareholders (Williams, 2017).

Figure 7: Reinvestment rate for big three, 2007-2021



Note: All data from Refinitiv. Reinvestment rate = total capital expenditures in a year divided by the total earnings before interest and taxes. For illustrative purposes, reinvestment rates are not shown below -20%.

In sum, as demand evaporated during the GFC, the volume housebuilders faced a dilemma. They could build out their land bank (or sell some land off), thus realising significant losses in the process; or they could hold the land back and reduce supply in the hope that the margins on new build housing would pick up again. As we have shown, all three volume housebuilders opted for the latter option of reducing supply, while selling off little, if any, of their land bank. And they continued to pursue this strategy of prioritising margins over volumes for the next decade, with enormous success. That they were able to do so is no doubt partly attributable to their acumen and luck, but as we show below, this level of profitability would not have been achieved and sustained without state actors perceiving their structural power, combined with their monopsonic land market power. Below, we discuss how the big three wielded these forms of power to increase both the value of their developments, and the proportion of that value they captured compared to landowners and the state.

5. Planning renegotiation, liberalisation and structural power

The first major way in which the state intervened to support the housebuilding industry was at the local level, initially through the contracting of social housing, and re-planning of sites to include more houses and fewer apartments; and latterly through the renegotiation of Section 106 agreements and the liberalisation of the planning system which seems to have particularly benefitted the largest housebuilders. Some of these regulatory interventions were arguably win-win for the public and housebuilding industry, others could better be described as a transfer of value from the public to the largest housebuilders and their shareholders. The purpose of this section is not to interrogate the efficacy of these policies or to examine them and their effects in detail but rather to explore their significance for the survival and subsequent profitability of the big three and to consider the role that their structural power is likely to have played in bringing about these policies.

Social housing, renegotiations of planning obligations and re-planning of sites

Affordable housing is now generally considered to be a drag on development viability due to the lower values such homes command in comparison with private homes, particularly in the absence of grant funding for Section 106 schemes. However, in the aftermath of the GFC the volume housebuilders brought forward the affordable housing elements of their schemes because these homes represented guaranteed sales to Registered Social Landlords supported by government grant funding that was then still in place. Affordable housing was therefore a source of much-needed cashflow in a very challenging trading environment:

> *"I think in line with everybody else, the percentage of our output that's affordable is continuing to increase. And we will continue to bring forward the affordable piece of any site where we can because, effectively, it's an order on hand."*
>
> *(Mark Clare, Group Chief Executive, Barratt, 10 July 2008).*

> *"It's good business for us, that's -- one thing we like, the government -- one of the new initiatives they've put forward is that they will now give 60% of their grant funding upfront on day one. So, they're helping the industry by providing a lot of cash from day one. So that's good for us in investment terms, so that's a great benefit for us. Again, hence the other reason why we are very pleased to able to push on with the affordable housing because it is very good cash flow for us."*
>
> *(Mike Farley, Group Chief Executive, Persimmon, 27 October 2008)*

> *"You'll see on the affordable completions quite a significant year-on-year fall of 45%. That reflects particularly abnormally high levels in the first half of 2008. And it was an unusual first half because we, probably slightly ahead of but not dissimilar to most of the industry, were pushing affordable volumes in the first half to drive out cash."*
>
> *(Pete Redfern, Group Chief Executive, Taylor Wimpey, 5 August 2009)*

Importantly, this pivot to affordable housing was only possible because the big three possessed these housebuilding contracts, and owned the land on which the affordable housing was to be built:

> *"And if I could just add on the HA that you will see in the -- it's a good margin business and the reason it's a good margin business is because we bring the land to places desired. And the reason -- and that in a way is a further advantage because undoubtedly there will be more affordable homes built in this country over the next few years, and they've got to be built somewhere. And generally it's on land which we own and so I think we're well placed to continue to grow our volumes."*
>
> ***(John White, Group Chairman, Persimmon, 21 August 2008)***

At the same time, many housebuilders sought to revise the design and typology of planning permissions to improve viability, mainly by adjusting the housing typology to suit the new environment:

> *"Through the downturn, our divisional and regional teams have played an important role in site optimization through re-planning and renegotiation. During the last financial year, we achieving around 70 re-plans, and have identified a similar number of further opportunities this year."*
>
> ***(Mark Clare, Group Chief Executive, Barratt, 23 September 2009).***

> *"But what we have been revisiting as we've been revisiting on the current sites is also revisiting on the strategic sites to get those planning consents in the right shape, to get the planning -- to get the 106 agreements back into the right positions, to get the phasing of those payments right. So that's where we've been focusing our work in the last 12, 18 months."*
>
> ***(Mike Farley, Group Chief Executive, Persimmon, 25 August 2009)***

At this time, planning obligations could be voluntarily renegotiated if the local authority agreed to do so. Alternatively, a developer could submit an application to remove or vary an existing planning obligation, but only if the obligation was more than five years old and the grounds for removal or variation were limited.

However, the government introduced new regulations in February 2013 that meant that an application could be submitted to remove or vary a planning obligation that had been entered into prior to 6 April 2010, thereby shortening the time period from five years. Furthermore, the government introduced a new process via the Growth and Infrastructure Act 2013 that enabled developers to apply to a local authority to change the affordable housing element of an existing planning obligation on the grounds of viability (these provisions expired in April 2016). The combined effect of these changes was to make it easier for housebuilders to have existing planning obligations reviewed and changed in their interests, with a particular emphasis on affordable housing viability.

There have been various reports commissioned by the government examining the incidence, value and delivery of planning obligations in various snapshot years before and after the GFC (Crook et al., 2010; McAllister et al., 2014; Lord et al., 2018, 2020). These indicate a significant increase in the number of planning obligation renegotiations in the years following the GFC. The main reason for developers wishing to renegotiate in the period 2011-2012 was that development viability had been impacted by the GFC (McAllister et al., 2014). The renegotiations tended to relate to the affordable housing element of planning obligations, but also included requests to change time limits to implement planning permissions, introduction of a claw-back mechanism (i.e. to reduce contributions subject to a later increase should viability improve within a specified period) and introduction of staged payments. Of those reported by the research respondents, almost all of the requests to vary a Section 106 agreement in this period led to a change (McAllister et al., 2014: 29).

Updated research by Lord et al. (2018) covering planning obligations in 2016-2017 found that 65% of local authorities who responded to the survey renegotiated a planning obligation – a further increase from 2011-2012. Adjustments to the affordable housing element was one of the most common reasons for renegotiation. However, requests were also made to vary the housing type of residential developments to better suit market demand. Overall, this research suggests that *"renegotiation became a more common feature of planning practice in the immediate aftermath of the 2008* *downturn usually relating to the question of revised development viability*" (Lord et al., 2018: 58).

The above cited research does not differentiate between type of developer and size of site. However, taking into account what we know about the concentration of the housebuilding industry and the potential for oligopoly in the local land markets preferred by volume housebuilders, combined with evidence from the earning call transcripts of the big three, we can infer that these local renegotiations represent instances of structural power. This is derived from the reliance of local authorities on these housebuilders to deliver schemes that assist them in meeting their policy objectives and which provide contributions to meeting housing needs (including affordable housing) as well as infrastructure provision.

To be sure – there is a limit to the extent that housebuilders can wield this power at local level. Local authorities, after all, have monopoly control of development rights and so will not be minded to grant planning permission unless the development takes sufficient account of local planning policy or, potentially, where there is considerable local political opposition. However, there is always the option for housebuilders to go to planning appeal, where there is the potential for the Planning Inspectorate to find in favour of the appellant on behalf of the Secretary of State.

Nevertheless, the power of volume housebuilders over housing supply and the payment of developer contributions was certainly a considerable factor in local negotiations, particularly given the cuts to local authority budgets that were ongoing at the time (e.g. Institute for Government, 2020):

> *"I think a combination of a real local and national need for funds to drive any project that needs to happen, so actually the sort of contributions we're making through Section 106s, have become much more important for local authorities who are very starved of cash, which is making for a better planning environment, and genuinely a better dialogue between ourselves and local authorities and planners."*
>
> ***(Pete Redfern, Group Chief Executive, Taylor Wimpey, 3 August 2011)***

> *"We're looking to re-plan some of our sites. We're looking to take off apartments, the apartment market still is difficult, and replace it in certain cases with more traditional houses; two and three storey houses which we find there's still good demand for. We're negotiating with Local Authorities about Section 106 payments in the planning consents and I think we're getting a favorable response on that front, particularly over the phasing of some of these payments on the larger sites. The Local Authority are aware, if they are going to get the affordable housing that they want in their region they are going to have to be flexible on that. And if there are large capital sums to be paid up front, they may not get those houses. So we are getting a favorable response to that and continue that negotiation."*
>
> ***(Mike Farley, Group Chief Executive, Persimmon, 21 August 2008)***

> *"Yes, the debate as to what the local authority thinks is not viable and what we think is not viable will clearly be different. But certainly, an impaired site is not viable because it's making no money so why would we carry on? We can clearly stop building on that site and say well, look, it's under water. I think that's where the debate with local authorities is, but we have had a very sensible debate in a lot of cases. I think it's more when the local authority says, that's what you signed up, you're stuck with it, that's when you go well, to be honest, we're not accepting that any more. We now believe we have the right to appeal that, and I think that's very helpful."*
>
> ***(Mark Clare, Group Chief Executive, Barratt, 12 September 2012)***

NPPF and the 'tilted balance'

Following the election of a Conservative-led coalition government in 2010, there was an explicit strategy to reform the planning system so that it could generate construction-driven growth (HM Treasury & BIS, 2011). Enabling the housebuilding sector to deliver more housing was a key part of this. The government introduced a new National Planning Policy Framework in England in 2012 (NPPF) which included policy wording intended to make it easier for speculative planning applications to be granted consent in circumstances where local authorities were unable to demonstrate a sufficient supply (five-years' worth) of deliverable housing land.

The initial drafting of the 2012 NPPF was done by a specially-appointed external Practitioners Advisory Group (PAG) which comprised four persons including Peter Andrew who at the time was UK Land and Planning director at Taylor Wimpey – a clear example of instrumental power. The government's final draft of the NPPF was very similar to that prepared by the PAG (Rutter, 2012: 13). There is further evidence from the earning calls transcripts regarding the orientation of planning reform in this period towards serving the interests of larger housebuilders. For example, Nicholas Wrigley (Chairman of Persimmon) commented in 2012 that:

"NPPF, the planning framework, is working well. Early days yet, some local authorities are more positive than others but nevertheless we think in the long term, the presumption in favor of development must be good for the industry and good for Persimmon particularly on the strategic landbank."

(Nicholas Wrigley, Chairman, Persimmon, 21 August 2012)

The requirement to plan for and maintain a rolling five-year supply of deliverable housing land existed previously (CLG, 2006: 5), but the 2012 NPPF strengthened this and imposed a requirement for local authorities to plan to meet its full objectively assessed need for housing. This led to many debates regarding the precise level of housing need and consequent housing and housing land requirements in local authority areas[11]. This helped to create an environment whereby market-based calculative practices were embedded in planning, which came to resemble a financialised land-release system (see Bradley, 2021, 2022 for a critical discussion). The interaction between the renewed focus on housing numbers and the strengthening of the pre-existing five-year housing land supply requirement constituted the so-called 'tilted balance' in favour of sustainable development (Savills, 2021), which remains in altered form in the most recent version of the NPPF (published in 2021).

The new 'tilted balance' in the 2012 NPPF created a national planning policy environment that was favourable to land promoters and housebuilders. In particular, it reduced planning risk for sites and development that could be argued to be 'sustainable' in NPPF terms, but which were not supported in local planning policy and which were in local authority areas that were struggling to demonstrate a sufficient supply of deliverable housing land. This, in theory, increased the chances of local authorities granting permission to planning applications for speculative sites. Even if a local planning authority refused a planning application on such land, the developer could appeal the decision in the hope that the Planning Inspectorate would agree with them that the NPPF provisions in combination with the undersupply of housing land would override local objections.

Because of the expense incurred via the planning appeal process, it favours larger housebuilders and businesses who specialise in adversarial appeals-led planning strategies such as land promoter Gladman Land. Indeed, in research conducted by McAllister et al. (2022), land promoters indicated that the 2012 NPPF was a key catalyst for the growth and maturation of the specialist land promotion sector. Research by Planning Resource that examined the most frequent and most successful housing appellants annually over the period 2012-2019 found that the top four most frequent appellants were Gladman Land, Barratt, Persimmon and Taylor Wimpey (Wilding, 2019).

11 In plan-making, the calculation of housing need is conducted to identify the number of homes that a local authority should plan for in its area. This is then converted into a housing requirement set out in the local plan. The requirement figure could be less than the identified need figure if there are constraints within the local authority area, such as expanses of designated green belt or national park.

Table 2: Most frequent major housing appellants, 2012 – 2019

Rank	Firm	Total Appeals	Appeals Allowed	Success Rate*
1	Gladman Land	197	94	48%
2	Barratt Developments	64	37	59%
3	Persimmon	63	37	61%
4	Taylor Wimpey	56	39	71%
5	McCarthy & Stone	46	28	61%
6	Redrow	46	28	62%
7	MJ Gleeson	41	23	58%
8	Galliford Try	39	27	71%
9	Churchill Retirement Living	35	17	49%
10	Bloor Homes	33	21	64%

* Takes account of appeals partially allowed

Source: reproduced and adapted from Wilding (2019)

According to the Planning Resource research, almost nine out of ten of Gladman's appeals included 'housing need or supply considerations'. Some land promoters, such as Gladman, tend to prefer to promote greenfield sites of around 100 units or more with the intention of selling them on to the larger housebuilders[12] (McAllister et al., 2021). 66% of the appeals by Barratt involved discussions of housing need and land supply, a direct consequence of the 2012 NPPF according to Philip Barnes, then-group land director at Barratt Developments who was interviewed for the Planning Resource research. Two in three of Persimmon's appeals involved housing numbers and land supply considerations with housing need and land supply being the most common issues.

Although the Planning Resource data is only focused on appeals rather than applications determined locally without recourse to appeal, it does suggest that the post-2012 NPPF environment favoured larger housebuilders. This is because it worked in the interests of companies, such as Gladman, who specialise in promoting land to sell to larger housebuilders and also because it is larger housebuilders (with their extensive land banks and resources) who were well positioned to pursue speculative planning applications for the kind of sites on which the NPPF (2012) had reduced planning risk.

Furthermore, there is anecdotal evidence to suggest that some local authorities have a preference for dealing with a smaller number of larger housing sites over a larger number of smaller housing sites. There are various possible reasons for this. These include the need to deliver housing at a scale sufficient to enable the delivery of supporting infrastructure, and/or the desire to concentrate resources and political risk into a smaller number of locations. It is also likely that a significant incentive for local authority preference for larger sites is the NPPF requirement to plan for a sufficient supply of housing land. Larger sites with larger numbers of units can obviously make a larger difference in housing land supply calculations.

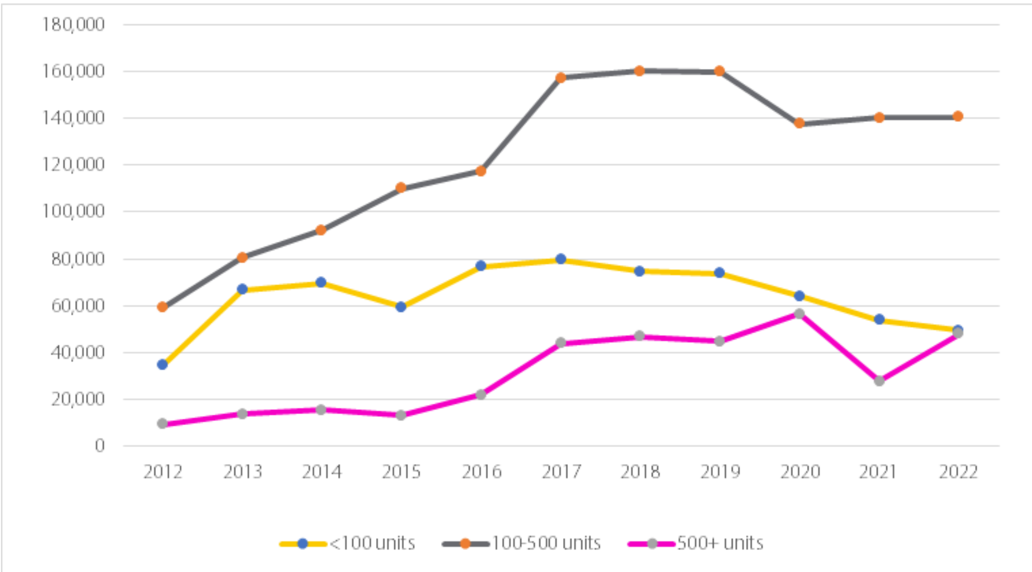
However, local authorities are then clearly reliant on such large sites delivering the homes required to meet identified housing need. If consented sites do not deliver homes at the expected speed and volume, this leaves local authorities vulnerable to the effects of the Housing Delivery Test which was introduced into national policy in 2018.

12 Barratt announced in January 2022 that it had acquired Gladman for £250 million. The accompanying press release stated that *"Gladman will operate as a stand-alone business...[and] will continue to supply land to third parties as well as provide an additional route for Barratt to source strategic land and help to promote Barratt's existing strategic land portfolio"* (Barratt Developments Plc, 2022).

This test requires local authorities to compare actual housing delivery over the previous three years with their housing requirement over the same period. If delivery has been below the housing requirement, then various sanctions can be imposed, including applying the 'tilted balance' in decision-making in circumstances were there has been a significant shortfall in housing delivery.

This bias towards larger sites, and thus larger housebuilders, is clearly evidenced in the transcripts. "*It is patently clear*" Jennie Daley, Chief Executive of Taylor Wimpey, recently observed "*that local authorities have a preference for large sites*" (25 May, 2022). Likewise, Jeffrey Fairburn (Group Chief Executive) from Persimmon reported "*a tendency for sites over more recent times to be a bit larger. That's the way the planning system has tended to push the market*" (5 July, 2017). It is also backed up by the available data on planning permissions granted. As demonstrated by Figure 8, below, post NPPF 2012, the number of planning permissions granted for large sites (>100 units) increased much more rapidly than for smaller sites (<100 units).

Figure 8: Planning permissions granted for different site sizes post NPPF 2012



Source: Savills Research, Glenigan

These post-GFC changes to the planning system and their impact on the strategic land banks of the larger housebuilders are indicative of the structural power enjoyed and effectively signalled by these firms in this period. They were well positioned to influence emerging national policy in their favour as there was a receptive audience among policymakers and politicians, as well as to take advantage of the resultant opportunities to deploy their considerable resources to secure consents on larger sites and purchase such sites from land promoters whose activities the new regime favoured. In Section 7, we discuss how these planning reforms conferred (land) market power on the largest housebuilders but, first we must recognise the other policy area through which the largest housebuilders exerted structural power: mortgage market support.

6. Mortgage market support and structural power

Whilst renegotiation of Section 106 contributions and adjustments to the national planning policy environment reduced planning risk for housebuilders, they still ultimately needed people to buy their homes, and at a price that did not fall well below what they had assumed when buying land pre-GFC. For this to occur, it was crucial that mortgage lending on new-build properties returned to its free-flowing ways. But banks were wary of lending on these new-build properties because of their tendency to depreciate in value via the rapid erosion of the new build premium (the difference in value between new-build and second-hand homes) (Hudson, 2021). The banks were also reluctant to lend to first-time buyers - a key target market for the big three - because of their lower levels of equity. To address these concerns, the state stepped in to incentivise bank lending via mortgage market support schemes.

Mortgage market support schemes typically fall into two broad categories. The first category, most commonly associated with Fannie Mae and Freddie Mac in the US, are mortgage guarantee schemes, where the government effectively insures lenders against credit risk associated with lending to borrowers. The second category are equity loan schemes, where the government provides home-buyers with a loan to cover part of the deposit, which the homebuyer then pays back (typically at subsidised interest rates), thus allowing the homebuyer to access mortgage financing. In the GFC and its immediate aftermath, it was largely the second category of support scheme that was preferred in the UK (Whitehead & Williams, 2020). Of particular value to the housebuilding industry were mortgage market support schemes that were targeted at new-build properties. In addition to providing support for mortgage lending in general, these also shifted a greater proportion of demand towards the new-build stock, with the likely effect of inflating the new-build premium. It is these, summarised in Table 3, on which this section focusses.

Table 3: Summary of mortgage market support schemes targeted at new-build development

Policy	**Timescale**	**Bias towards big three?**
HomeBuy Direct	2010 - 2013	64% funding went to the four largest housebuilders, and was explicitly designed with largest housebuilders in mind (Griffith, 2011)
Firstbuy Direct	2011-2013	47% of Firstbuy funding went to the big three (Griffith, 2011)
Newbuy	2012-2013	Policy design strongly disadvantaged developers of <100 units p.a. (Igloo Regeneration, 2012)
Help to Buy	2013 - 2022	Big three accounted for 40% of all Help to Buy sales between 2013-2017 (MHCLG, 2018)

New Labour government post-GFC

If we limit our attention to these UK mortgage support schemes that were only applicable to new-build properties then the only scheme introduced by the Labour government post-GFC was Homebuy Direct. Announced and introduced in 2008, and running until 2011 (Griffith, 2011), the scheme had three main characteristics. First, it was relatively limited in its scope, only valid for first-time buyers earning less than £60K per annum (House of Commons, 2009). Second, it involved a sharing of risk between developer and state, who each contributed 15% of the equity loan (House of Commons, 2009). The third characteristic, which stems from the previous two, was that it was relatively small-scale, with the state lending a total of £213 million to about 9,000 households (Griffith, 2011).

What was the logic behind this scheme, and what role did the perceived structural power of the VHBs play in the scheme's design? According to the impact assessment for the scheme, the stated objectives were twofold:

"to a) Assist first time buyers by providing an affordable LCHO option; and b) Ensure the Government is well-placed to meet the country's housing supply needs in the longer term – by stimulating housing market activity and helping to retain capacity in the housebuilding industry."

(DCLG, 2008: 23)

The impact assessment went onto propose that through increasing demand for new-build properties, and potentially inflating the new-build premium, the policy would incentivise developers to build out faster than they would otherwise:

"HomeBuy Direct would provide a much needed transactions boost to participating developers through additional sales at potentially higher values. It would also enable them to build out some sites on which they have currently stopped or slowed development."

(DCLG, 2008: 31)

The two key forms of structural power discussed in Section 3 can therefore be inferred from this statement. First, there is the objective of *"slowing the rate of capacity loss by stimulating some additional construction activity, both in the short and long-run"* (DCLG, 2008: 31). Second, there is perceived to be the need to prop up the demand-side so as to ensure that developments are built out, with the explicitly stated risk (or benefit) that this will potentially inflate the new-build premium.

The most striking aspect of the impact assessment, and subsequent policy design, was the express targeting of the largest housebuilders. The government seemed to think slowing completion rates was particularly an issue with larger housebuilders because with *"significant debt leverage"* and *"Without sufficient cash reserves and little / no revenue stream", they would be "unable to repay loans and satisfy shareholders"* (DCLG, 2008: 31). By contrast, the impact assessment maintained that smaller builders *"may be"* able to rent out their properties, and would therefore have greater capability to build out (DCLG, 2008: 31). This focus was reflected in the scheme's distribution of resources: ultimately, 64% of funding went to the four largest housebuilders (significantly more than what we would expect based on their market share), and 84% went to the largest twelve (Griffith, 2011). For the big three, the policy provided a much-needed injection of demand, backing, for example, 15% of Barratt's sales in 2010 (see Figure 9).

There is very little evidence to support the idea that larger housebuilders were particularly in need of help. If anything, smaller housebuilders were more financially vulnerable in the depths of the GFC, and faced greater financial pressure to build out and sell (as opposed to rent) their housing stock, as demonstrated by the fact that smaller housebuilders dropped much more rapidly out of the market than larger housebuilders, who were able to access financing and had extensive land banks (Lyons, 2014). Rather, the superior power of the volume housebuilders offers a more feasible explanation for this bias. They possessed greater structural power as a result of their sheer size, the amount of development land they controlled, and their stronger ability to manage build out rates (and maximise prices). Crucially, the industry was able to signal this power to state actors who formed a receptive audience. As the Chief Executive of Homes and Community Agency put it to the CLG Committee in 2009:

"part of the reason why we went for the HomeBuy Direct model was in response to what the industry was saying to us and they in fact had been running their own schemes because they found it worked in terms of getting potential purchasers"

(Lord Robert Kerslake, Chief Executive of the Homes and Communities Agency, Oral Evidence to the CLG Committee on Housing and the Credit Crunch, 16 December 2008)

It is not clear exactly which housebuilders the senior civil servant was referring to, but given the skewed outcomes of the scheme, and the fact that only the largest housebuilders were *"running their own schemes"* it was unlikely to have been the smaller/medium housebuilders that were deploying instrumental power in this way.

Continuity under the Conservative-led Coalition: 2010-2012

By 2010, a new Conservative-Liberal Democrat coalition government had been formed and the overarching trend of their policy agenda was to continue promoting home-ownership and private housing supply via demand-side subsidies. In their first three years of government, the Coalition's approach to mortgage market support schemes was largely one of continuity. In 2011, they replaced HomeBuy Direct with Firstbuy Direct (2011-2013), which similarly involved developers and government each contributing 10% of purchase price as equity loan (Griffith, 2011). The government then introduced Newbuy (2012-2013), a mortgage guarantee scheme open to all buyers of new-build properties (excluding investors), whereby developer and government each guaranteed (in the case of default) 3.5% and 5.5% of the property respectively (reportedly inspired by a similar scheme in the US – Pickard, 2012).

Whilst both schemes were less targeted than under Labour, they were of a roughly equivalent scale, and continued to disproportionately benefit the VHBs. In the case of Firstbuy, 47% of funding went to the four largest housebuilders (Griffith, 2011) - significantly more than we would expect based on their market share - while the design of NewBuy, whereby housebuilders producing less than 100 units per annum had to team up if they wanted to participate, actively favoured the larger housebuilders, whose brands were also given prime position on the policy's webpage (Igloo Regeneration, 2012). There were no impact assessments published with these schemes, but in terms of private housing supply, the Coalition's logic was similar to Labour: as the ministerial foreword to the government's 2011 'Get Britain Building' programme prospectus proclaimed, "*Building more houses means more jobs. More houses for people who dream of owning their own home. More economic growth*" (HCA & CLG, 2011). This reflects the structural power of housebuilders in relation to the perceived role of housebuilding in fuelling economic growth and the reliance of the state on these businesses for housebuilding activity.

Over the course of 2012, Prime Minister David Cameron and Chancellor of the Exchequer George Osborne both reportedly came to the conclusion that *"the constraint on credit was one of the things holding back housing supply"* (Parker, 2014), and there were extensive discussions between government and the VHBs in which they instrumentally signalled their power that was grounded in the structural conditions of the housebuilding sector, as indicated by this emblematic quote from one of the earnings calls transcripts from this period:

> *"We have had the fullest period of engagement with government over the last few weeks that we've ever had. There is definitely an appetite to try and boost new build volumes and use it as one of the levers government use for growth…..We do feel we've been listened to."*
>
> ***(Pete Redfern, Group Chief Executive, Taylor Wimpey, 4 July 2012)***

Help to Buy: 2013 – 2017 (and beyond)

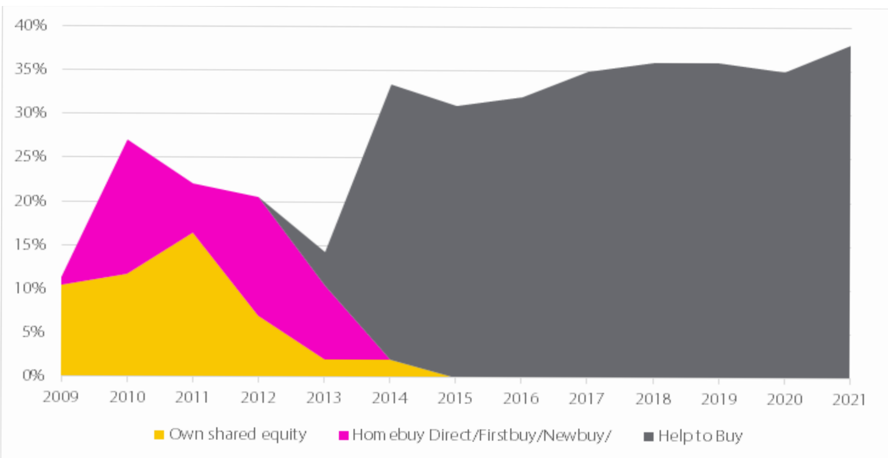
The outcome of these discussions materialised in March 2013, when George Osborne announced the introduction of the 'Help to Buy' scheme which consisted of two major policies, both of which were ostensibly aimed at increasing home-ownership via an expansion of mortgage lending, and housing supply. By far the largest policy initially was the mortgage guarantee scheme (Help to Buy 2), whereby the state would effectively insure banks to lend at higher loan to value ratios (Parker, 2014). However, because of its likely inflationary effects on overall house prices, this element of the Help to Buy scheme provoked a chorus of criticism from IMF, OBR among other orthodox economic institutions (O'Conner & Plimmer, 2013). This element of the scheme failed to take off, and was wound down in December 2016, having contributed £2.3 billion of mortgage guarantee, much less than the £12 billion that had been made available (HM Treasury, 2017).

Ultimately, the most significant branch of the Help to Buy scheme has been the equity loan scheme – which at the time of writing, has led to £22.5 billion being lent by the government to fund the purchase of over £100 billion worth of properties (DLUHC, 2022). Like HomeBuy Direct and FirstBuy schemes, the Help to Buy Equity Loan (herein 'Help to Buy') was targeted at new-build properties, but it differed in three key ways. First, it was much less targeted, open to all buyers of properties worth up to £600k (from 2021, eligibility was narrowed to first time buyers) (NAO, 2019). Second, for the Help to Buy equity loan scheme, developers were relieved of any risk-sharing responsibility - from now on, it would be the state that would assume all the credit risk associated with equity loans to participating first-time buyers. Finally, it was designed to be much larger, both in terms of the amount of equity advanced by the state, but also the accessibility to smaller housebuilders[13] , a design feature that was informed by previous schemes (Kerslake, 2014). As Mark Clare, Group Chief Executive of Barratt reflected on 25 February 2015: "*The biggest change was when the Conservatives came and basically took everything out, and then about 12 months later, basically put everything back again and then turbo charged it.*"

To understand the structural power of the VHBs at this juncture (2013), we need to re-evaluate their resources and strategy. Even before Help to Buy, the big three's profitability had recovered (Figure 3), thus they could no longer be perceived as having the kind of structural power associated with being 'too big to fail'. The VHBs did, however, continue to control much of the land and productive capacity, and this structural power continued to be reinforced by the concentration of the housebuilding industry: by 2012/3, the big three produced 28% of all new GB supply, which turned out to be the peak of their collective market share (see Figure 1). This gave the VHBs a degree of control over the level of aggregate supply, which the government attempted to leverage.

There was no impact assessment conducted for the Help to Buy Equity Loan scheme, an omission that was criticised by the National Audit Office (2014), but the 'Business Case' for the policy, which was originally circulated in March 2013 (DCLG, 2013), identifies a similar set of priorities as previous equity loan schemes: increasing housing supply and improving access to home-ownership through the enabling of mortgage lending on new-builds at high loan to value ratios. We can think of Help to Buy benefitting volume housebuilders in two-ways. The first explicit way was de-risking demand for new-build housing, thus providing greater certainty for housebuilders, and allowing them to wind-down their own shared equity schemes – which in the case of Barratt were of roughly equivalent size to the government's schemes at that time (see Figure 9)[14] . As Persimmon put it, for whom Help to Buy sales represented 44% of all transactions between 2014-7, "*The help to buy benefit, obviously, was the opportunity to reduce our own shared-equity under-write*" (January, 2014, Mike Killoran, Finance Director Persimmon).

Figure 9: Proportion of total completions bought using shared equity schemes – Barratt, 2009-2021



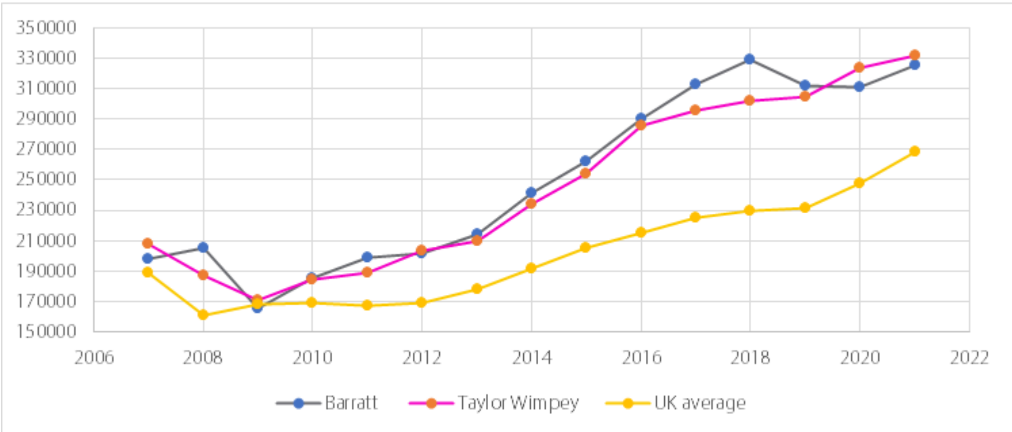
Note: All data from Annual Reports

13 The Help to Buy scheme was notably more accessible than previous mortgage market schemes, but there were still significant barriers to SMEs. For example, the scheme did not cover custom build, and probably involved significantly higher administration costs (in marginal terms) than for the larger developers (MHCLG, 2018).

14 From 2016, the Financial Conduct Authority required housebuilder's own shared equity schemes to be subject to regulation. However, the decline in housebuilders' shared equity scheme clearly preceded this, as recognised by the HBF (Lynn, 2016).

The second way in which the scheme benefitted housebuilders was through inflating the new-build premium. By expanding the availability of mortgage credit, and directing it towards the new-build stock, standard economic theory predicts that it will result in higher new-build house prices, unless supply is highly elastic to the increased demand. Subsequent analysis has generally confirmed this showing that the scheme had an inflationary effect on overall house prices in supply-inelastic areas (Carozzi et al., 2020; though see NAO, 2019 for contrasting evidence), and this is also reflected in the private sales prices of Barratt and Taylor-Wimpey which accelerated faster than the UK average (Figure 10). For example, between 2013 and 2017, their sales price rose by 46% and 41% respectively, much more than the 28% rise in UK average house prices overall (Land Registry, 2023). Moreover, this is ignoring the significant non-financial incentives (e.g. free carpets) that developers tended to withdraw for those participating in Help to Buy – as Mike Killoran, Finance Director at Persimmon noted in response to the policy: "*We are seeing the opportunity to be able to reduce the incentives offered to customers to seal deals in the market*" (January, 2014 – exact date unknown).

Figure 10: Average sales prices for the Barratt and Taylor Wimpey, 2007-2021



Note: All figures taken from Annual Reports. Taylor Wimpey and Barratt figures relate to private sales only. Persimmon has been excluded as they do not provide consistent data on their private sales only (typically, their reported sales prices include social housing). House prices are calculated using end of calendar year (December) figures: UK House Price Index (data.gov.uk)

There was no mention of the new-build premium in the (redacted) risks register of the business case. This is surprising given that inflating the new-build premium was consistent with the scheme being deemed a success. For the scheme to break even, only one additional unit had to be built for every five mortgages advanced (DCLG, 2013). This implies that if the other 80% of equity loans were used to increase demand (and, likely, prices) of houses that would have been built anyway, then the 'economic benefits' would still have been deemed sufficient to exceed the cost. This implies that policymakers must have accepted that inflating the new-build premium was a price worth paying for increased supply. Indeed, in a Select Committee meeting not long before Help to Buy was announced, the Housing Minister said that, maybe, the new-build premium should be higher than it was currently;

> *"A final comment on this: traditionally, there was a premium on new-build houses and flats. That premium disappeared in the recession and has not come back. I am not sure there should be a premium—I do not know; it is up to the market—but I would have thought that a new build is not necessarily worth less than a previously enjoyed property, which it is at the moment. If there were a distortion, it might just be to correct a market"*
>
> ***(Grant Shapps, Housing Minister, CLG Select Committee Meeting, 30 January 2012)***

In short then, the objective of Help to Buy was to dangle two carrots in front of the housebuilders to get them to increase supply; the first was to transfer the risk of equity-loan schemes from the balance sheets of the housebuilders to that of the state, and the second was to increase demand for new-build homes thus, in all likelihood, inflating the new-build premium, ultimately at the expense of those (mostly first-time) buyers who purchased them[15].

In recognition of the structural power of the volume housebuilders, on at least two occasions the government called them in to ask them to commit to increasing volumes. The first was a meeting between banks, volume housebuilders and the Treasury when they were about to announce the Help to Buy Mortgage Guarantee Scheme. As one Treasury Official told the Financial Times:

> *"Housebuilders were there this morning because we wanted them to see that the interest from lenders was there… At the moment, they are sitting on huge land banks because they are not convinced that, if they start building, they can get a decent return."*
>
> ***(Plimmer et al., 2013)***

However, the volume housebuilders saw no need to commit to a target for the sake of a policy that was already being introduced: "*The Treasury pushed us as hard as we can to give us a figure – but there's a lot of determinants on that figure so we are reluctant to commit*" (Housebuilder quoted in Plimmer et al., 2013). The second was on September 2013, the Financial Times reported that "*Britain's biggest housebuilders have been called in by Mark Prisk, the housing minister, to discuss the urgent need to raise construction*" (Plimmer & Allen, 2013).

But the state was pushing on a string, as the big three had little intention of rapidly expanding volumes in response to the policy. On 1st August 2012, for example, Pete Redfern, Chief Executive of Taylor Wimpey stated that "*We still see maximum volume of about 14,000 completions*", and on 31st July 2013, after Help to Buy was introduced, they still targeted 14,000 completions, with Redfern restating "*nothing that has happened fundamentally changes our strategy at all.*" Similarly, if we look at the trajectory of completions overall (Figures 3-5), there is no clear structural break in the number of completions before and after Help to Buy was introduced, but rather a continuation in the slow upward recovery of volumes back to pre-GFC levels, but not beyond.

Where we do see a structural break is in the proportion of these volumes that were backed by a government shared equity scheme. Between 2012 and 2017, the big three's collective completions had increased by about half from 33,646 to 47,979, but the proportion of these backed by a government shared equity scheme almost trebled from 15% to 42%. The Help to Buy scheme was supporting lots of sales but not many of these were 'additional'. Rather, the big three primarily used the scheme to accelerate their sales rate (and site turnover), increase their sales price (including via offering reduced incentives), and shift any demand-side risk off their balance sheet and onto that of the tax-payer, all of which boosted their profit margins (see Figure 3).

Having signalled their structural power to bring about the introduction of Help to Buy, the housebuilding industry has continued to use its dependence on the scheme to argue that if the scheme was now phased out, supply would drop. In October 2017, soon before Help to Buy was extended (to 2021) the HBF argued that: "*The uncertain future of the Help to Buy scheme means there is uncertainty as to what extent the industry will be able to maintain its current investment and housing delivery should the scheme end in 2021*", and in March 2023, after the scheme had been finally phased out, the HBF wrote to the Treasury calling for a "*new, targeted home ownership scheme for first-time buyers*" (Eley, 2023).

15 Unless those buyers default on their mortgages – in 2019, 5% of homeowners were in arrears (NAO, 2019) - in which case it will come partly at the expense of the state.

7. Land values, competition and market power

Given that it de-risked demand for new-build homes, and in all likelihood boosted the new-build premium, it is unsurprising that the introduction and rolling out of Help to Buy coincided with a large increase in the profitability of the big three. What is more surprising is that these supernormal levels of profitability were sustained for so long. In a competitive land market, we would expect the lower risk and higher sales values associated with Help to Buy to soon feed through into rising land values, as new firms enter or existing firms expand, thus squeezing profit margins back down. Whilst this appears to have occurred in central London and, to a lesser extent, urban brownfield land markets (see Savills' Development Land Index), it does not appear to have done so in the greenfield land markets which the big three rely upon, where the price of land seems to have stayed largely flat. We argue in this section that this discrepancy can be explained by the monopsonistic market power that the big three have wielded in the land market, which has been facilitated by the prioritisation of large sites by local planning authorities.

The nature of land markets

From the perspective of (neoclassical) economic theory, we would expect land markets to operate under highly imperfect competition, implying a significant role for market power. This is because land markets violate many of the assumptions behind the model of perfect competition: buyers and sellers do not have complete information about market conditions; goods are certainly not identical (to the contrary, every single piece of land is different); there are not a large number of buyers and sellers; and there are significant barriers to entry for developing particular sites, particularly large, greenfield sites.

When evaluating the competitiveness of the land market we are faced with several data constraints - we have little reliable public data on who owns land outright, who has an option on land, or how much land is transacted for. Compounding the issue, land markets, like housing markets, are geographically discrete, each with their own particular levels/drivers of demand and supply. Further, these different land markets will also be structured by a different set of buyers (SME vs large housebuilders), sellers (large vs small landowners) and intermediaries (land promoters), all operating on the basis of differentiated incentives and information. Therefore, it is not possible to usefully generalise about the degree of competitiveness in 'the land market'. Different land markets in different locations may be more or less competitive from the perspective of different kinds of housebuilders of varying size and market segmentation.

Analysing the big three's land markets

Our argument in this section relates specifically to those land markets in which the big three are most active: large-scale sites of around 100 units or more, particularly in greenfield areas outside of London – from herein, this is what we mean when we refer to 'the land market'. Empirically, we rely on three data sources when examining the land market power of the big three. The first is the quantitative data contained in the big three's Annual Reports and shareholder presentations, most notably the ratio between the average plot cost of their land bank, and average sales price of the houses sold in the previous year. These have also been analysed by Neal Hudson whose work we draw upon here (Hudson, 2018). The second are the qualitative accounts of the land market in the earnings calls, which we analysed for each two year period running from 2007-2018. Our full results and summary can be found in the Supplementary Appendix. Finally, we looked at the Savills development greenfield land index, which is calculated based on the stated opinions of Savills agents active in the market. All three indicate that post-NPPF (2012), the big three saw a significant and sustained increase in the supply of development land, which was not matched by an increase in demand, meaning the price they paid for land rose much more slowly than house price inflation. This is not what we would expect in a competitive land market.

Tracking changes in the competitiveness of land markets

Drawing on these three data-sources, but particularly the earnings call transcripts (see Supplementary Appendix), we can distinguish between three main periods in the land market between 2006-2018 (the land market is likely to have changed significantly since then due to planning reforms, COVID-19 and recent interest rate rises[16]). The first period was in the run-up to the GFC (2006-7) when, as is well established, the land market was competitive, leading housebuilders to make excessively bullish assumptions when bidding on land. The second period was the aftermath of the GFC, running from 2008-2010, which involved a stasis in the land market, as sellers held off from dramatically cutting prices, and the big three focussed on renegotiating existing land transactions rather than initiating new ones.

By late-2010/12, the third period, supply of land was increasing as sellers returned to the market. Yet private housebuilders were still unable to access finance, so in land markets outside London (and possibly the South East), the publicly listed housebuilders were largely competing with each other. Faced with this limited competition, there were emergent signs that the land market was turning the way of the big three (though there were also more pessimistic views voiced – see Supplementary Appendix). In September 2010, Barratt increased their hurdle rates (the minimum expected profit margin which land purchases need to meet) "*to reflect our success last year*" (Mark Clare, Group Chief Executive, Barratt, 8 September 2010). Taylor Wimpey later called 2011 a "*good year from a land buyer's perspective*" (Pete Redfern, Group Chief Executive, Taylor Wimpey, 17 January 2012). Similarly, Persimmon reported:

> *"what you need to understand in the business is the actual housing market, and the builders in the marketplace, is an entirely different place than it was say two years ago. The capacity of the industry has probably halved. So, land is still there in the same quantity as it was two years ago. I'm not saying there's an over-supply of land in the marketplace, but there's not a radical shortage of land at this stage. We are able to buy as much land as we want at the margins we see"*
>
> ***(Mike Farley, Group Chief Executive, Persimmon, 24 August 2010)***

While there were already signs of a less competitive regional land market in 2011, this trend accelerated from 2012/13 onwards. We can see this reflected in the plot cost to average sales price ratio, which, for Persimmon at least, accelerated its decline from 2013. For example, in 2011, the cost of the average plot in Persimmon's current land bank equated to about 21% of their average sales price over the previous year, whereas throughout 2017-2020 it made up less than 15%[17]. The same story is reflected in the Savills Greenfield Index[18] , which decoupled from the BuiltPlace residual price index (which is where we would expect land prices to be in a competitive market) at the same juncture[19].

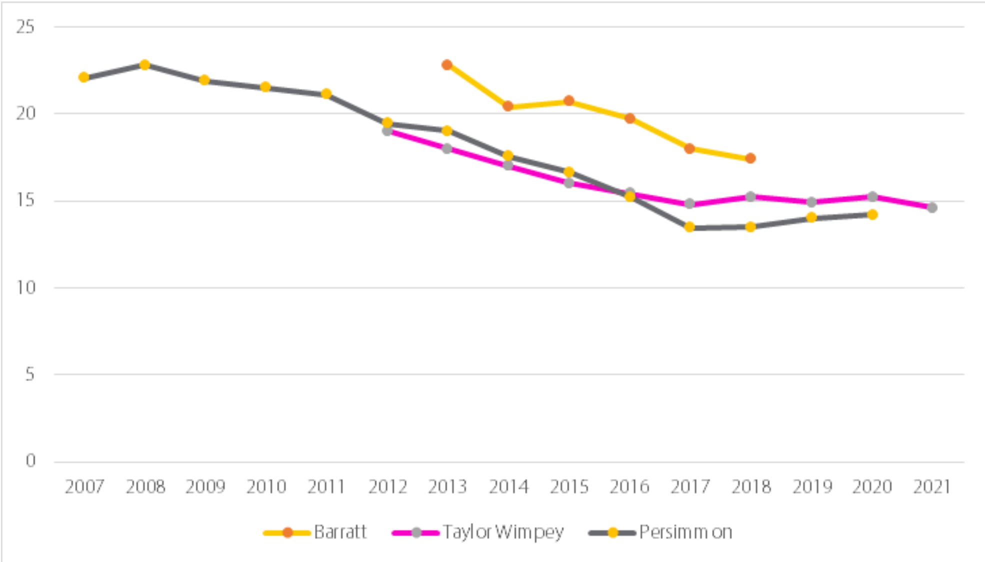
16 For example, on 25 May 2022, the Group Chief Executive of Taylor Wimpey, Jennie Daley, reported that "*the competition in the land market has been increasing. We are now operating in what I would classify as a very competitive land market. Good opportunities do remain, though these are less obvious in smaller site sizes, where competition is greatest*"….which she attributed to "*high demand from competitors, who effectively stopped acquiring in 2020*" and "*lower levels of supply due to local plan and planning determination delays.*" However, this was before the most recent housing market downturn (starting in September 2022).

17 Our original hypothesis was that this downward trend in average plot: average sales price was an accounting quirk, resulting from i) the housebuilders dramatically writing down the value of their existing land bank in the depths of the GFC, and then ii) building out this pre-GFC land in 2013/14, and achieving much higher average sales prices than the written down values implied. However, this explanation does not align with the data. By the 2013/14, the big three had already built out most of their pre-GFC land (e.g. in 2014, 65% of Barratt's completions were on land acquired post-2009, rising to 90% in 2015 – see Annual Reports). Moreover, it does not explain either the qualitative accounts of the big three of the Savills Greenfield Land Index, both of which clearly imply that there was little competition in the land market from 2012/13 onwards, despite rising new-build values.

18 The Knight Frank Residential Land Index also implies that the land market is far from competitive. It shows 'England Greenfield' land prices actually decreasing between 2014-2020, despite rising house prices (Knight Frank, 2022).

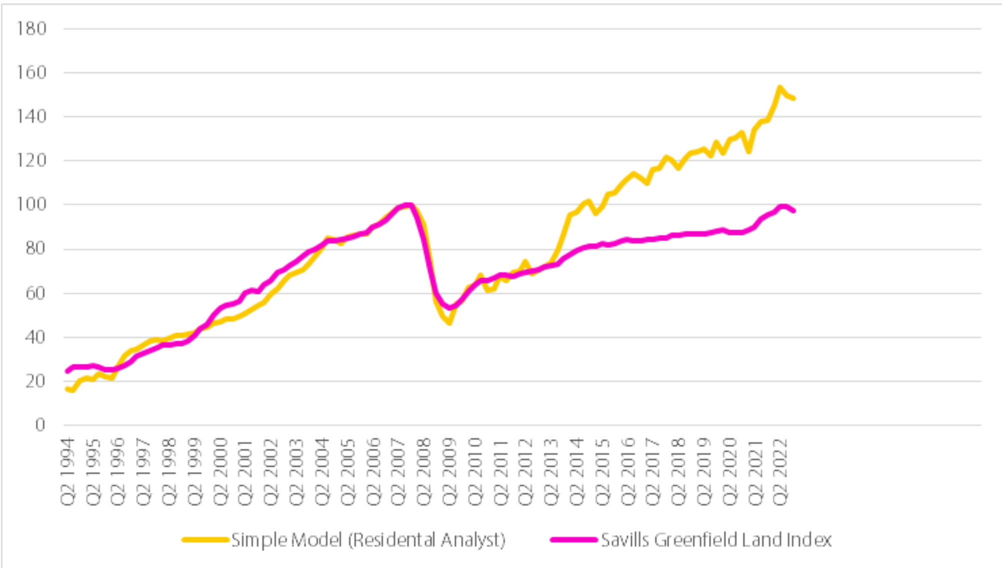
19 Another potential hypothesis for explaining the post-2013 decline in land values is increased development costs (leaving less money for land), perhaps as a result of increased Section 106 requirements or higher build costs on larger sites. However, analysis of Persimmon's balance sheet by Neal Hudson (2022) suggests that development costs (including Section 106 requirements) did not change markedly between 2013-2019, in contrast to profits which rose dramatically and land values which declined (see Figure 11). It was a similar story for Taylor Wimpey (Taylor Wimpey, Half Year Results, 2015).

Figure 11: Plots cost for the big three as % of average sales prices, 2007-2021



Note: Data has been acquired from respective companies' Annual Reports and other shareholder presentations.

Figure 12: Expected land values according to simple (residual) model vs Savills Greenfield Land Index



Source: Savills Development Land Index and Residential Analysts/BuiltPlace.

UK COLLABORATIVE CENTRE FOR HOUSING EVIDENCE

The role of planning in changing the land market

The key driver of this structural change in the land market was the 2012 NPPF:

> *"put simply: pre-NPPF, housing land supply was restricted by lack of viable planning consents, supply was constrained and often uncertain. Post-NPPF, whether locally approved or via the appeal process, the system has been generating more land supply and more consents… As a result, the land market has structurally different measures and different characteristics than previously with reduced competition and consistently higher investment margins than we saw in previous decades."*
>
> ***(Jennie Daley, Group Operations Director, Taylor Wimpey, 15 May 2018)***

How exactly did the NPPF change the land market, and why did land remain so cheap for so long? As discussed in Section 5, by forcing local authorities to make available a sufficient pipeline of land, and allowing developers to appeal planning decisions where this supply was not in place, the NPPF tilted the negotiating power towards developers.

This made it significantly easier for the big three to achieve planning permission on their own strategic land, allowing them to capture a greater proportion of the land value uplift. For example, Taylor Wimpey increased the proportion of their short-term land bank that came from their own strategic land from 41% in 2011, to 52% in 2017, while Barratt more than doubled the proportion of their total completions from their own strategic land from 10% in 2014 to 25% in 2017.

> *"it was really the introduction of the Localism Act, and the NPPF, that saw significant increase in housing consents and housing allocations via the plan process. These have benefited strategic land supply conversions quite materially, such that we are now exceeding our previous 40% target from strategically sourced land."*
>
> ***(Jennie Daley, Group Operations Director , Taylor Wimpey, 15 May 2018)***

Moreover, there remained only a select group of publicly listed volume housebuilders who were ultimately able to build out these large greenfield sites, with the phasing and infrastructure that they required. This made for limited competition on the strategic land market, but also the operational land market, because even if a land owner or land promoter (who were a growing presence at this time – see McAllister et al., 2022) successfully secured planning permission on a large-site, and then sought to sell it on, there remained a select group of housebuilders that would be realistically able to bid for it.

> *"we are seeing material advantage on those larger scale sites, particularly with infrastructure requirements that excludes many others in both operational and strategic land markets"*
>
> ***(Jennie Daley, Group Operations Director , Taylor Wimpey, 15 May 2018)***

> *"There's still low levels of competition in the land market, particularly on the larger sites, and that's enabling us to continue to drive down the average plot cost"*
>
> ***(Jeff Fairburn, Group Chief Executive, Persimmon, 18 August 2015)***

> *"the land market remains very attractive and there is a great supply of excellent opportunities that we are securing. And we continue to see limited competition in the land market from the smaller house builders"*
>
> ***(Mark Clare, Group Chief Executive, Barratt Development, February 2015)***

As a result, the big three were able to repeatedly raise their hurdle rates on both the strategic and operational land market, ultimately feeding through into higher margins (see Figure 1) and profits.

> *"everybody in the industry has been telling you for a number of years how much easier the land environment is, how much, much better the returns are, how much less competition there is... there is enough evidence, that it is far more likely that the land environment will remain as it is today and perhaps get a bit better, and that it won't be the fundamental constraint on the industry going forward, you know, for at least the next five to ten years"*
>
> ***(Jennie Daley, Group Operations Director , Taylor Wimpey, 15 May 2018)***

> *"We have been moving our hurdle rate, and the terms for the land payments over recent years, to a level that has generated good value in the land bank."*
>
> ***(Jeff Fairburn, Group Chief Executive, Persimmon, 23 August 2016)***

Notably though, this was less true in London the South East, where there was much greater competition, and Taylor Wimpey and Barratt had much less opportunity to increase their hurdle rates (Persimmon has little presence in the London and South-East market).

> *In terms of the open market purchases, we have said that, over the last two or three years, we have nudged our hurdle rates up a bit clearly, in the regional land market. That's not been the case in London; there's not been an opportunity to really move margin upward.*
>
> ***(David Thomas, Group Chief Executive, Barratt, 22 February 2017)***

> *"we've flagged over the last two or three years that London and the southeast have been particularly competitive land markets with a number of bidders"*
>
> ***(David Thomas, Group Chief Executive, Barratt, 9 September 2015)***

The demand-side puzzle

The one remaining part of the puzzle though is why the big three have not increased their demand for land. This brings us back to the volumes vs margins trade-off (see Section 4) and particularly the risk that, in an oligopsony, by radically increasing their demand for land, any one volume housebuilder could risk bidding up the price of the land overall.

We know that land markets are segmented by location and site size, and we know that the demand for operational (i.e. with planning permission) large-scale greenfield sites has been largely limited to the few publicly listed developers, and even more limited in the case of strategic sites. At a best guess, the transcripts suggest that these operational sites generally have about 3-4 bidders[20], while the strategic site might only have one competitor, if any at all. With such few demand-side actors, it only takes several companies (or perhaps just one) expanding their demand to increase these local land values:

> *"when companies were opening new divisions, of course, the first thing they must do is fill their land bank. So I think that's the only time where we see perhaps margins under pressure. Our approach there is simply to avoid buying at that particular time because we know those divisions will acquire three or four pieces of land, and then the market will normalize again."*
>
> ***(Mark Clare, Group Chief Executive, Barratt, 25 February 2015)***

20 David Thomas, Group Chief Executive, Barratt (22 February 2017) noted that "nationally, so for every three or four offers we make, we are successful in one offer." If every volume housebuilder had the same success rate as Barratts then it follows there will be 3-4 bidders per site..

If the publicly-listed companies want to minimise the price they pay for land, then they would ideally coordinate so as not to target the same local land markets all at once. Of course, such coordination would be difficult to achieve in practice, and illegal, and we have no evidence that it occurs. But the publicly listed housebuilders are likely to be aware that if one of them radically increases their demand for land (or at least, the large scale greenfield sites on which they specialise), then this could shrink the supernormal profit margins of the sector more broadly. As Pete Redfern explained frankly:

> *"But the land market is pretty balanced, and so I could go out and say, right, we're going to accept 15% margins. And I could probably buy – sort of have bought 9000 plots in that period. That to me is value destructive both for me and for the sector as a whole. And nobody in the sector is doing that. But I'm – there's no sort of handshake agreement here, but effectively we're all taking a share – there's not land sitting out there waiting to be bought. So if I can't take a bigger share of it, then I can get by sort of reasonable means of my existing team or by changing my financial metrics. All I do is drive up the land price across the market. And you know, of course, we're all just pushing to get that bit more and every site you look at does compromise on that one just a bit. And that one is great so I can do that but that one I'm slightly concerned about. We all go through that balance. But I can't go and buy another 2000 plots at the same prices. It's not that my teams have got land budgets that I'm not letting them spend. It's the balance of land in what's effectively an oligopoly in terms of land buying. But I'm not – there's no agreement that X will take a particular share. But like any oligopoly, there's a balancing act. If you push – you try and push your market share and your -up by moving price, you move the whole market and that's going to damage us all."*
>
> *(Pete Redfern, Group Chief Executive, Taylor Wimpey, 4 July 2013)*

Thus, there is no indication of volume housebuilders explicitly coordinating and constraining demand for land - "*there's no sort of handshake agreement*" - but there is clear awareness here of their interdependency, and the fact that the decision of one company to dramatically increase volumes, could undermine the margins of the volume housebuilding industry as whole.

8. Summary and policy implications

We have explored how the big three first managed to survive the GFC and then went on to report sustained levels of supernormal profitability in the ensuing decade. We have argued that their structural power in relation to the state, the recognition of this power by a receptive audience of state actors, and their market power in relation to the land market, were fundamental in explaining their profitability. In this final section, we briefly summarise our findings and outline some policy implications in the context of today's evolving policy and political landscape, a notable feature of which is the increased scrutiny over market concentration and the build-out rates achieved by volume housebuilders.

Summary of findings and analysis

Our central argument has been that the structural and market power of the big three volume housebuilders has been crucial in driving their post-GFC profitability, and in all likelihood providing them a comparative advantage over smaller housebuilders. After outlining the rise and consolidation of the big three in Section 2, we used Section 3 to introduce the twin concepts of market power and structural power. Market power relates to a firm's (or group of firms') ability to achieve prices that would not prevail in a competitive market, and structural power refers to the power that a firm (or group of firms) possesses in relation to the state as a holder of capital. We argued that, in theory, volume housebuilders are able to signal structural power over the state because of their control over housing supply which is important to the state economically, politically and symbolically. This control stems from their productive capacity ('too big to fail') and substantial development land holdings, both of which are a function of their large market share and vertically-integrated development model.

In Section 4, we moved from theory to empirical evidence, and explored how the business model of the volume housebuilders changed in response to the GFC. We demonstrated that whereas before the GFC, the volume housebuilders mainly prioritised sales volumes, in the decade(s) after they focussed their attention on widening profit margins. Their remarkable success in doing so, we submitted, is due largely to their structural and market power.

Focussing first on structural power, in Section 5, we showed how state actors responded to pressure to enable Section 106 contributions to be renegotiated on viability grounds and for sites to be re-planned. We also summarised key changes to national planning policy guidance intended to enable purported housing need and associated housing requirement figures to trump local planning policy in some circumstances. This was often via an appeals process which favours well-funded housebuilders and the specialist land promoters who supply them with land.

In Section 6, we demonstrated the receptiveness of the state in terms of mortgage market policy, showing how volume housebuilders signalled their ability and willingness to withdraw market supply to secure demand-side subsidies. These subsidies served both to inflate the price of their new-build properties and allowed them to shift credit risk from their own balance sheet onto that of the state. Together, the evidence presented in Sections 5 and 6 demonstrate the receptive response of state actors to the signalling of structural power by the volume housebuilders in the two key areas of planning policy adjustment and mortgage market support.

A crucial aspect of both of the policies above is that they benefitted larger housebuilders over smaller housebuilders. This comparative advantage of the volume housebuilders was magnified by the market power they wielded. As well as wielding monopolistic market power over local rates of new supply so as to maximise prices in Section 7, we argued that the volume housebuilders also exerted monopsonistic power over the land market. Since the introduction of the NPPF in 2012, which expanded the supply of larger sites, the price that the big-three paid for land has not kept up with house prices. As a result of their superior structural and market power, the VHBs have therefore enjoyed a multitude of comparative advantages over the SME housebuilders: stronger ability to manage build out rates, better capacity to play the planning game, lower land prices, and better access to mortgage market support schemes.

Throughout this report, we have been careful to emphasise that there was nothing inevitable about the structural and market power enjoyed by the volume housebuilders. The volume housebuilders enjoyed monopsonistic land market power because the state chose to shape the land market in a way that benefitted them over SME housebuilders, most notably via the planning system. Further, the volume housebuilders were only able to wield structural power in relation to the state because state actors perceived the state as a necessarily passive actor in the direct production of housing. In the depths of the GFC, when land values were low and government could access financing more cheaply than anyone else, there was an opportunity for the state to operationalise its own structural and market power through, for example, buying up land to be developed by SME housebuilders, housing associations or custom builders. Indeed, this is what was being proposed by certain think-tanks at the time (Lloyd, 2009; Griffith, 2011). What appears to have prevented the government from doing so, more than anything else, was an ideological aversion to positive state intervention in the housing and land market.

There are clear echoes of the impacts of the GFC today, as interest rates rise and house prices decline. And there are also signs that the volume housebuilders are once again signalling their structural power, as they reduce supply and call for the revival of Help to Buy (Yeomans & Nixon, 2023). However, their signals appear to be finding a less receptive audience within government than in the aftermath of the GFC, as the state displays an increasing tendency to exert its structural power over the volume housebuilders via regulation aimed at improving building safety and speeding-up build-out rates, as well as requesting a Competition Markets Authority review of the competitiveness of the housebuilding industry. In addition to this, and somewhat paradoxically, the weakening of the power of housing targets in planning that was proposed by the government in December 2022 has shown that the Conservative Party is willing to exert its state-structural power over housebuilders in order to protect its own electoral interests, even if this means risking a possible slump in housing delivery (House of Commons, 2023). This brings us to our concluding question of what the state can do to bring about a more responsive, environmentally sustainable and equitable housebuilding industry.

Policy implications: how to improve housing delivery

Liberalise the planning system?

For many 'New Urban Economists' (McMaster and Watkins, 2006), the key reform needed to address market concentration – and any potential market power – is a liberalisation of planning constraints (e.g. Ball, 2007). There is some implicit support for this argument in our analysis which indicates that a key reason why the volume housebuilders hold large land banks is because of the uncertain supply of developable land, and a major source of this uncertainty lies with the planning system. Moreover, a complex and locally differentiated planning system acts as a barrier to entry (expansion) for SME housebuilders, and strengthens the comparative advantage for the largest housebuilders who are heavily invested in local land market and planning system intelligence (via extensive land-buying teams).

That said, we are very sceptical that the liberalisation of the planning system – through, for example, forcing local authorities to grant more planning permissions - will do much to promote a flourishing of competition, or the promotion of a larger, more efficient and sustainable industry, or the provision of homes across the range of affordable tenures that is needed. If planning constraints were suddenly liberalised, then it could just allow the larger housebuilders to push down their cost of land without dramatically increasing supply, as happened post NPPF 2012. It is the largest housebuilders, after all, who have the strongest presences in their preferred land markets and the easiest access to capital. Further, so-called liberalisation of the planning system in a way that is intended to improve the elasticity of supply of development land will inevitably come at a democratic, environmental and local political cost. It was concerns about these issues that largely defeated the government's 2020 White Paper proposals to introduce a more market-responsive zonal planning system (Shepherd, 2023). Finally, the New Urban Economics view of planning as a constraint on development represents a rather myopic perspective and ignores the progressive potential of good planning backed up by a clear system of local plans to guide the market, deal with market failure and improve sustainable development outcomes in the public interest.

Diversify the housebuilding industry?

In our view, there are other more effective ways in which the housebuilding industry could be diversified. Access to finance could continue to be offered to smaller housebuilders on favourable terms, and any demand-side subsidies could avoid any bias in favour of the largest housebuilders. In terms of planning, the land market should be made more transparent, and local authorities should ensure that a mix of site sizes are offered planning permission (there is already a small sites policy in the NPPF), and in some cases, break up larger sites into several smaller sites.

A more diverse housebuilding industry would likely increase build-out rates, as smaller housebuilders have limited capacity to manage build out rates [21] . It would also likely make for a more competitive market across a wider variety of types of sites would make it more difficult for larger housebuilders to coordinate supply (Xu et al., 2021). Also, the structural power of the largest housebuilders would be diluted, reducing the likelihood of them getting special treatment as they did post-GFC.

That said, we are sceptical that a more diverse housebuilding industry alone will markedly improve supply. Even with a diverse housebuilding industry, it will remain the case that land is expensive[22] because of the high returns expected by landowners. Consequently, housebuilders will continue to remain cautious, and demand significant profits in return for taking on the risk of delivery under their speculative models. Further, the diversification of the housebuilding industry is unlikely to result in housing that is more affordable to any meaningful degree, as the requirement for profit militates against providing housing at less than full market value. The only actor that is able to significantly reduce and shoulder this risk, we argue, is the state.

A larger and more positive role for the state

Hitherto, the main form of positive state intervention in the housebuilding industry has been on the demand side, through de-risking housing demand via Help to Buy. The issue, though, with Help to Buy was threefold. First, by channelling first-time buyer demand towards the new-build stock it appears to have unsustainably inflated the new-build premium (Carozzi et al., 2021), largely to the detriment of the (mostly first-time) buyers who purchased them (Hudson, 2021). Second, in circumstances of higher competition in land markets, these demand-side subsidies are likely to (partly) feed through into higher land prices. Finally, for such a demand-side policy to succeed in boosting supply, it relies on suppliers choosing to increase volumes, rather than boosting margins (which was the strategy adopted by the big three after the GFC). Overall, then, demand-side subsidies have been a relatively ineffective means of boosting supply.

A more effective solution could be for the state to take on more of the risk associated with both the supply-side and demand-side, whilst also retaining more of the returns. There are a variety of ways in which the state could do this, and the purpose of this report is not to provide detailed policy proposals[23] . Nor should the discussion below be read as a paean to the state. The state is a powerful actor, with considerable structural and market power, but it is also a blunt actor that lacks the agility and nimbleness of the market[24]. That said, as we move further into a housing market downturn, and market-led supply nimbly nosedives in response to declining demand, there is clearly a need for this blunt, countercyclical force of the state.

The simplest option for the state to improve housing supply would be to increase the grant funding available to housing associations and support the burgeoning growth of local authority direct delivery of housing (Morphet and Clifford, 2021), thus allowing them to ramp up the supply of non-market housing, which is a relatively safe asset

21 Although this also means they have less ability to speed-up build out rates if local absorption rates allow for it.

22 Albeit, not as expensive as it would be in a perfectly competitive land market.

23 See Lloyd et al., (2023) for a detailed set of policy proposals which are broadly consistent with our analysis.

24 One analogy, first advanced by the political scientist Charles Lindblom, has the state as the thumb (blunt, powerful, countervailing force) to the markets' fingers (agile, nimble, but also fragile) (see Hacker and Pierson, 2017).

because demand for it is so high[25]. Another option would be for the state to acquire large-scale sites, service them by providing the relevant infrastructure, and then sell them off to SME housebuilders, housing associations and particularly custom builders. Currently, the custom-build model is negligible in the UK despite recent government attempts to support its development via the introduction of self-build registers and allocations in local plans (DLUHC & MHCLG, 2021). Yet across many other European countries it accounts for between a third and a half of new supply (Ehwi et al., 2022). This seems like a missed opportunity to improve supply. Whilst build costs are likely to be higher under this model, which lacks economies of scale, the overall development risk should be lower. Because the producer of the building and the consumer are the same person, this removes some of the development risk associated with the speculative model, as well as removing any information asymmetries, and thus any incentives for shoddy design or mis-selling. However, for this model to thrive, it will need much stronger state intervention and support than has been provided to date.

In addition to grant-funding, the state could also fund non-market housing and the custom-build sector via capturing a greater proportion of land value uplift. There have been a range of approaches attempted in England (for a summary see Jones et al., 2018) and there are also many different models utilised internationally, from land readjustment in Germany, to impact fees in the United States and leasing of state-owned land in Singapore (for an international overview see OECD & Lincoln Institute, 2022). However, under the current policy regime in England, the most obvious means for local authorities to collect a larger proportion of development value would be to demand higher proportions of affordable housing on large-scale developments and/or to revise their Community Infrastructure Levy charging schedules (while also being alert to the time this process can take as well as the risk of rendering marginal sites unviable).

However, a key constraint in the viability calculations underpinning Section 106 and CIL is the return demanded by landowners. There is therefore potential for reform of the current land value capture regime to introduce greater clarity regarding what constitutes a reasonable return to a landowner in any transaction (public or private), with this return set at a level that would enable a larger proportion of land value uplift to be used to support the delivery of affordable housing and infrastructure than is currently the case, particularly in areas of the country with significant development pressure and high land values (Crosby & Wyatt, 2019). This could ultimately have the effect of stabilising land values in such areas such that more value could flow towards the provision of social and physical infrastructure whether via developer contributions in a private sector-led development, or as a result of lower land prices in a public-sector led development.

However, it would take time for the effects of such a shift in policy approach to be reflected in land prices. Furthermore, it would take time for local authorities or other state entities (such as Homes England) to significantly increase land acquisition and housebuilding operations. Local authorities are not currently equipped with the resources and expertise that would be necessary to engage in large-scale land buying and development strategy. Therefore, any such policy objective would need to be supported by a consistently maintained commitment to supporting local authorities in acquiring the skills and expertise and resources necessary to significantly expand their land acquisition and housebuilding activity.

Any radical change to the housebuilding industry that is intended to increase the supply of affordable housing and/or enable the state to take a more active role is likely to come up against major economic, cultural and political barriers, not least the structural power of the big three. Couldn't the big three just respond to any major market reforms by withholding supply? Are they not too big to fail? Whilst any reform would involve significant disruption, it is important to recall that although the VHBs fundamental reliance on land allows them significant control over local supply, it also deprives them of an exit option, forcing them to deal with whatever legal or institutional reforms the government makes. Therefore, state actors may not feel so compelled, once again, to introduce the same suite of policies as they did after the GFC. On the contrary, with volume housebuilders retreating from the market, perhaps now is the opportune moment for the state to stop perceiving itself as a passive actor in the development process, resigned to propping up demand and socialising development costs so as to incentivise 'the market' to keep on building, and to

25 Indeed, it is notable that large-scale institutional investors are increasingly building and acquiring social housing, in search of safe returns backed by the state e.g. Sage Homes (backed by the asset manager, Blackstone) produced the largest amount of social housing in 2022.

recognise and deploy its own structural and market power through buying up land and ensuring it is built out rapidly in a way that prioritises quality, sustainability and affordability over profit margins.

UK COLLABORATIVE CENTRE FOR HOUSING EVIDENCE

References

Adams, D., Leishman, C., & Moore, C. (2009). Why Not Build Faster? Explaining the Speed at Which British House-Builders Develop New Homes for Owner-Occupation. The Town Planning Review, 291-314.

Adams, D., Leishman, C., & Watkins, C. (2012). Housebuilder networks and residential land markets. Urban studies, 49(4), 705-720.

Archer, T., & Cole, I. (2016). Profits before volume? Major housebuilders and the crisis of housing supply. Report, October. Sheffield Hallam University, Centre for Regional and Social Research.

Archer, T., & Cole, I. (2021). The financialisation of housing production: exploring capital flows and value extraction among major housebuilders in the UK. Journal of Housing and the Built Environment, 1-21.

Aubrey, T. (2017). Static models cannot explain the failings of a dynamic housing market. Shelter (Blog). Available at https://blog.shelter.org.uk/2017/02/static-models-cannot-explain-the-failings-of-a-dynamic-housing-market/ (Accessed 27 July 2023).

Babic, M., Huijzer, J., Garcia-Bernardo, J., & Valeeva, D. (2022). How does business power operate? A framework for its working mechanisms. Business and Politics, 24(2), 133-150.

Ball, M. (2007). Firm Size and Competition: A Comparison of the Housebuilding Industries in Australia, the UK and the USA. Working papers in real estate and planning 02/07, Department of Real Estate and Planning, University of Reading. Available at: https://centaur.reading.ac.uk/27052/1/0207.pdf#:~:text=Housebuilding%20is%20frequently%20viewed%20as%20an%20industry%20full,in%20Britain%20when%20measured%20on%20per%20capita%20basis (Accessed 2 August 2023).

Ball, M. (2010). The Housebuilding Industry. Promoting Recovery in Housing Supply, Communities and Local Government. Communities and Local Government, April. Available at: https://benfieldgroup.uk/wp-content/uploads/2022/01/housebuilding-industry-clg-report-April-2010.pdf (Accessed 2 August 2023).

Barlow, J., & King, A. (1992). The state, the market, and competitive strategy: the housebuilding industry in the United Kingdom, France, and Sweden. Environment and Planning A, 24(3), 381-400.

Barratt Developments Plc. (2022). Acquisition of Gladman Developments Limited significantly enhances strategic land credentials – Barratt Developments Plc. 31 January. Available at https://www.barrattdevelopments.co.uk/media/media-releases/pr-2022/pr-31-01-2022#:~:text=The%20acquisition%20combines%20Barratt%27s%20best,enhancing%20Barratt%27s%20strategic%20land%20credentials. (Accessed 27 July 2023).

Bell, S., & Hindmoor, A. (2017). Structural power and the politics of bank capital regulation in the United Kingdom. Political studies, 65(1), 103-121.

Bradley, Q. (2021). The financialisation of housing land supply in England. Urban Studies, 58(2), 389–404.

Bradley, Q. (2022). The accountancy of marketisation: Fictional markets in housing land supply. Environment and Planning A: Economy and Space, 54(3), 493– 507.

Bramley, G. (2007). The sudden rediscovery of housing supply as a key policy challenge. Housing Studies, 22(2), 221-241.

Calcutt, J. (2007). The Calcutt Review of Housebuilding Delivery, London, HMSO.

Carozzi, F., Hilber, C. A., & Yu, X. (2020). On the economic impacts of mortgage credit expansion policies: evidence from help to buy. CEPR Discussion Paper No. DP14620. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3594250 (Accessed 2 August 2023).

CMA (Competition Markets Authority) (2023). Housebuilding market study: The CMA has launched a market study into housebuilding in England, Scotland and Wales. 28 February. Available at: https://www.gov.uk/cma-cases/housebuilding-market-study (Accessed 27 July 2023).

CLG (Communities and Local Government). (2006). Planning policy statement 3 (PPS3): Housing (first edition). November 2006. Communities and Local Government: London.

Crosby, N. and Wyatt, P. (2019). What is a 'competitive return' to a landowner? Parkhurst Road and the new UK planning policy environment. Journal of Property Research, 36 (4),367-386.

Crow, D. (2020). Treasury puts back deadline for divestiture of RBS shares by one year, Financial Times, 11 March 2020. Available at: https://www.ft.com/content/0a3b3c1e-63b1-11ea-a6cd-df28cc3c6a68 (Accessed 27 July 2023).

Culpepper, P. D. (2015). Structural power and political science in the post-crisis era. Business and Politics, 17(3), 391-409.

Culpepper, P. D., & Reinke, R. (2014). Structural power and bank bailouts in the United Kingdom and the United States. Politics & society, 42(4), 427-454.

Darling, A. (2011). Back from the brink: 1000 days at number 11. Atlantic Books Ltd.

DCLG (Department for Communities and Local Government) (2008). Homeowners Support Package Impact Assessments. Available at https://www.legislation.gov.uk/ukia/2008/226/pdfs/ukia_20080226_en.pdf (Accessed 27 July 2023).

DCLG (Department for Communities and Local Government) (2013). Help to Buy Business Case. Accessed via Freedom of Information Request. Available from the authors on demand.

DCLG (Department for Communities and Local Government) (2016). Written evidence submitted by the Department for Communities and Local Government [BLD 068] BLD0068 - Evidence on Capacity in the home building industry.

DLUHC (Department for Levelling Up, Housing and Communities) (2021). National planning policy framework. Available at: https://www.gov.uk/guidance/national-planning-policy-framework/5-delivering-a-sufficient-supply-of-homes (Accessed 27 July 2023).

DLUHC (Department for Levelling Up, Housing and Communities) (2022). List of developers who have signed building safety repairs pledge, Guidance, 2 March. Available at: https://www.gov.uk/guidance/list-of-developers-who-have-signed-building-safety-repairs-pledge (Accessed 27 July 2023).

DLUHC (Department for Levelling Up, Housing and Communities) (2022). Help to Buy: Equity Loan statistics to 31 March 2022. Available at https://www.gov.uk/government/statistics/help-to-buy-equity-loan-scheme-data-to-31-march-2022/help-to-buy-equity-loan-scheme-data-to-31-march-2022 (Accessed 27 July 2023).

DLUHC (Department for Levelling Up, Housing and Communities) (2023). Technical consultation on the Infrastructure Levy, 17 March 2023. Available at: https://www.gov.uk/government/consultations/technical-consultation-on-the-infrastructure-levy (Accessed 24 July 2023).

DLUHC (Department for Levelling Up, Housing and Communities) & MHCLG (Ministry of Housing, Communities and Local Government) (2019). Permission in principle, Guidance, 15 March. Available at: https://www.gov.uk/guidance/permission-in-principle (Accessed 27 July 2023).

DLUHC (Department for Levelling Up, Housing and Communities) & MHCLG (Ministry of Housing, Communities and Local Government) (2021). Self and custom build action plan, Policy Paper, 24 April. Available at: https://www.gov.uk/government/publications/self-and-custom-build-action-plan/self-and-custom-build-action-plan (Accessed 27 July 2023).

DLUHC (Department for Levelling Up, Housing and Communities) & MHCLG (Ministry of Housing, Communities and Local Government) (2022). The building safety levy: consultation outcome, 6 January. Available at: https://www.gov.uk/government/consultations/the-building-safety-levy (Accessed 27 July 2023).

Eckford, S. (2022). New requirement for developers to report build-out rates among Gove's proposed bill amendments, Planning Resource, 18 November 2022. Available at: https://www.planningresource.co.uk/article/1805753/new-requirement-developers-report-build-out-rates-among-goves-proposed-bill-amendments (Accessed 27 July 2023).

Eckford, S. (2023). Government amends Bill to allow councils to buy land for affordable housing at existing use value, Planning Resource, 28 March 2023. Available at: https://www.planningresource.co.uk/article/1817953/government-amends-bill-allow-councils-buy-land-affordable-housing-existing-use-value (Accessed 24 July 2023).

Edgar, L. (2023). Government urged to reconsider infrastructure levy by 30 organisations, The Planner, 16 June 2023. Available at: https://www.theplanner.co.uk/2023/06/16/government-urged-reconsider-infrastructure-levy-30-organisations (Accessed 24 July 2023).

Ehwi, R., Maslova, S., & Burgess, G. (2022). Self-build and Custom Housebuilding in the UK: An Evidence Review. Cambridge Centre for Housing and Planning Research.

Eley, J. (2023). UK housebuilders' profitability no less remarkable than BP's returns, Financial Times, 9 February 2023. Available at: https://www.ft.com/content/c9a8bb46-2cb8-4223-8e82-675f4f412df9 (Accessed 27 July 2023).

Griffith, M. (2011). We Must Fix It: Delivering Reform of the Building Sector to Meet the UK's Housing and Economic Challenges. Institute for Public Policy Research (IPPR). Available at: https://www.ippr.org/publications/we-must-fix-it-delivering-reform-of-the-building-sector-to-meet-the-uks-housing-and-economic-challenges (Accessed 2 August 2023).

Gupta, R. (2023). LURB in the Lords – no hope, Blog, no date. Available at https://www.townlegal.com/wp-content/uploads/Compulsory-Reading-LURB-in-the-Lords-%E2%80%93-No-Hope.pdf (Accessed 24 July 2023).

Gurney, C. M. (1999). Pride and prejudice: Discourses of normalisation in public and private accounts of home ownership. Housing studies, 14(2), 163-183.

Hacker, J. S., & Pierson, P. (2002). Business power and social policy: Employers and the formation of the American welfare state. Politics & Society, 30(2), 277-325.

Hacker, J. S., & Pierson, P. (2017). American amnesia: How the war on government led us to forget what made America prosper. Simon and Schuster.

HBF (Home Builders Federation) (2022). Building homes in a changing business environment. Available at: https://www.hbf.co.uk/documents/12117/HBF_report_-_Building_Homes_in_a_Changing_Business_Environment.pdf (Accessed 27 July 2023).

HCA (Homes and Communities Agency) & CLG (Communities and Local Government) (2011). Get Britain Building Programme Prospectus. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/563591/get_britain_building_programme_prospectus.pdf (Accessed 2 August 2023).

HMRC (HM Revenue and Customs) (2021). Residential property developer tax, Policy Paper, 27 October. Available at: https://www.gov.uk/government/publications/residential-property-developer-tax/residential-property-developer-tax (Accessed 27 July 2023).
HM Treasury (2017). Help to Buy: mortgage guarantee scheme Quarterly Statistics. Data from 8 October 2013 to 30 June 2017.

HM Treasury and BIS (Department for Business, Innovation and Skills) (2011). The plan for growth, London, HM Treasury.

Henneberry, J., & Parris, S. (2013). The embedded developer: Using project ecologies to analyse local property development networks. The Town Planning Review, 84(2), 227-249.

Homes England (2020). Homes England and Invest & Fund launch 7-year lending partnership to support small builders, News Story, 9 September 2020. Available at: https://www.gov.uk/government/news/homes-england-and-invest-fund-launch-7-year-lending-partnership-to-support-small-builders (Accessed 27 July 2023).

Homes England (2023). Development finance available for small and medium housebuilders through the Levelling Up Home Builders Fund, News Story, 9 January 2023. Available at: https://www.gov.uk/government/news/homes-england-and-invest-fund-launch-7-year-lending-partnership-to-support-small-builders (Accessed 27 July 2023).

House of Commons (2009). Housing and the Credit Crunch, Communities and Local Government Committee, Third Report of Session 2008-09. Available at https://publications.parliament.uk/pa/cm200809/cmselect/cmcomloc/101/101.pdf (Accessed 27 July 2023).

House of Commons (2023). Reforms to National Planning Policy, Levelling Up, Housing and Communities Committee, Seventh Report of Session 2022-23. Available at: https://committees.parliament.uk/publications/40872/documents/199083/default/ (Accessed 2 August 2023).

Hudson, N. (2018). The Value and Cost of Land, Blogpost, 11 April 2018. Available at http://resi-analysts.com/2018/04/11/the-value-and-cost-of-land/ (Accessed 27 July 2023).

Hudson, N. (2021). The problem with new-build property, Financial Times, 19 October 2021. Available at https://www.ft.com/content/51d6c771-a74b-4088-85a9-b07d4c75602d (Accessed 27 July 2023).

Hudson, N. (2022). Help to Buy's legacy: higher prices and richer builders, Financial Times, 2 March 2022. Available at https://www.ft.com/content/f1a7bd5c-eb1a-47f8-ae85-6366397b3877 (Accessed 27 July 2023).

Igloo Regeneration (2012). Written Submission to HC1652 CLG Select Committee. Available at: https://publications.parliament.uk/pa/cm201012/cmselect/cmcomloc/1652/1652vw36.htm (Accessed 27 July 2023).

Institute for Government (2020). Local government funding in England: How local government is funded in England and how it has changed since 2010, Blogpost, 10 March 2020. Available at:

https://www.instituteforgovernment.org.uk/explainer/local-government-funding-england#:~:text=Local%20authority%20%27spending%20power%27%20%E2%80%93,%25%20below%20 2009%2F10%20levels (Accessed 27 July 2023).

Jones, C., Morgan, J., and Stephens, M. (2018). An assessment of historic attempts to capture land value uplift in the UK. Commissioned Reports, no. 002, Scottish Land Commission, Inverness. Available at: https://researchportal.hw.ac.uk/en/publications/an-assessment-of-historic-attempts-to-capture-land-value-uplift-i (Accessed: 27 July 2023).

Kerslake, B. (2014) Oral Evidence to Public Accounts Committee on Help to Buy: equity loans.Wednesday 2 April, 2014. Available at https://committees.parliament.uk/event/7654/formal-meeting-oral-evidence-session/ (Accessed 27 July 2023).

Knight Frank (2022) Residential Development Land Index, Q1 2022. Report. Available at https://content.knightfrank.com/research/161/documents/en/uk-res-dev-land-index-q1-2022-9048.pdf (Accessed 27 July 2023).

Land Registry (2023) UK House Price Index. Available at: https://landregistry.data.gov.uk/app/ukhpi (Accessed 2 August 2023).

Letwin, O. (2018) Independent review of build out: draft analysis, London: MHCLG. Available at: https://www.gov.uk/government/publications/independent-review-of-build-out-draft-analysis (Accessed 2 August 2023).

Lloyd, T., Grayston, R., and Hudson, N. (2023) Reboot: building a housing market that works for all. Joseph Rowntree Foundation. Available at: https://www.jrf.org.uk/report/reboot-building-housing-market-works-all (Accessed 2 August 2023).

Lloyd, T. (2009). Don't bet the house on it. Compass, London. Available at: https://www.compassonline.org.uk/publications/dont-bet-the-house-on-it-no-turning-back-to-housing-boom-and-bust/ (Accessed 2 August 2023).

Lynn, A. (2016). Help to Buy dilutes demand for developer shared equity schemes. Development Finance Today, 22 August 2016. Available at https://www.developmentfinancetoday.co.uk/article-desc-4804_help-to-buy-dilutes-demand-for-developer-shared-equity-schemes (Accessed 27 July 2023).

Lyons, M. (2014). The Lyons Review: Mobilising across the nation to build the homes our children need. Available at: https://www.policyforum.labour.org.uk/uploads/editor/files/The_Lyons_Housing_Review_2.pdf (Accessed 2 August 2023).MacFarlane, I. (n.d.) Ranking housebuilders: Who is selling the most homes? Show House Magazine (online). Available at: https://www.showhouse.co.uk/news/ranking-housebuilders-who-has-built-the-most-homes/ (Accessed 27 July 2023).

McAllister, P., Shepherd, E., & Wyatt, P. (2022). State regulation of land financialisation: land promoters, planning risk and the land market in England. Housing Studies, Online First.

McMaster, R., & Watkins, C. (2006). Economics and underdetermination: a case study of urban land and housing economics. Cambridge Journal of Economics, 30(6), 901-922.

Migration Advisory Committee (2023). Construction and hospitality shortage review: A report into labour shortages in the construction and hospitality sectors and the potential use of the immigration system as a response. Available at: https://www.gov.uk/government/publications/construction-and-hospitality-shortage-review (Accessed 2 August 2023).

MHCLG (Ministry of Housing, Communities and Local Government) (2018). Evaluation of the Help to Buy Equity Loan Scheme 2017, October 2018. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/751359/Evaluation_of_the_Help_to_Buy_equity_loan_scheme_2017.pdf (Accessed 2 August 2023).

MHCLG (Ministry of Housing Communities and Local Government), Valuation Office Agency (VOA) (2018). Land Value Estimates for Policy Appraisal 1 April 2017 Values, London, MHCLG. Available at: https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017 (Accessed 2 August 2023).

MHCLG (Ministry of Housing, Communities and Local Government) (2021). Over £150 million funding to kickstart self building revolution, Press Release, 24 April 2021. Available at: https://www.gov.uk/government/news/over-150-million-funding-to-kickstart-self-building-revolution (Accessed 27 July 2023).

Morphet, J. & Clifford, B. (2021). Local authority direct provision of housing: third report. September 2021. Bartlett School of Planning. Available at: https://www.ucl.ac.uk/bartlett/planning/news/2021/sep/third-report-local-authority-housebuilding-published (Accessed 2 August 2023).

Nathaniel Lichfield and Partners (2017). House building and development: the case for pragmatism . Blogpost. 15 February 2017. Available at: https://lichfields.uk/blog/2017/february/15/house-building-and-development-the-case-for-pragmatism/ (Accessed 27 July 2023).

National Audit Office (NAO) (2014). The Help to Buy equity loan scheme. Report. Available at: https://www.nao.org.uk/reports/help-buy-equity-loan-scheme-2/ (Accessed 27 July 2023).

National Audit Office (NAO) (2019). Help to Buy: Equity Loan scheme – progress review. Available at: https://www.nao.org.uk/reports/help-to-buy-equity-loan-scheme-progress-review/ (Accessed 27 July 2023).

O'Connor, S., & Plimmer, G. (2013). IMF adds to growing criticism of 'Help to Buy' mortgage scheme, Financial Times, 22 May 2013. Available at: https://www.ft.com/content/64bdfe24-c309-11e2-9bcb-00144feab7de (Accessed 27 July 2023).

OECD (Organisation for Economic Co-operation and Development) & Lincoln Institute (2022). Global Compendium of¬ Land Value Capture Policies, OECD Regional Development Studies. Available at: https://www.oecd.org/publications/global-compendium-of-land-value-capture-policies-4f9559ee-en.htm (Accessed 24 July 2023).

OFT (Office of Fair Trading) (2008) Homebuilding in the UK: A Market Study. Available at: https://webarchive.nationalarchives.gov.uk/ukgwa/20140402132426/http://www.oft.gov.uk/shared_oft/reports/comp_policy/oft1020.pdf (Accessed 2 August 2023).

ONS (Office for National Statistics) (2022). Dataset: House building, UK: permanent dwellings started and completed. 19 January 2022. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/housing/datasets/ukhousebuildingpermanentdwellingsstartedandcompleted (Accessed 27 July 2023).

Parker, G. (2014). UK Treasury was not Help to Buy's only parent, Financial Times, 7 May 2014. Available at https://www.ft.com/content/ec77635a-d438-11e3-bf4e-00144feabdc0 (Accessed 27 July 2023).

Payne, S., Serin, B., James, G., & Adams, D. (2019). How does the land supply system affect the business of UK speculative housebuilding? An evidence review. UK Collaborative Centre for Housing Evidence. Available at: https://housingevidence.ac.uk/wp-content/uploads/2019/02/190228-How-does-the-land-supply-system-affect-the-business-of-UK-speculative-housebuilding.pdf (Accessed 2 August 2023).

Pickard, J. (2012). Treat Clegg's infrastructure promises with a pinch of salt, Financial Times, 4 June 2012. Available at: https://www.ft.com/content/5eb6c881-33a7-3a0d-87bf-4c507ab11d52

(Accessed 27 July 2023).

Pignal, S., & Sakoui, A. (2008). Barratt soars on reports of covenant deal, Financial Times, 20 June 2008. Available at: https://www.ft.com/content/4247522c-3efd-11dd-8fd9-0000779fd2ac (Accessed 27 July 2023).

Plimmer, G., Rigby, E., & Powley, T. (2013). Housebuilders urged to build more homes to prevent price bubble, Financial Times, 23 July 2023. Available at: https://www.ft.com/content/167da87e-f3a9-11e2-b25a-00144feabdc0 (Accessed 27 July 2023).

Plimmer, G., & Allen, K. (2013). Housing minister and builders discuss boosting volume of new homes, Financial Times, 6 September 2013. Available at: https://www.ft.com/content/5b8b038a-1708-11e3-9ec2-00144feabdc0 (Accessed 27 July 2023).

Quintero, L. (2022). Fewer players, fewer homes: concentration and the new dynamics of housing supply. Johns Hopkins Carey Business School Research Paper, (18-18).

Reuters (2009) UPDATE 1-Taylor Wimpey says defers covenant tests again. 4 March. Available at: https://www.reuters.com/article/taylorwimpey-idUSL459584520090304 (Accessed 2 August 2023).

Robinson, J. (1969). The economics of imperfect competition. Springer.
Rutter, J. (2012). Opening up policy making: A case study of the National Planning Policy Framework and other models of more open policy making, Report, July 2012. Institute for Government. Available at: http://www.instituteforgovernment.org.uk/sites/default/files/publications/opening_up%20policy%20making_final.pdf (Accessed 27 July 2023).

Ryan-Collins, J., Lloyd, T., & Macfarlane, L. (2017). Rethinking the economics of land and housing. Bloomsbury Publishing.

Savills (2021) In plain English: The tilted balance, Savills Blog, 19 April. Available at: https://www.savills.co.uk/blog/article/312988/residential-property/in-plain-english--the-tilted-balance.aspx (Accessed 27 July 2023).

Shepherd, E. (2023) Housing development, land values and the decentred state: Traditions and dilemmas in House of Commons planning debates. Journal of Legislative Studies, 2023 (forthcoming).

Syverson, C. (2019). Macroeconomics and market power: Context, implications, and open questions. Journal of Economic Perspectives, 33(3), 23-43.
UK Housing Observatory (2023) UK House Price Index. Available at: https://uk.housing-observatory.com/resources.html (Accessed 2 August 2023).

Wellings, F. (2008). British housebuilders: history and analysis. John Wiley & Sons.

Whitehead, C., & Williams, P. (2020). Thinking outside the box: exploring innovations in affordable homeownership. UK Collaborative Centre for Housing Evidence. Available at: https://housingevidence.ac.uk/publications/thinking-outside-the-box-publication/ (Accessed 2 August 2023).

Wilding, M. (2019). The most frequent, and most successful, major housing appellants, Planning Resource, 9 May 2019. Available at: https://www.planningresource.co.uk/article/1583989/frequent-successful-major-housing-appellants (Accessed 27 July 2023).

Williams, A. (2017). Big bonuses set to turn housebuilders into new pay villains, Financial Times, 29 December 2017. Available at: https://www.ft.com/content/5d16c82e-ebe3-11e7-8713-513b1d7ca85a (Accessed 27 July 2023).

Yeomans, J. & Nixon, G. (2023). Housebuilders call for revival of Help to Buy, The Sunday Times, 29 January 2023. Available at: https://www.thetimes.co.uk/article/housebuilders-call-for-revival-of-help-to-buy-kwn8z98jl (Accessed 30 August 2023).

Yu, X., Ball, M., Cheshire, P., Hilber, C. (2021). Why Delay? Understanding the Construction Lag, AKA the Build Out Rate, Chapter 3 of LSE PhD Thesis.

Supplementary Appendix

This supplementary appendix contains evidence from the earning call transcripts for Taylor Wimpey, Barratt and Persimmon over the period 2006/07-2018/19 regarding changing conditions in the local land markets within which these firms were active. It can be read in conjunction with Section 7 of the main report and provides supplementary detail regarding how the big three were representing the degree of competition in local land markets to their investors. This evidence provides further insight into the softening of competition in local land markets in the decade following the GFC.