

Profits before Volume? Major housebuilders and the crisis of housing supply

ARCHER, Thomas <<http://orcid.org/0000-0002-9857-359X>> and COLE, Ian <<http://orcid.org/0000-0002-9207-7528>>

Available from Sheffield Hallam University Research Archive (SHURA) at:

<http://shura.shu.ac.uk/27047/>

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

Published version

ARCHER, Thomas and COLE, Ian (2016). Profits before Volume? Major housebuilders and the crisis of housing supply. Project Report. Sheffield Hallam University, Centre for Regional Economic and Social Research.

Copyright and re-use policy

See <http://shura.shu.ac.uk/information.html>

Profits before Volume?
*Major housebuilders and the
crisis of housing supply*

Tom Archer
Ian Cole



Profits before Volume?

Major housebuilders and the crisis of housing supply

Tom Archer

Ian Cole

October 2016

Foreword

It took us some time to get a title agreed for this report, as we sought suggestions from colleagues in CRESR and further afield. We decided in the end on this one because it seemed to capture our underlying argument: that the performance of what are sometimes referred to as 'volume' housebuilders in recent years has been marked by a very sharp increase in their levels of profits, and a much more modest increase in their 'volumes'. We think an acknowledgement of this trend is too often missing from the perpetual head shaking analysis on what can be done so that more homes will be built in the future. This report is intended to bring into focus these recent trends in the performance of larger housebuilders, and their dominance in the industry as a whole. We would be the first to acknowledge that more detailed analysis is required of the underlying processes within housebuilding, and how much leaks out of the sector, on dividends to shareholders. We have only scratched the surface in a short report of this kind. We are pleased to see that the Communities and Local Government Committee, for example, has recently launched an inquiry into the nature and capacity of the housebuilding sector. We hope that this may be the start of a more thorough reappraisal of how housing supply can be enhanced through direct public investment as well as through the private market.

We would like to express our gratitude to Dr. Stewart Smyth at the University of Sheffield for his scrutiny of our analysis of companies' accounts, to ensure we had a robust case to present. Mervyn Jones of Yorkshire Housing and Hugh Owen of Riverside Housing Association also made helpful observations (in a personal capacity) on the direction of future policy. We would like to thank Sarah Ward, Emma Smith and Louise South at CRESR for all their help in the production of this report. We would also like to thank Professor David Robinson at CRESR for making funding available so that Tom Archer was able to complete his analysis of the financial data. Any error or omissions that remain are, of course, solely our own responsibility.

Tom Archer and Ian Cole, Sheffield, October 2016

The Authors

Tom Archer is a PhD student at the Centre for Regional Economic and Social Research, Sheffield Hallam University.

Ian Cole is Professor of Housing Studies at the Centre for Regional Economic and Social Research, Sheffield Hallam University.

Contents

Executive Summary	i
1. Introduction	1
2. A crisis of housing supply	3
3. Private housebuilding, land and the process of consolidation.....	8
4. The recent performance of the largest housebuilders	12
5. Focussing on demand - the case of Help to Buy	21
6. A shift towards supply-side interventions?	23
7. Conclusion.....	25
8. References	28
Appendix 1: Technical notes on the data and analysis.....	35

Executive Summary

There is widespread consensus that housing supply in the UK is not keeping pace with housing demand. We suggest in this report that these debates have often failed to give sufficient attention to structural changes in the housebuilding industry. If we focus on this factor, our analysis suggests that any national strategy which is largely dependent on the private market sector, as currently constituted, will be simply incapable of achieving the required uplift in housing output.

Not only is the current regime for developing new housing highly unlikely to stem the long standing decline in output in the face of increasing demand; it is also unlikely that the geographical distribution of new developments will be aligned with the major local pressure points in high housing demand.

In order to guard against volatility, housebuilders use landbanks to control the flow of new housing into local markets, and to strengthen their negotiating position with landowners. The need for land leads some housebuilders to focus on the acquisition of smaller firms, in order to access their land banks. This leads to a consolidation in the sector, and a concentration of market share by bigger firms. **The top ten housebuilders have increased their share of housing production from nine per cent in 1960 to 47 per cent by 2015. In 1980 there were over 10,000 small and medium (SME) housebuilders, building 57 per cent of all housing. In 2014 this had dropped to 2,800 firms delivering just 27 per cent of all output.** We think this process of consolidation matters, because larger firms are more concerned to maximise returns than increase output as an end in itself. They may therefore be reluctant to increase the production of a good where ongoing scarcity is proving so conducive to enhanced profitability per unit.

From 2012-15, the output of the nine largest private housebuilders grew by 33 per cent. Revenues increased by 76 per cent. In the same time frame, profit before tax (prior to the removal of exceptional items and financing costs) rose by nearly 200 per cent for these nine firms. Over a slightly longer period, 2010-15, the profits before tax of the top five housebuilders increased by 473 per cent. **End of year profits for the biggest five firms (after taxation, impairments and exceptional items are taken into account) increased from £372 million in 2010 to over £2 billion by 2015 - an increase of over 480 per cent.** In their normal functions, significant surpluses are being generated by these firms. Other priorities hold sway ahead of increasing volume. The profit margin dominates, and investment is therefore directed to those sites and locations that are most likely to produce the best returns.

What happens to these surpluses? In the aftermath of the financial crisis, one firm (Berkeley Group) chose to forgo paying dividends so it could reinvest in its core activities. The strategies of the largest firms have changed markedly since then. **In 2015, the biggest five housebuilders returned 43 per cent of their annual profits to shareholders, an amount totalling £936m. This raises questions about the potential volume of new supply that could have been provided through reinvestment of at least some of this money.**

The Government has introduced some initiatives, such as Help to Buy, to stimulate the private housing market. Help to Buy has so far generated a 14 per cent increase in supply, which is well short of the fundamental uplift in output that is required. The risk with demand-side initiatives is that they end up simply subsidising households to afford high prices, and for a temporary period. They can bring a short-term political dividend more readily than a significant long-term shift in increased supply.

The failure of the private housebuilding sector to build in sufficient quantity is not some kind of temporary aberration, while the exigencies of the 2008 financial crisis work through the system. This failure is of long standing and is indeed integral to the business model that major housebuilders work with. This process of financialisation, in which maximising shareholder returns takes precedence over increasing output or improving productivity is not, of course, unique to the housebuilding industry. However, the ramifications of this emphasis on realising profits rather than maximising investment carries particular force in housing – not least for households struggling to gain access to affordable housing, those living in overcrowded and poor quality properties, and the increasing number of households experiencing homelessness.

There are recent signs that the government is going to focusing more directly on housing supply in the future, and some new measures have been announced. But there is scope for the government to do much more to increase investment by local authorities, housing associations and other non-profit bodies for housebuilding. It needs the political will to do it. This needs to go beyond easing access to loan finance and planning reforms. This could involve measures over the use of reserves, rent policy, land supply, borrowing restrictions and moving the balance of housing subsidy away from demand and towards supply. A wide range of economists have advised the government to borrow more for sustainable infrastructural investment at this juncture. We think there is little reason why borrowing to invest in housing should be exempt from this process.

On the basis of the evidence in this report about the structure, organisation and financial performance of the major housebuilders, the private sector alone will simply continue to fail to provide what is needed, and the gap between housing demand and supply will continue to grow larger.

Introduction

There is widespread (though not universal) consensus that housing supply in the UK is not keeping pace with housing demand. As Sir Michael Lyons's 2014 review of UK housing put it: '*We face the biggest housing crisis in a generation*' (Lyons, 2014). This stark assessment was effectively a statement of accepted wisdom, rather than an unusually dramatic or controversial verdict. Lyon's portentous warnings about low levels of housing output echoed many previous judgements along similar lines. Ten years earlier, for example, Kate Barker (2004: 1) had suggested that it was not a 'realistic option' to keep building at the current low rate. The consequences would be greater homelessness, worsening affordability, social division, declining quality in public services and greater costs for businesses working in the UK. These words were unheeded. In 2004-2005, the year Barker's report was published, 205,000 houses were built in the UK. In 2014-15, ten years later, annual output was 153,000. In fact housing completions have been steadily ratcheted down since the 1960s, reflecting in particular the declining role of the public sector in housebuilding activity.

Our intention in this report is to suggest that, in these debates about housing supply, insufficient attention has been given to the structural changes taking place in the housebuilding industry itself. These changes predate the 2008 financial crisis but have become amplified since then. **If we focus on this factor in housing supply, our analysis suggests that any national strategy which is largely dependent on the private market sector as currently constituted will be simply incapable of achieving the uplift needed in housing output.**

In a paper in 2014 we explored recent trends in housing supply in the context of post-crisis austerity (Archer and Cole, 2014), and offered some insights into the persistent failure of UK governments to achieve their own housing supply targets, in both good times and bad. This report undertakes further analysis of the changing structure and financial performance of the private housebuilding industry, and provides an account of more recent trends.

Our earlier paper focuses on the largest firms that had steadily increased their market share (Wellings, 2006). In assessing the output and financial performance of these firms after the 2008 financial crisis, our analysis showed that the five biggest housebuilders, which provide for more than a third of all new housing, were prioritising their profitability ratios over increasing output.

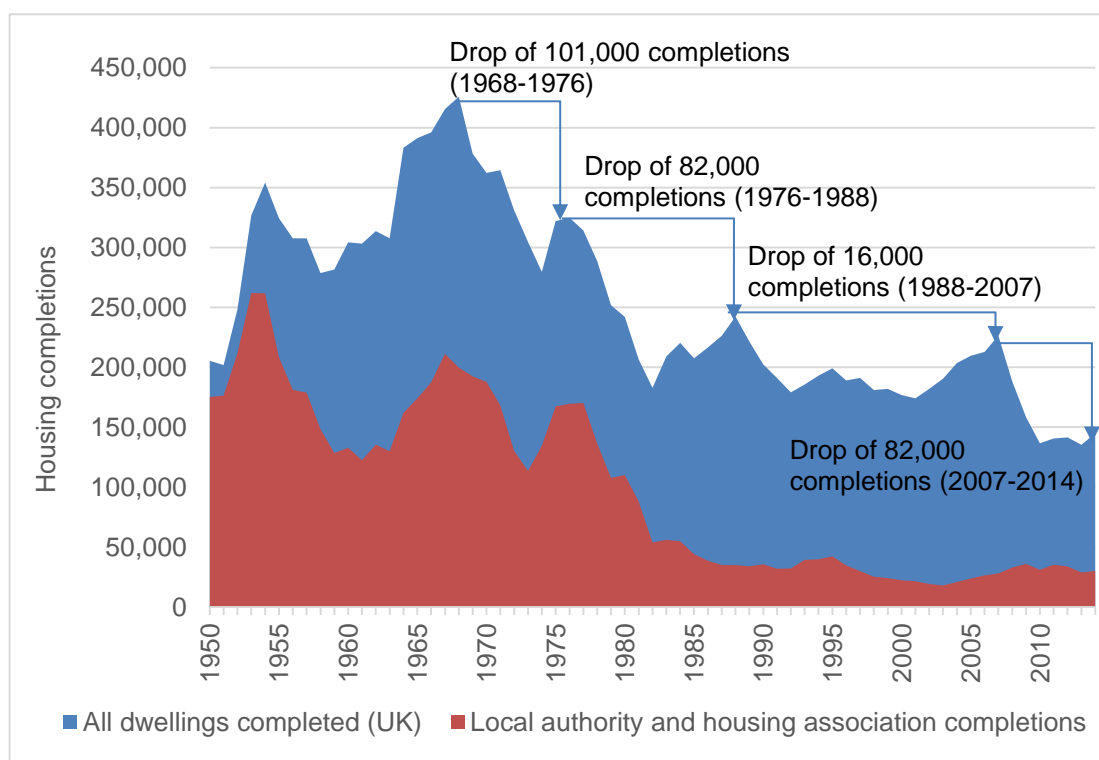
This paper updates and extends our earlier analysis. It examines whether the financial performance of the large housebuilders has continued to improve, as the financial shock of 2008 recedes; it considers whether the market share of the larger builders has diminished or increased as the housing market cycle moves on; it explores some of the early effects of government interventions since 2013 to stimulate housing demand; and it outlines some of the opportunity costs of this increased reliance on a financialised culture in the housebuilding sector, compared to a programme based on more direct public investment in housing. In essence, we concur with the Prime Minister's recently expressed view that 'where markets are dysfunctional, we should be prepared to intervene' (May, 2016). Our analysis in this report suggests that the market in new housing supply, and the industry responsible for it, is overdue proactive intervention in the public interest.

In the next section we outline the nature and scale of the crisis in housing supply. This is followed by a more detailed exploration of the private housebuilding sector, and recent trends in output, revenue, profits and dividends. We then review one of the measures introduced by the government in response to housing under-supply - the Help to Buy programme - and outline the new measures concerning housing supply that have recently been announced. In conclusion, we offer some thoughts on how the level of housing output could be significantly increased in the future if the government's own ambitions are to be met.

A crisis of housing supply

We have already noted that recent warnings about low levels of housing output are far from new. Indeed, as Figure 1 below shows, after historic highs in output in the 1960s, housing completions have been steadily declining. This long-run downward trend in overall output reflects the sharp decrease in completions in the social housing sector since the 1970s.

Figure 1: The long run decline in housing output in the UK

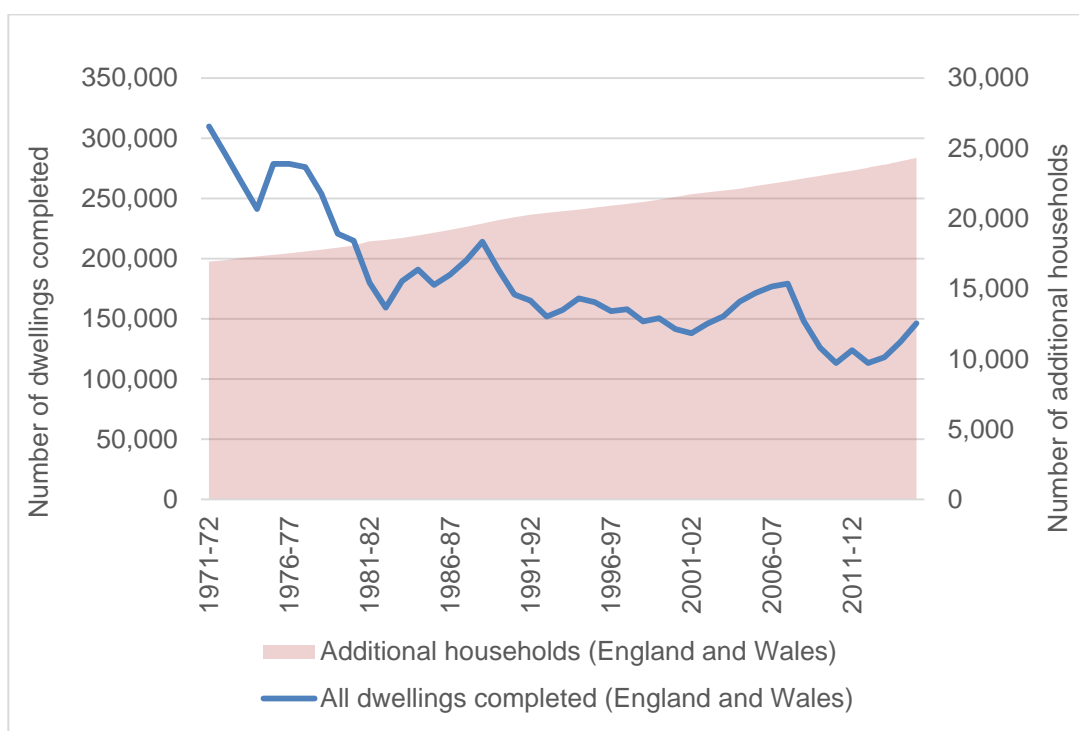


Source: DCLG (2016a)

The case for increasing housing supply has become increasingly persuasive as this historic decline in housebuilding has been set against significant annual increases in the number of additional households forming. As shown in Figure 2, the gap between what we need to build and what we are building is growing larger year on year. Changes in the size and speed of household formation and net migration have created major pressure on the existing housing stock (McDonald and Williams, 2014), compounding the existing backlog of housing need and demand. This has led a broad consensus of opinion to suggest that there should be a target for annual

housebuilding of between 240,000 to 300,000 additional units a year (Holmans, 2011; KPMG and Shelter, 2015; Lyons, 2014; House of Lords Select Committee on Economic Affairs, 2016). It can be seen from Figure 2 that completions in 2014-15 fell nearly 100,000 short of even the lowest target output figure in this range. The current government has a commitment to build a million new homes by 2020, though it is not entirely clear whether this is a target or an ‘aspiration’ (Inside Housing, 2015; 2016a). Jeremy Corbyn has also stated that a future Labour government would be committed to build one million new homes in five years, of which half would be in the council housing sector (Inside Housing, 2016b; 2016c).

Figure 2: Annual housing output and additional households forming: 1971 to 2016

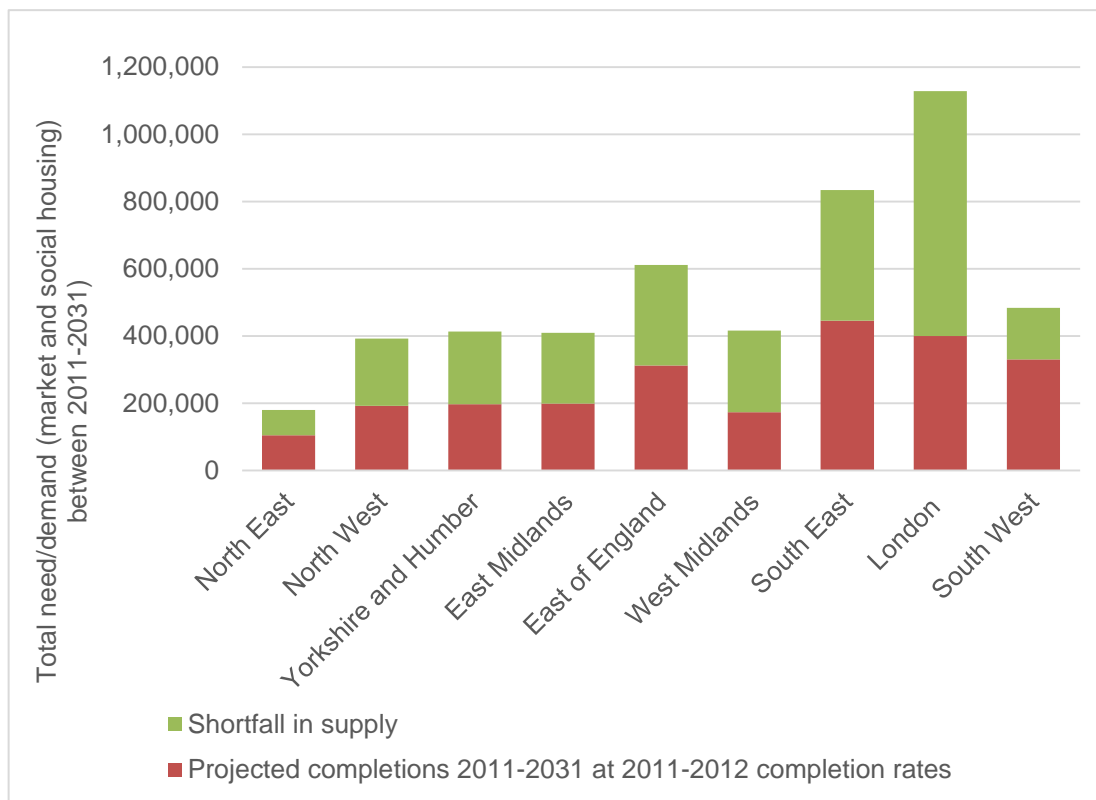


Source: DCLG (2016b), ONS (2015)

It is a truism that there is no such thing as a national housing crisis so much as a complex series of overlapping and distinct local, sub-regional and regional housing problems that require locally mediated responses. So where in England is the shortfall in supply most acute? Using Holman’s (2011) projections of housing need and demand from 2011 to 2031, alongside data about regional housing completions (DCLG, 2012), it is possible to project forward from 2011-12 completion rates.¹ Figure 3 below shows that if these levels of output were maintained long term, shortfalls will occur in all regions, but they will be particularly acute in the South East and London.

¹ DCLG discontinued their reporting on regional housing completions in 2011-12. We now know that completions rates have increased since this time, but using 2011-12 completions data gives some continuity between the data on demand and need, as it was calculated in 2011-12 by Holmans (2011).

Figure 3: Regional variations in housing need/demand and future supply, projected from 2011-12 levels.



Source: Holmans (2011), DCLG (2012)

At a lower geographical level a more nuanced picture emerges, as proportionate output in different local authorities varies markedly, within as well as across regions. Figure 4 presents data on the number of housing completions, per capita, in certain local authorities (2014-15). Those listed are the authorities with the ten highest and ten lowest per capita outputs.

Figure 4: Local authorities in England and Wales with highest and lowest per capita completions (2014-15)

Local authority	Completions per capita	Region	Local authority	Completions per capita	Region
City of London	1/50	London	Blackpool	1/2007	NW
Hinckley and Bosworth	1/98	EM	Reading	1/2010	SE
North West Leicestershire	1/109	EM	Maldon	1/2092	East
East Devon	1/148	SW	Gravesham	1/2105	SE
Test Valley	1/151	SE	North Hertfordshire	1/2184	East
Wychavon	1/160	WM	Islington	1/2210	London
Cambridge	1/161	East	Harrow	1/2460	London
Telford and Wrekin	1/165	WM	Oxford	1/3160	SE
Horsham	1/168	SE	Haringey	1/4459	London
Aylesbury Vale	1/168	SE	Richmond upon Thames	1/4840	London

Source: DCLG (2016c), ONS (2015b)

What such local analysis shows is that those local authorities with the highest outputs are not necessarily in those areas where there is most acute demand. This reflects a range of local factors, such as the availability and cost of developable land and local planning regimes. There is, for example, a disparity between completions per capita between the East Midlands and the North West: among the 100 local authorities with the highest housing completions per capita, just six are in the North West, whereas 16 are in the East Midlands. (These regions contain comparable numbers of local authorities.) However, the future growth in annual housing need and demand in the North West is estimated to be similar, per annum, to the East Midlands (Holman, 2011).

This outline analysis suggests that the current regime for developing new housing is highly unlikely to stem the long standing decline in output in the face of increasing demand; and even then it is unlikely that the geographical distribution of new developments will be aligned with the distribution of the major local pressure points in housing supply.

There are a range of explanations for this long-standing trend of housing undersupply. Some commentators have focused on what they perceive as the undue restrictions within the planning system, artificially raising the price of land and discouraging both large-scale investments and local initiatives (Ball, 2010; Morton, 2012; 2013). However, this analysis does not sit easily with the practice of land banking, used by developers, in part to inoculate themselves against risk. Others have argued that the focus on the 'numbers game' and building targets pays too little attention to the very inefficient use of the current housing stock - in terms of the number of vacant properties, second homes and, especially, under-occupied dwellings, in particular among elderly owner-occupiers (Dorling, 2014). However, the political palatability of redistributing households and properties in the private sector to

ensure a better 'fit' through a mix of sticks (such as council tax surcharges) and carrots (such as developing equity release products) still seems rather remote.

Even if housing supply were to be significantly increased in the next few years, it may not bring about the fall in property prices that would be hoped for by those concerned about housing (un)affordability. There is not a linear relationship between an increase in output and a reduction in housing costs (Gallent, 2015). It is therefore important to recognise the complexities of undertaking a comprehensive assessment of the reasons for low supply, and to predict what impact increased supply will have on housing access and affordability.

We cannot attempt in this short report to address the full range of factors accounting for low levels of new homes and indicating how output could be increased. (However, one recent and useful overview along these lines can be found in the House of Lords Select Committee on Economic Affairs (2016)). Our intentions in this report are more modest. We would contend that, in much of this debate, sufficient attention is rarely given to the structural changes taking place in the housebuilding industry itself. These changes pre-date the 2008 financial crisis but have become amplified in recent years. If we focus on this factor in housing supply, our analysis suggests that any national strategy which is largely dependent on the private market will be simply incapable of achieving the uplift needed in housing output. In the following section we outline some of the distinctive characteristics of this sector, highlighting the trend towards consolidation in the housebuilding industry, and the networks of relationships set up around the housing development process.

3

Private housebuilding, land and the process of consolidation

In an international context, it is something of an anomaly that UK housebuilders combine the functions of land acquisition and development with actual housing construction (Barker, 2004; Griffiths, 2011; Ball, 2003). Although they are still popularly described as ‘housebuilders’, many of the biggest private firms responsible for housing output in the UK are, in strict business terms, land speculators first and housing developers second (OFT, 2008; Barker, 2004; Callcutt, 2007). These firms have adopted this model as it is the best route to securing their primary objective, which is to ‘deliver profits to their investors’ (Callcutt, 2007: 4).

The acquisition of land for development is critical in this enterprise. The volatility in land prices creates scope for a cycle of large scale booms and busts in the sector. Between 2000 and 2007, for example, the value of land in England and Wales rose by 170 per cent, compared to an increase in house prices of 124 per cent (Griffiths, 2011). The greater volatility in land prices underlines the risks inherent in the housebuilding sector. In a tight land market, organisations are engaged in a delicate forecasting exercise, competing to acquire a scarce resource, and often speculating on future planning consent. They have to predict the end value of any development on a site, subtracting the production costs, to produce an offer to the landowner which builds in a profit margin (Leishman et al., 2000; Savills, 2015a). As a result, housebuilders can reap large rewards, or large losses, due to unexpected fluctuations in house prices or inaccurate costings. The process of forecasting end values compounds the likely volatility in land prices. A study by KPMG (2008), for example, showed that an expected increase or decrease in houses prices of three per cent translates to a ten per cent increase or decrease in the land values in the development.

The vagaries of making predictions about future property prices can be illustrated by the recent economic shock of Brexit. There has been little consensus since then on whether and when and for how long property prices would fall. Furthermore, the extent of the impact in specialist markets such as central London remains unclear and this is compounded by wider uncertainties in macro-economic forecasting about Britain’s future position in the global economy. It is for such reasons that the minimisation of risk is a central priority of all housebuilders.

As this pricing model plays out through the development process, housebuilders obviously seek to sell properties when the sale price covers their costs and the required profit margin. The firm's main focus is on preserving, or if possible enhancing, profit margins. This acts as a major disincentive to increase output significantly in times of both falling houses prices and rising house prices. When prices are rising, an increase in output might lead to oversupply which will affect end sale prices; and selling at below projected levels in times of declining prices would directly jeopardise the predicted margin. This helps to explain why supply is relatively inelastic to price changes (Barker, 2004; Swank et al., 2002).

In order to guard against volatility and secure sales at predicted prices, housebuilders use landbanks to control the flow of new housing into local markets, and to strengthen their negotiating position with landowners (Barker, 2004; Griffiths, 2011). Where development land is in short supply, access to land through ownership and options contracts also enables housebuilders to act strategically against other firms and landowners. As Ball (2003: 909) notes, land banks help the larger housebuilders *'spread risks, lower financing costs, [and] improve negotiating positions with land-owners'*.

The fundamental importance of access to land leads some housebuilders to focus on the acquisition of smaller firms, in order to access their land banks. This leads to a consolidation in the sector, and a concentration of market share by bigger firms. In 1960, the top ten housebuilders accounted for approximately nine per cent of all new housing production. By 2004 the biggest ten firms had increased their share to 46 per cent (Welling, 2006). Beyond these volume housebuilders, there has been a pronounced shrinking in the number of SME builders. Lyons (2014) indicated that in 1980 there were over 10,000 SME housebuilders, building 57 per cent of all housing. In 2014 this had dropped to 2,800 firms delivering just 27 per cent of all output. The need to acquire land has driven this process in many cases, to the detriment of overall housing output. Griffiths (2011) has examined trends in housing output after periods of intense market consolidation. He assessed the impact of eight big mergers in the sector in the 2000s, and showed that in each case output dropped compared to the amalgamated output before the merger. For the firms involved, that is simply a by-product of following their business logic - to acquire developable land as cheaply as possible.

It is not straightforward to see how this process of consolidation might be reversed, despite repeated government exhortations to diversify the industry and promote the SME sector. In response to competition for land, and the need to secure planning consent to build housing, housebuilders utilise local information and unique skill and knowledge sets. Adams et al (2008: 15), for example, noted how big housebuilders;

'retain estate agents...to bring sites to their attention. Such agents are expected to know when potential development sites are likely to be marketed, who owns them, when any lease will expire and whether planning permission can be easily obtained...The local network and localised knowledge are seen as an important source of competitive advantage.'

The presence of these networks, in conjunction with the specialist skills and knowledge required to secure planning permissions in the right location, at the right density, with an appropriate tenure mix and so on, creates a major barrier to entry for new firms, or existing SME builders wishing to increase their acquisition of new sites to build more.

An additional factor affecting the behaviour of housebuilders is the inherent time lag from land acquisition to producing a marketable product. This helps to explain why housing starts often do not mirror the rate of new planning permissions. An examination of permissions data produced by the Local Government Association (2013), and data on total housing starts in England and Wales (DCLG, 2016d), suggests that shortly after the 2008 financial crisis permissions quickly began outstripping housing starts. Recent analysis by Savills showed that this gap has continued to widen, with approximately 50,000 more permissions to housing starts in the first quarter of 2015 (Savills, 2015b).

The motives and behaviours of large private housebuilders since the 2008 financial crisis have been explored by Payne (2015), drawing on interviews with senior staff about changes in their operating practices. Payne claims that, in the immediate aftermath of the crisis, these organisations were prioritising '*cash returns*' and making '*other features of speculative housebuilding, such as profit and volume output...secondary considerations*' (Payne, 2015: 279). In the effort to maximise sales at an acceptable price, housebuilders were offering part-exchange deals, and selling off-plan to organisations such as housing associations to generate some cashflow. To maximise prices, housebuilders were active in renegotiating their section 106 contributions, to reduce the number of 'affordable' homes they were required to provide (Mathiason et al., 2013).

Such practices characterised the response of larger housebuilders to the immediate aftermath of the financial crisis, but they soon reverted to '*prioritising margin over volume*' (Taylor Wimpey, 2011, in Archer and Cole, 2014). The post-crisis strategies of each firm were, in part, dictated by how leveraged they were. Those with high levels of debt, and capital assets tied up in land (which was decreasing in price), were hit particularly hard. As Griffiths (2011) notes, those holding large land assets had to write-down the value of their assets, and as sales slowed in the immediate post-crisis period, they witnessed severe cashflow and balance sheet problems. Some housebuilders broke their covenants with their lenders, and had to restructure their debts, as lenders were reluctant to force the realisation of those assets at current prices. This forbearance has meant that many firms survived by retaining land assets, which under other circumstances would have been repossessed.

This response by lenders meant that firms did not bear the full costs of the 'market correction' provoked by the 2008 financial crisis. As they recovered from the effects of the crisis, many larger housebuilders shifted their focus to building in those locations where prices were more resilient (Lyons, 2014; Jefferys and Lloyd, 2015), or to areas where planning conditions are less onerous (Payne, 2015). This is one manifestation of increased risk aversion that affected how schemes were being appraised, where land was being acquired and how investment was reshaped.

This summary of the motives and actions of private firms since the 2008 crisis shows how new housing supply can be suppressed, as other priorities hold sway ahead of increasing volume. As a result, national output can be unresponsive to changes in demand. The profit margin dominates, and investment is directed to those sites and locations that are most likely to produce the best returns. Of course, not everything required to increase volumes lies within the gift of the private housebuilder, as their actions and operating conditions are influenced by other factors, such as local planning regimes, national policy initiatives and the attitude of lenders. A full discussion of how these relationships have changed in recent years lies beyond the scope of this report. Nevertheless, it remains clear that the largest housebuilders have been adopting a more risk averse approach to their use of capital, and in their competition in land markets (Payne, 2015).

4

The recent performance of the largest housebuilders

This understanding of the practices and operations of private housebuilding firms sets the context for a more thorough analysis of their performance since 2008, in terms of both their housing output and their financial health. This segment of the overall market is of critical importance. In 2014/15, for example, private firms were responsible for more than three quarters of all new housing in the UK and the ten biggest housebuilders were responsible for nearly half of all completions. An analysis of these trends after the 2008 crisis is timely, if another downturn in the housing market is in prospect, following the decision to leave the European Union. Warnings have been given about slowdowns in housing sales and falling house prices (Dorling, 2016; Pickford, 2016), declines in share prices for housebuilding firms (Cahill, 2016), and the suspension of property funds in light of mass withdrawals by investors (MacAdam, 2016). As yet, some of the more pessimistic predictions have not come to pass, but the full effects of Brexit are likely to take months if not years to work through. Even a slight slowing down in housebuilding activity will make it impossible to get anywhere near to those ambitious output targets for 2020 and beyond. Hence, there is value in looking at the last shock to the system, and its effect on the housebuilding industry, to prepare for the next one.

We have compiled and analysed data from the annual reports of the nine biggest housebuilders, based on the size of their revenue in 2015.² The tenth biggest housebuilder in the UK, Bloor Holdings, is not a publicly listed company, and hence information about their housing completions and financial performance is difficult to access. Where appropriate the annual report data have been allied with data from other sources to situate their performance in the broader market place. A more detailed note on our data and data analysis is provided in Appendix 1.

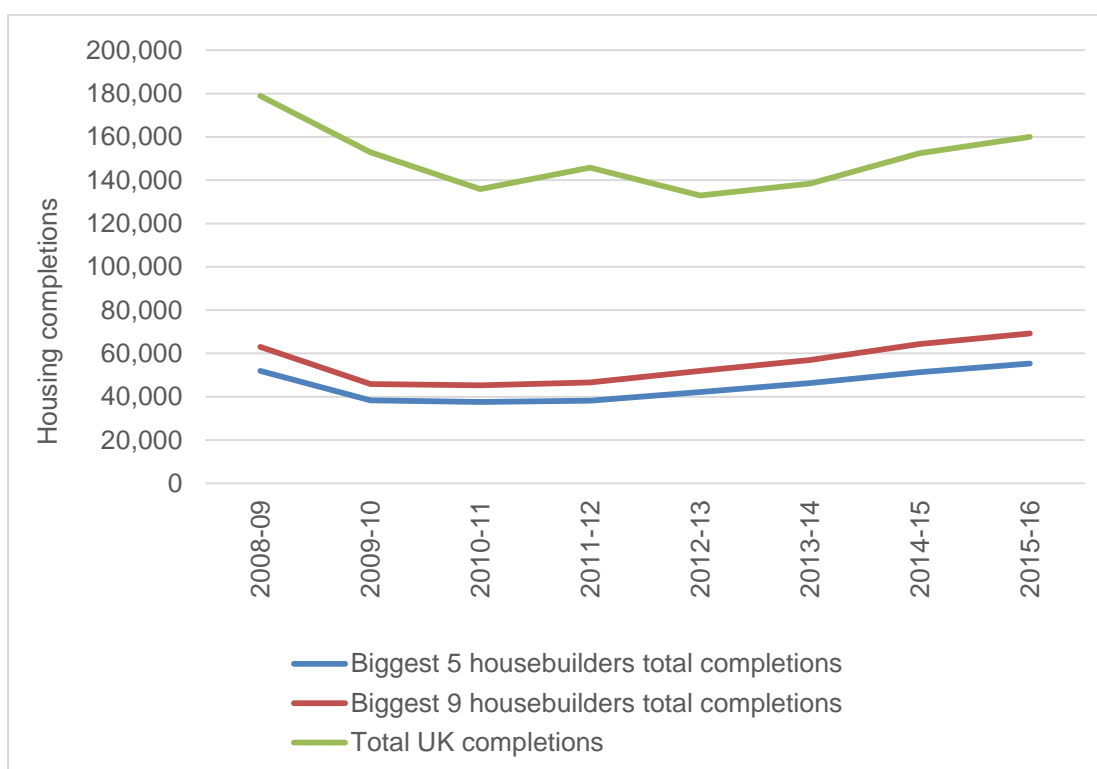
4.1. The disjuncture between revenue and output

The biggest housebuilders have geared up their supply in recent years, and have played an important role in preventing volumes from suffering a sharp decline.

² In order of the size of their housebuilding revenue, starting with the largest, the following firms were studied; Barratt Developments PLC, Taylor Wimpey PLC, Persimmon PLC, Berkeley Group Holdings PLC, and Bellway PLC, Redrow Group PLC, Galliford Try PLC, Bovis Homes PLC, Crest Nicholson PLC.

Figure 5 shows how, in a climate of fluctuating completions overall, the largest private firms have consistently increased their output since 2010

Figure 5: Housing completions for the UK, and the biggest private housebuilders³



Source: DCLG (2016b), housebuilder annual reports

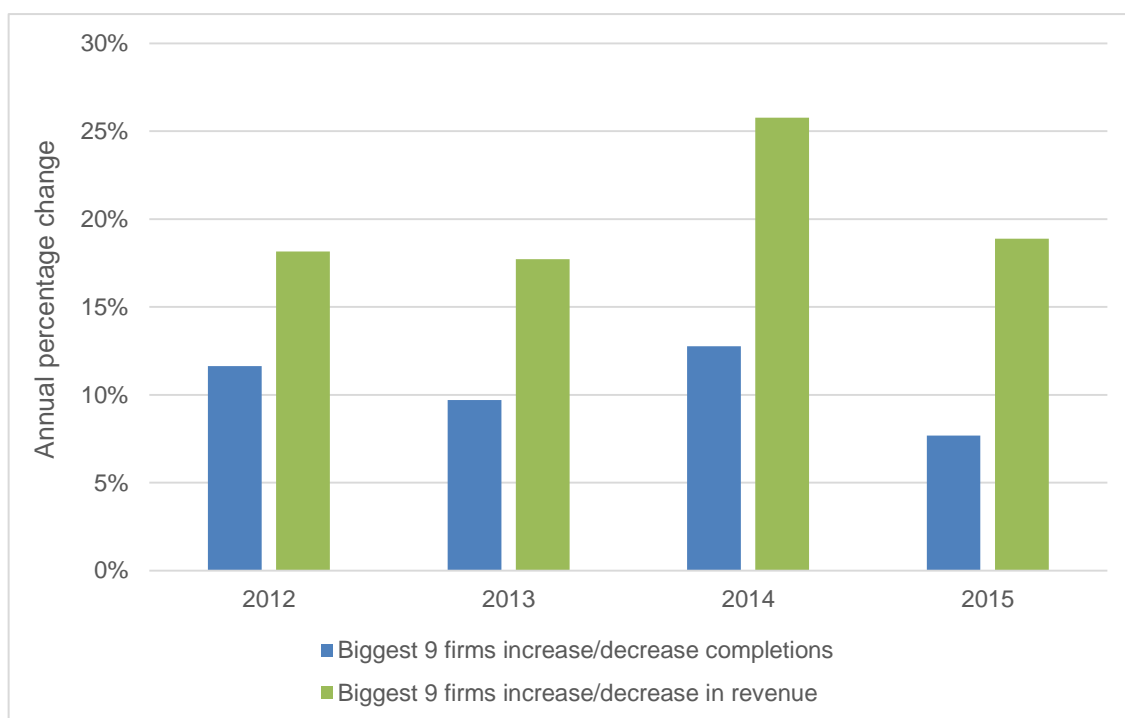
The annual output of the biggest housebuilders is at historically high levels. Wellings (2006) has shown how, among the biggest ten housebuilders, there was a steady increase in the number of units developed, from 14,000-16,000 in the 1960s, to a peak of 76,000 in 2004. As Figure 5 shows, the top nine firms were back to reaching this peak level by 2015. This trend confirms not just the scale of their activity, but their increasing prominence in the market. In the 1960s the top ten housebuilders were responsible for 8-9 per cent of national output (Wellings, 2006). In 2015 we calculate this figure to be 47 per cent, indicating considerable consolidation in the market. Does this process of consolidation matter, as long as larger housebuilders are continuing to step up supply in the wake of the 2008 crisis? We think it does matter, because these firms are more concerned to maximise returns than increase output as an end in itself. There may be some reluctance to increase the production of a good where ongoing scarcity is proving so conducive to enhanced profitability per unit.

Behind these issues of output lie some interesting financial dynamics. In our earlier article, we noted how the revenues of the biggest five housebuilders grew by 40 per cent between 2008 and 2012, whilst completions only grew by 24 per cent over the same time period (Archer and Cole, 2014). This discrepancy between revenue and

³ Figures for UK completions 2015-16 were not available at the time of publication, so estimates have been made based on quarterly results.

output has continued. From 2012-15, a similar pattern emerged, as the five biggest housebuilders delivered year-on-year revenue growth of up to 22 per cent, yet the maximum growth in completions in one year was 11 per cent. For this report, we extended the analysis to cover the biggest nine housebuilders, as shown in Figure 6. In simple terms, between 2012-2015 the number of dwellings completed by this group grew by 33 per cent. However, the rate of increase in their revenue from housebuilding was more than twice this, increasing by 76 per cent. A major disjuncture has emerged between income and output, and this comes into even sharper focus in section 4.3 below when we analyse profit before tax.

Figure 6: Annual percentage change in the revenue and housing completions of the biggest 9 housebuilders



Source: Housebuilder annual reports

One of the reasons behind the difference between revenue growth and output growth may lie in the pricing of new housing by the biggest builders. Figure 7 shows the average sale price achieved by four of the biggest five housebuilders for the period 2008-2015.⁴ Berkeley Group, the other firm in the biggest five, has been removed as an outlier; as they operate largely in London, their average sale price far exceeded the other firms. The figure shows that the price of new products by these housebuilders is increasingly outstripping price growth in the wider housing market. This trend may therefore underpin the disproportionate growth in revenues.

⁴ Where possible this data is for all sales, which includes affordable housing units not just private sales.

Figure 7: Average UK house prices compared to the average sale prices of a selection of volume housebuilders



Source: Land Registry (2016), housebuilder annual reports

The increase in average sales prices may well reflect the decision by housebuilders to target locations that will generate higher end values. This is corroborated by trading updates and investor presentations from these firms, which focus on land purchases and development in 'better quality locations' (Taylor Wimpey, 2014a). This raises a number of questions - not least, whether investment is likely to be directed to the lower end of the private market, and whether the growth in average sales prices has been fuelled in part by public subsidy.

4.2. The geography of housing output

Pricing trends raise further questions about the geographical distribution of housing by the biggest housebuilders if they have indeed targeted more favourable markets. However, it is notoriously difficult to assess the distribution of their output, as each firm uses different regional boundaries to report their activity.

Certain conclusions can be drawn, however, not least because four of the biggest nine housebuilding firms operate predominantly in the south of England: Berkeley Group operates almost universally in London and the South East region; Crest Nicholson also operates predominantly in the south, with some development in the Midlands; Bovis Homes develop nationally but two thirds of their development in 2015 was in the south; and approximately three quarters of Galliford Try's completions in 2015, through its Linden Homes arm, was located in the south. Adding geographical data from the other housebuilders (excluding Redrow Group, where data of this type were not available) it is possible to estimate the concentration of 2015 completions in the south of England by these eight firms. We suggest that

25-000-30,000 of the 65,000 completions by these firms were based in London, the South East or the South West.⁵ Figure 8 presents this information.

Figure 8: 'Southern' completions by eight of the biggest ten housebuilders

	'Southern' completions in 2015	Data and boundary notes
Barratts	7,183	Total completions labelled 'London', 'South' (the boundary for which includes most of the South East and parts of Norfolk), and 'West' (which largely mirrors the South West administrative boundary).
Taylor Wimpey	5,737	Total completions in the South East, South West and London offices of their 'South' division. The South West boundary covers parts of south Wales. Full year completions modelled on half year results.
Persimmon	7,084	Total completions by their 'South Division', which in addition to London, the South East and South West includes certain shire counties, parts of south Wales and the Midlands, East of England.
Berkeley Group Holdings	3,355	Development almost universally in the South East and London administrative boundaries, though some developments in the south Midlands.
Bellway	4,056	Total completions for their 'South' division, which comprises the administrative areas of London, the South East and South West, but also includes southerly parts of the East of England and south Wales.
Galliford Try	2,111	Total completions for Linden Homes in their 'South of England' division. Completions in the Midlands have been deducted.
Bovis	2,784	Total completions for their 'South' division, which comprises the administrative areas of London, the South East and South West, but also includes southerly parts of the East of England.
Crest Nicholson	2,725	Total completions by all divisions, which cover all of the South East and London administrative boundaries, with some activity in the West Midlands.
Total	32,310	

Source: Housebuilder annual reports

There is some evidence that this concentration of activity in three of the nine English regions is starting to dissipate, and that the three largest housebuilders are starting to 'move North'. In some divisions in Barratts, Taylor Wimpey and Persimmon, recent growth in output was higher in the north than in the south. For example, the central division within Barratts, which covers the West Midlands and North West of England, registered a 75 per cent increase in output between 2011-15. This

⁵ This figure can only be an approximation as the split of completions by Crest Nicholson does not reveal the total for their Midlands activity. Furthermore, 'southern' completions data for Persimmon and Taylor Wimpey includes some completions in the Midlands, East of England and Wales. The figure for southern completions by Taylor Wimpey has had to be modelled on half year results (Taylor Wimpey, 2015) information as this was the only geographical data available.

compared with a 43 per cent increase in their 'Southern' region. Similarly, Persimmon has shifted from a position where a minority of completions were based in the 'North' in 2012, to a majority of completions being located here in 2015.

The data reveal a shift in the strategy among big housebuilders, which may have been influenced in part by higher land costs in the south, and more receptive local authorities in less pressurised markets in the North. The decisions of such firms about where they build are being driven by their underlying business logic and their access to land. This does not necessarily bear a close relationship to the geographical distribution of the areas across England with the most acute housing demand. It remains to be seen how far the government's recently announced measure on 'low supply' areas (see Chapter 6) will mitigate this trend.

4.3. Profit: understanding normal activity and net returns

In our previous paper we noted how the biggest housebuilders had moved from incurring losses in the immediate post-crisis environment to accruing sizeable profits by 2013 (Archer and Cole, 2014). It is not always clear what the term 'profit' refers to. Profit after all costs and other deductions is clearly different to profit before tax (PBT), but PBT calculated before exceptional items can look very different to PBT after these items are added. This is particularly relevant in an analysis of the accounts of large housebuilders following the crisis. Large 'impairments' were included in their accounts, particularly in 2009, which reduced the value of their land and other assets. Calculating PBT in a way which includes these items gives a sense of the current financial health of the company, but it may conceal the underlying profitability (or otherwise) of their normal functions (Cambridge University Press, 2011). We have therefore assessed profitability before exceptional items are included and also before any financing costs. In addition, we have sought to isolate the PBT associated purely with each firm's housebuilding activity in the UK, since a number undertake various commercial developments and housebuilding in other countries.

An analysis of this information shows a staggering rise in the profits before tax (PBT) of the biggest housebuilders. **Between 2010 and 2015, the biggest five housebuilders saw their PBT (before exceptional items) rise by 473 per cent, and the biggest nine firms saw an increase of 489 per cent in their PBT.** In their normal housebuilding functions, these firms are remarkable generators of profit. And whilst this analysis focuses on PBT generated from UK housebuilding activity, these firms have generated revenue from other sources. Looking at PBT after all revenue, the growth in their profitability is even more pronounced. The extent to which any of these surpluses were used to fund a cycle of reinvestment to increase housing volumes is explored in the next section.

If the 'normal functions' of these firms were generating profit, what about the net positions after tax, exceptional items and other costs were taken into account at the end of each year? In the immediate aftermath of the recession, some firms suffered big net losses (such as Taylor Wimpey in 2008). However, other firms remained profitable throughout, such as the Berkeley Group. Most of the biggest five firms were hit by heavy financing costs in 2008 and 2009. When impairments for falling land values are included, this created negative year end positions. Nonetheless, this group of firms had collectively achieved over £372m in end of year profits by 2010,

and this had risen sharply to over £2bn by 2015. This represents a near 500 per cent increase in end of year profits between 2010 and 2015, after taxation and other impairments have been taken into account. The suggestion, by the then Housing Minister in 2011, that the housebuilding industry had been 'brought to its knees' (Shapps, 2011) by the 2008 financial crisis is somewhat wide of the mark. There was a more varied picture for the biggest firms, both in the impact of the recession and in the speed at which they returned to profitability.

The performance of the largest housebuilders between 2010 and 2015 can be summarised as follows: for the biggest five firms, housing completions rose by 48 per cent, housebuilding revenue increased by 103 per cent, while housebuilding profit before tax (PBT) increased by 473 per cent, and end of year total profits increased by 484 per cent. In short, the rate of growth in profit is *ten times* the rate of increase in completions.

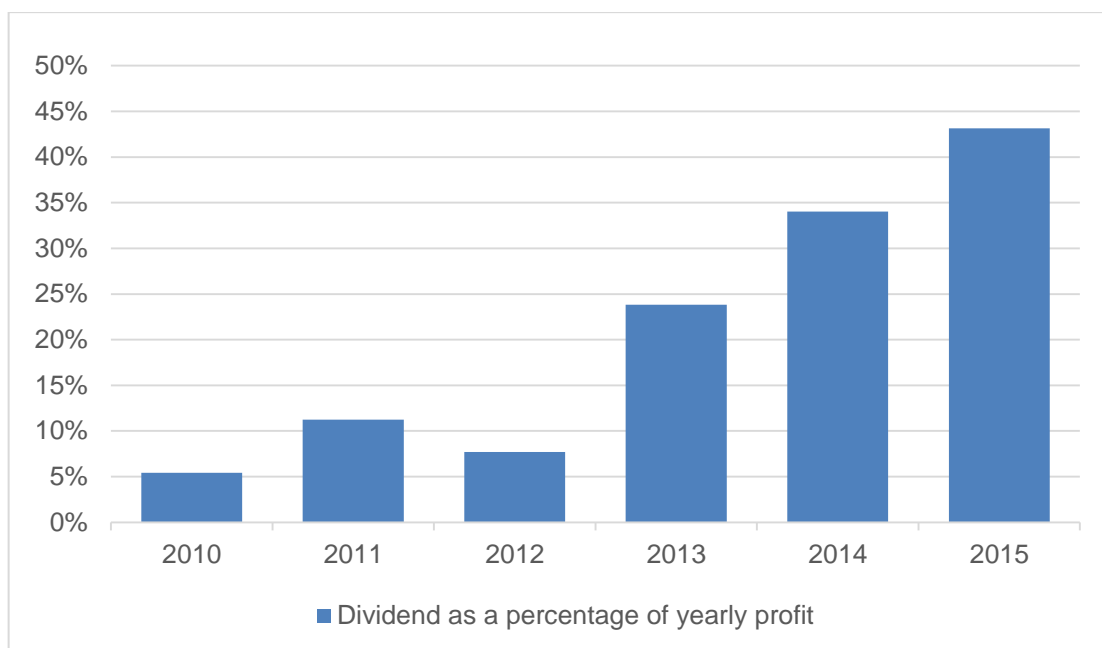
4.4. Dividends: lost potential for investment?

As profits among large housebuilders have risen sharply in the past five years, the distribution of these surpluses merits comment, especially given the widespread concerns about undersupply. In the aftermath of recession, one firm chose to forgo paying dividends so it could reinvest in its core activities. The Berkeley Group's annual report in 2010 declared:

'...the greatest value will be achieved through land acquisition, investing in work in progress and opportunistic share purchases, as opposed to declaring a dividend' (Berkeley Group, 2010: 3)

The strategies of the largest firms have changed markedly since then. As the recession has faded, an increasing proportion of annual profits has been transferred back to investors, rather than being reinvested to boost output, as shown in Figure 9. In 2015, the biggest five housebuilders returned 43 per cent of their yearly profits to shareholders, an amount totalling £936m, raising questions about the potential volume of new supply that could have been provided, had the firms followed a stronger reinvestment strategy.

Figure 9: Yearly dividends for the biggest five housebuilders as a share of profits for the year



Source: Housebuilder annual reports

Working backwards from the figure of £936m, the total value of dividend payments made in 2015 by the biggest five housebuilders, we can estimate the lost potential from this transfer of assets. Taking an 'average housebuilding cost per plot' of £52k in 2015 (Barratts, 2015: 25), we can use KPMG's breakdown of development costs (KPMG, 2008) to estimate development costs per unit to be approximately £104k. If this rough average cost is applied to all five of the biggest housebuilders, then the £936m they transferred out in dividends in 2015 could have funded an additional output of nearly 9,000 dwellings. This would constitute six per cent of total national output in 2015.

Of course, it can be argued that investors input their capital which, in part, enables those firms to build, and on that basis are legitimate in demanding a return. But even if one is sympathetic to this argument, our analysis shows how housing output is hostage to the interests of shareholders in these firms. The level of output of our biggest housebuilders turns on these strategic decisions about reinvestment or divestment.

The trends outlined here, in terms of revenue, profit, completions and the transfer of assets through dividends, will continue through 2016. This will certainly be the case if the immediate impact of Brexit on the housing market proves less severe than initially expected. The recently declared half year results for Persimmon Homes (up to end of June 2016) are a case in point. Compared to the first half year for 2015, profit before tax increased 29 per cent (to £352.3m); revenue increased by 12 per cent (to £1.49bn); legal completions increased by just six per cent (to 7,238 new

homes sold) (Persimmon PLC, 2016)⁶. Similarly, the results for Barratt Homes for the year ending in June 2016 showed that profit before tax was up by 20.7 per cent on 2014/15 (to £682.3m), revenue increased by 13 per cent (to £4.23bn) and total completions were up by just 5.3 per cent (to 17,319) (Barratt Developments PLC, 2016). These are stark differences of scale, even allowing for time lags around completions.

⁶ Persimmon Homes has also attracted considerable publicity over a proposed £600m-plus payout, which would rank as one of the most generous bonus schemes the City has ever seen. Persimmon is set to award a big slice of shares to its senior team under a long-term incentive plan put in place three years ago. It will ultimately result in a total of 30m shares being awarded to the company's 135 top managers by the end of 2021. It is likely to amount to a payment of over £100 million to the Chief Executive Jeff Fairburn. (Ficenec, 2015)

Focussing on demand - the case of Help to Buy

In 2013 the introduction of the Help to Buy programme by the Coalition Government caused economists to assess any possible repercussions on the wider housing market. Sir Stephen Nickell, during a Treasury Select Committee meeting, posed and answered a set of fundamental questions:

'...is it just going to drive up house prices? By and large, in the short run the answer to that is yes. But in the medium term will the increased house prices stimulate more house building? ...probably...a bit. But the historical evidence suggests not very much'. (Nickell, in Liszewski, 2013)

These words have been largely prophetic. Help to Buy was devised to provide a stimulus to the housebuilding market by increasing the supply of housing through the building of more new homes (Finlay et al., 2016). Contrary to the suggestion in this statement, the programme has not subsidised the creation of that supply directly, or directly subsidised housebuilders to build. It was in fact an avowedly political gesture to ease the path for those potential first time buyers unable to get their fabled 'foot on the housing ladder' through the normal operation of the housing market. The equity loans component of Help to Buy enabled those who could not access a mortgage to do so by supplementing their minimum five per cent deposit with a 20 per cent equity loan. The mortgage guarantee element (to be discontinued) provides reassurances to mortgage lenders in the event of a default, to encourage more lending.

It is therefore not clear how the Help to Buy programme can, or will, affect any major changes in the underlying dynamics of the housebuilding process discussed earlier in this report. However, the programme has made an impact on overall new housing supply, with an evaluation suggesting it has stimulated an increase in national supply by 14 per cent (Finlay et al., 2016). It is also clear that housing offered through Help to Buy is generally at 'the lower end of the price spectrum' (NAO, 2014: 9), perhaps offsetting concerns about those on moderate incomes being priced out of new housing.

For the biggest housebuilding firms, Help to Buy has been an important intervention. Using information from the government's evaluation of the programme (Finlay et al.,

2016) and other statistics about equivalent programmes in Wales (Welsh Government, 2016) and Scotland (Scottish Government, 2016),⁷ we estimate that in 2014 at least 50 per cent of all the equity loans made in the UK related to sales by just five of the biggest nine housebuilders. In 2014, Help to Buy sales constituted 53 per cent of all Taylor Wimpey's completions (Taylor Wimpey, 2014b), 40 per cent of Persimmon's, and 31 per cent of Barratts' (Finlay et al., 2016). This intervention represents, indeed is intended to represent, a distortion of the market, but this can have less favourable consequences too. Studies suggest that there is a strong relationship between increased mortgage lending and house prices, such that the volume of mortgages through Help to Buy has stimulated a three per cent price increase nationally (Shelter, 2015).

But what of the impact on the finances and pricing of housing by the biggest builders? One might hypothesise that Help to Buy provided cashflow stability to the biggest firms, enabling them to remain disciplined on the pricing of their other units. As seen in Figure 6, the average sale prices of the biggest firms are increasingly outperforming the average price for all residential sales nationally, which would suggest that Help to Buy has not led them to moderate their prices on other products. There is certainly evidence in their annual reports, and in national evaluations, that the programme has stimulated new demand to which those firms have responded with higher volumes. However, there is also considerable evidence of switching from 'normal' market housing to Help to Buy products, making any output gains less than would have been anticipated. It seems that the big housebuilders are increasingly dependent on Help to Buy to prop up demand for their products, and are therefore highly susceptible to changes in associated government policy (Elder, 2016)

The question that cannot be answered at this stage is whether such interventions represent both good value for money for the taxpayer, as well as an effective mechanism to increase housing supply. Much depends on the future performance of the housing market. Comparisons with other government housing interventions raise important questions. The government's Affordable Homes Programme (AHP) 2011-15, created 186,000 housing units for the £4.5bn of public expenditure (Cross, 2015). By March 2016, the £3.5bn of government liabilities, generated by Help to Buy (equity loans), had supported the development of 81,000 units of housing (DCLG, 2016e). Clearly there are considerations about additionality and deadweight effects beyond what would have happened anyway. Time will tell whether the approach of guaranteeing debt, and taking on liabilities in the form of equity, will deliver the projected returns. Little attention seems to have been paid as yet to the external effects of such interventions on pricing in the wider market, as well as any net gains in housing output.

⁷ This uses 2014 data for the year 2014 in England and financial year 2014-15 for Wales and Scotland.

A shift towards supply-side interventions?

In the course of finalising this report, distinct signs have emerged that the government may be changing course from the insistent demand-side emphasis in housing policy that marked the 'Osborne' years from 2010 to 2016 in the Coalition and Conservative administrations. A series of housing initiatives were announced at the Conservative Party conference in October 2016. These included:

A Home Building Fund. This involves combining several existing schemes (the Builders Finance Fund, the large sites infrastructure programme and the Build to Rent fund) and an additional £1.15 billion of previously unannounced loan finance. This amounts to £3 billion overall. £2 billion will be devoted to long-term funding for infrastructure and £1 billion for small and custom builders. Housing associations will be able to bid to the fund. The fund will run until 2021. The announcement about the Fund suggested that it would enable 25,000 new homes to be built by 2020 and an additional 225,000 new homes overall (see Inside Housing, 2016d).

The Accelerated Construction programme. This will involve a partnership between the government and investors and contractors to speed up development on public land and target the use of off-site construction and new models of building. The government estimates that this fund will enable 15,000 new homes to be built by 2020.

A focus on 'low demand, high supply' areas. In response to some of the marked geographical imbalances in the housing starts across the country (see Chapter 2 of this report) the government has identified 100 local authority areas where there is a 'massive' gap between local housing supply and demand. In these areas, predominantly in the South-east, the Housing Minister Gavin Barwell has announced that he will '*work with these places and find out what is happening and work with them to deliver [an improvement].*' (Inside Housing 2016e)

These initiatives, and possibly further measures, are likely to be spelt out in more detail in the forthcoming Autumn Statement and in a White Paper later in the year.

The announcement of the above measures met with a broadly positive initial response across the housing sector, though clearly more detail will be necessary before a proper assessment can be made. However, on the basis of our report, several issues will need to be taken into account in order to judge whether the new

programmes are going to have the impact on housing output that the government anticipates. First, it is unlikely that these measures alone will dent the *modus operandi* of the major housebuilders outlined in this report, and they will remain responsible for the larger part of housing output in the country. Profits will continue to trump output. Second, small and custom builders will not necessarily be ready to benefit from any support for access to loan finance and this will take some time to work through: much of the SME sector has not recovered from the 2008 crash and many of those involved then have either retired or downscaled their level of activity since. It will take sustained encouragement for them to re-enter the market in many parts of the country. Third, while many larger housing associations, notably the G15 group of London housing associations, are keen to enhance their development programmes, it remains to be seen how attractive any new loan conditions will be for them and how large their role will be compared to the private sector. Fourth, there has been no reference by the government to the potential role of local authorities in increasing their housebuilding activity, for example, if borrowing constraints were to be eased. Councils still seem to be a cast as part of the problem - through presiding over slow or restrictive planning regimes - rather than as part of the solution. We return to this issue in the Conclusion.

Conclusion

This report has undertaken a partial analysis of one aspect of housing supply - the domination of the largest housebuilding firms in the sector and the extent to which increases in revenue and, especially, profits have outstripped the rate of growth in output since the 2008 financial crisis. Our analysis concurs with the conclusion of the recent House of Lords Select Committee on Economic Affairs inquiry (House of Lords Select Committee on Economic Affairs, 2016) in their assessment of the housebuilding sector: *'the government must recognise the inability of the private sector, as currently incentivised, to build the number of homes needed (p.5)'*. As the Prime Minister has recently suggested that government will intervene in dysfunctional markets (May, 2016), one could argue that the market for housebuilding should be first in line.

The failure of the private housebuilding sector to build in sufficient quantity is not, it should be noted, some kind of temporary aberration, while the exigencies of the 2008 financial crisis continue to work through the system. This failure is of long standing and is indeed integral to the business model that major housebuilders work with. The model of forecasting end values, and protecting profit margins, has restricted the extent of discounting that firms could undertake. And housebuilding is not immune to the trend of the remorseless financialisation of the British, and indeed global, economy, creating an environment in which what is produced becomes less important than the leverage it enables for profit maximisation and securitisation (Aalbers, 2015; Gamble, 2014; van der Zwan, 2014).

This tendency has been well captured by John Kay in his outstanding account of the aftermath of the financial crash (Kay, 2015). Kay shows how the twin functions of search (property development through new sites and refurbishment) and stewardship (holding property as long-term investments) in capital allocations in the property sector have started to crumble, and become eclipsed by the trade in securities on existing houses, infrastructure or businesses. In this world, it is not the number of houses built that counts, it is the financial opportunities that arise from this output. This process produces an outcome of 'contrived scarcity' (Standing 2016) in housing⁸. It is not an inevitable feature of the housing system.

⁸ *'Scarcity may be natural, as in the case of truffles..but in modern capitalism scarcity is more often contrived, because a minority possesses all or most of an asset, because rules make it hard to produce or sell, or demand is deliberately stoked to outstrip supply'* (Standing, 2016)

This process of financialisation, in which maximising shareholder returns takes precedence over increasing output or improving productivity, is, of course, not unique to the housebuilding industry (Archer and Cole, 2014). However, the ramifications of this emphasis on realising profits rather than maximising investment carries particular force in housing – not least for households struggling to gain access to affordable housing, those living in overcrowded and poor quality properties, and the increasing number of households experiencing homelessness.

There is not a direct alignment between the demand for housing and housing supply, both in terms of where new homes are built, and the prices they command. To buy a Barratt's property in 2015 at their average sale price, for example, one would need a household income of around £60k, on the basis of a mortgage four times annual earnings - well beyond the means of most middle and low income households, unless they have access to other funds (such as 'the bank of Mum and Dad'). Given the structural nature of the business logics followed by the biggest housebuilders, what scope is there for government intervention to raise output through initiatives such as Help to Buy? The cost to the public purse of the Help to Buy programme depends in part on the future performance of the housing market, where any predictions are hazardous at the best of times, but especially when having to take account of the long-run effects, large or small, of Brexit. Help to Buy has so far generated a 14 per cent increase in supply (Finlay et al., 2016), which is well short of the fundamental uplift in output that is required. The risk with demand-side initiatives of any kind is that they end up simply subsidising households to afford high prices, and for a temporary period. They can bring a short-term political dividend more readily than a significant long-term shift in increased supply.

As shown in Chapter 6, the Government has recently announced a series of new measures, including the £3 billion Home Building Fund, part of which is to be targeted at small and medium sized developers. This intervention seems to be founded on the assumption that access to finance is the major barrier to increasing supply from this part of the housebuilding industry. However, the barriers to increasing supply are multifaceted, and any attempt to achieve a major uplift in supply by 2020 will require a systematic and comprehensive approach. This would cover a range of factors hindering supply, including the control and supply of land, capacity and, not least, incentivising private firms to reinvest their surpluses and stop drip-feeding supply onto the market. But at least this package of measures opens the door to the kind of supply side focus that has been notably absent from the government's policy agenda up to now.

What does not seem to be on the government's agenda, however, is to introduce measures that would produce a major uplift in building by local authorities, housing associations and other non-profit bodies who make up the variegated world of community-led development (Heywood et al, 2016). Detailed economic appraisals (such as Capital Economics, 2016) have argued that this policy will help head off the unsustainable growth in welfare expenditure. Nevertheless, increasing the output of these non-profit organisations will not be a straightforward process. Many local authorities may not have the capacity and appetite to begin building again. For their part, major housing associations are currently caught between government exhortations to build for home ownership and the drive from financial regulators such as credit rating agencies to concentrate on social rented housing, to keep leverage down, as Dame Kate Barker recently pointed out (House of Lords Select Committee,

2016: para 59). A stimulus to these vehicles for housebuilding would also need complementary action on the supply and release of land.

Nevertheless, there is scope within the government's grasp to do much more to increase public sector building, if there is the political will. This could involve measures over the use of reserves, rent policy, borrowing restrictions and moving the balance of housing subsidy away from demand and towards supply. A wide range of economists have advised the government to borrow for sustainable infrastructural investment (for a recent summary, see Zhengelis, 2016). There is little reason why borrowing to invest in housing should be exempt from this process.

The House of Lords Select Committee on Economic Affairs (2016) recently concluded that, without an uplift in the contribution of local authorities and housing associations to housing supply, it would not be possible to build the number of houses required in the next few years. The relaxation of the government's previous fiscal strategy to generate a surplus by 2020 provides a window of opportunity. It would be extraordinary to continue to ignore this policy option, if a serious attempt is going to be made to achieve stated building targets by 2020 and beyond. On the basis of the evidence in this report about the structure, organisation and recent financial performance of the major housebuilders, the private sector alone will simply continue to fail to provide the homes that are needed, and the gap between housing demand and supply will continue to grow larger.

References

Aalbers, M.B. (2015) The potential for financialization. *Dialogues in Human Geography*, 5 (2), pp. 214-219.

Adams, D., Cartlidge, L., Leishman, C. and Watkins, C. (2008) *Understanding Builder to Builder Residential Land Transactions*. London: Department for Communities and Local Government.

Archer, T. and Cole, I. (2014) Still not plannable? Housing supply and the changing structure of the housebuilding industry in the UK in 'austere' times. *People, Place and Policy*, 8 (2), pp. 97-112.

Ball, M. (2003) Markets and the Structure of the Housebuilding Industry: An International Perspective. *Urban Studies*, 40 (5-6), pp. 897-916.

Ball, M. (2010) The housebuilding industry Promoting recovery in housing supply [online]. Accessed: 2 June 2016, available at: <http://webarchive.nationalarchives.gov.uk/20120919132719/http://www.communities.gov.uk/documents/housing/pdf/1526670.pdf>

Barker, K. (2004) Review of Housing Supply: Delivering Stability: Securing our Future Housing Need [online]. Accessed: 5 August 2016, available at: http://news.bbc.co.uk/nol/shared/bsp/hi/pdfs/17_03_04_barker_review.pdf

Barratts Development PLC (2016) Building Sustainable Values: Annual report and accounts 2016. Accessed: 17 October 2016, available at: http://www.barrattdevelopments.co.uk/~/_media/Files/B/Barratt-Developments/reports-presentation/2016/barratt-annual-report-2016.pdf

Berkeley Group (2010) *Berkeley Annual Report 2010* [online]. Accessed: 3 August 2016, available at: <http://www.berkeleygroup.co.uk/media/pdf/4/i/berkeley-annual-report-2010.pdf>

Cahill, H. (2016) Housebuilders' share prices suffer after construction output falls [online]. Accessed: 3 August 2016, available at: <http://www.cityam.com/246676/housebuilders-share-prices-suffer-after-construction-output>

Callcutt, J. (2007) *The Callcutt Review of Housebuilding Delivery*. London: Department for Communities and Local Government.

Cambridge University Press (2011) *'Pre-exceptional' in Cambridge Business English Dictionary*. Cambridge: Cambridge University Press.

Capital Economics (2016) *Building New Social Rent Homes: An Economics Appraisal*. London, Capital Economics

Cross, L. (2015) *Affordable Homes Programme 'exceeds expectations', says government* [online]. Accessed: 18 August 2016, available at: <http://www.socialhousing.co.uk/affordable-homes-programme-exceeds-expectations-says-government/7010290.article>

Department for Communities and Local Government (DCLG) (2012) *Table 232: permanent dwellings completed, by tenure and region (final version)* [online]. Accessed: 12 June 2016, available at: <https://www.gov.uk/government/statistical-data-sets/live-tables-on-house-building>

Department for Communities and Local Government (DCLG) (2013) *House building data: notes and definitions* [online]. Accessed: 16 July 2016, available at: <https://www.gov.uk/guidance/house-building-data-notes-and-definitions-includes-p2-full-guidance-notes-and-returns-form>

Department for Communities and Local Government (DCLG) (2016a) *Table 241: permanent dwellings completed, by tenure, United Kingdom, historical calendar year series* [online]. Accessed: 15 July 2016, available at: <https://www.gov.uk/government/statistical-data-sets/live-tables-on-house-building>

Department for Communities and Local Government (DCLG) (2016b) *Table 209: permanent dwellings completed, by tenure and country* [online]. Accessed: 15 July 2016, available at: <https://www.gov.uk/government/statistical-data-sets/live-tables-on-house-building>

Department for Communities and Local Government (DCLG) (2016c) *Table 253: permanent dwellings started and completed, by tenure and district* [online]. Accessed: 15 July 2016, available at: <https://www.gov.uk/government/statistical-data-sets/live-tables-on-house-building>

Department for Communities and Local Government (DCLG) (2016d) *Table 208: permanent dwellings started, by tenure and country* [online]. Accessed: 15 July 2016, available at: <https://www.gov.uk/government/statistical-data-sets/live-tables-on-house-building>

Department for Communities and Local Government (DCLG) (2016e) *Help to Buy (Equity Loan scheme) and Help to Buy: NewBuy statistics: Data to 31 March 2016, England* [online]. Accessed: 18 August 2016, available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/532888/HTB_EL_and_HTB_NewBuy_statistical_release.pdf

Dorling, D. (2014) *All that is solid: The great housing disaster*. Harmondsworth, Penguin.

Dorling, D. (2016) 'Is Britain on the verge of a Brexit-fuelled house price crash? Only the data will tell'. *The Guardian*, Accessed: 26 August 2016, available at: https://www.theguardian.com/commentisfree/2016/aug/25/brexit-crash-house-prices-referendum?utm_source=esp&utm_medium=Email&utm_campaign=GU+Today+main+NEW+H+categories&utm_term=187616&subid=9107349&CMP=EMCNEWEML6619I2

Elder, B. (2016) *UK housebuilders feel mortgage approval pain*, Financial Times, 29 September 2016

Ficenec, J. (2015) *Building bosses at Persimmon to net £600 million*, Daily Telegraph, 22 August 2015

Finlay, S., Williams, P. and Whitehead, C. (2016) *Evaluation of the Help to Buy Equity Loan Scheme*. London: Department for Communities and Local Government.

Gallent, N. (2015) Investment, global capital and other drivers of England's housing crisis. *Journal of Urban Regeneration and Renewal*, 9 (2), pp.122-138.

Gamble, A. (2014) *Crisis Without End? The Unravelling of Western Prosperity*. Basingstoke: Palgrave Macmillan.

Griffiths, M. (2011) *We must fix it: Delivering reform of the building sector to meet the UK's housing and economic challenges*. London: IPPR.

Heywood, A. (2016) *Local housing, community living: prospects for scaling up and scaling out community-led housing*. London: The Smith Institute

Holmans, A. (2011) *Town & Country Planning Tomorrow Series Paper 16: New estimates of housing demand and need in England, 2011 to 2031* [online]. Accessed: 5 August 2016, available at: http://www.cchpr.landecon.cam.ac.uk/Downloads/HousingDemandNeed_TCPA2013.pdf

House of Lords Select Committee on Economic Affairs (2016) *Building More Homes* HL paper 20 <http://www.publications.parliament.uk/pa/ld201617/ldselect/ldeconaf/20/20.pdf>

Inside Housing (2015) *Lewis pledges a million homes by 2020* [online]. Accessed: 15 June 2016, available at: <http://www.insidehousing.co.uk/lewis-pledges-a-million-homes-by-2020/7011845.article>

Inside Housing (2016a) *Lewis: million homes was never a target* [online]. Available at: <http://www.insidehousing.co.uk/lewis-million-homes-was-never-a-target/7015848.article>

Inside Housing (2016b) *Corbyn pledges 500,000 new council homes* [online]. Available at: <http://www.insidehousing.co.uk/corbyn-pledges-500000-new-council-homes/7016366.article>

Inside Housing (2016c) *Labour still counting cost of 500,000 social home pledge* Available at: <http://www.insidehousing.co.uk/policy/politics/central-government/labour-still-calculating-cost-of-500000-social-home-pledge/7016959.article?adfesuccess=1>

Inside Housing (2016d) *May pledges to boost supply of new homes*, Inside Housing, 7 October 2016

Inside Housing (2016e) *Low supply areas' to be targeted*, Inside Housing 7 October 2016

Institute for Fiscal Studies (IFS) (2015) *Housing: Trends in Prices, Costs and Tenure* [online]. Accessed: 5 August 2016, available at: <http://www.ifs.org.uk/uploads/publications/bns/BN161.pdf>

Jefferys, P. and Lloyd, T. (2015) Why Don't We Build Enough New Homes in England? *Built Environment*, 41 (2), pp.166-182.

- KPMG (2008) *Homebuilding market study: Study investigating financing for homebuilders*. London: KPMG.
- KPMG and Shelter (2015) *Building the Homes We Need*. London: Shelter.
- Land Registry (2012) *House Price Index for: United Kingdom* [online]. Accessed: 5 August 2016, available at: <http://landregistry.data.gov.uk/app/ukhpi/explore>
- Land Registry (2016) *House Price Index for: United Kingdom* [online]. Accessed: 5 August 2016, available at: <http://landregistry.data.gov.uk/app/ukhpi/explore>
- Leishman, C., Jones, C. and Fraser, W. (2000) The influence of uncertainty on house builder behaviour and residential land values. *Journal of Property Research*, 17 (2), pp.147–168.
- Liszewski, L. (2013) *Financial experts question Help to buy claims* [online]. Accessed: 13 July 2016, available at: <http://www.insidehousing.co.uk/financial-experts-question-help-to-buy-claims/6526312.article>
- Lloyd, J. (2013) *Whose Home? Understanding Landlords and their Effect on Public Policy*. London: Strategic Society Centre.
- Local Government Association (LGA) (2013) *An analysis of unimplemented planning permissions for residential dwellings 2013* [online]. Accessed: 15 July 2016, available at: <http://www.local.gov.uk/documents/10180/11831/Unimplemented+planning+permissions+an+alysis/efb571d3-c869-4199-aaec-234f71eef76d>
- Lyons, M. (2014) *The Lyons Review: Mobilising across the nation to build the homes our children need* [online]. Accessed: 5 August 2016, available at: http://www.yourbritain.org.uk/uploads/editor/files/The_Lyons_Housing_Review_2.pdf
- MacAdam, D. (2016) *M&G and Aviva suspend property funds following Brexit vote* [online]. Accessed: 3 August 2016, available at: <http://www.bbc.co.uk/news/business-36715806>
- Mathiason, N., Fitzgibbon, W. and Turner, G. (2013) *Thousands of affordable homes axed* [online]. Accessed: 3 June 2016, available at: <https://www.thebureauinvestigates.com/2013/09/18/thousands-of-affordable-homes-axed/>
- May, T. (2016) *Prime Minister: The good that Government can do* [online]. Accessed: 18 October 2016 at <http://press.conservatives.com/post/151378268295/prime-minister-the-good-that-government-can-do>
- McDonald, N. and Williams, P. (2014) *Planning for housing in England: Understanding recent changes in household formation rates and their implications for planning for housing in England* [online]. Accessed: 5 August 2016, available at: http://www.rtpi.org.uk/media/819060/rtpi_research_report_-_planning_for_housing_in_england_-_january_2014.pdf
- Morton, A. (2012) *Why Aren't We Building Enough Attractive Homes? Myths, misunderstandings and solutions* [online]. Accessed: 19 June 2016, available at: <https://policyexchange.org.uk/publication/why-arent-we-building-enough-attractive-homes-myths-misunderstandings-and-solutions/>

Morton, A. (2013) *A Right to Build: Local Homes for Local People Policy Exchange*. Accessed: 15 September 2016 at: <http://policyexchange.org.uk/publication/a-right-to-build-local-homes-for-local-people/>

National Audit Office (2014) *The Help to Buy equity loan scheme* [online]. Accessed: 17 August 2016, available at: <https://www.nao.org.uk/wp-content/uploads/2015/03/The-Help-to-Buy-equity-loan-scheme.pdf>

Office for Fair Trading [OFT] (2008) *Homebuilding in the UK: A market study*. London: OFT.

Payne, S. (2015) Exploring the Impact of the Recession on British Volume Housebuilders: A Behavioural Analysis. *Built Environment*, 41(2), pp.271-288.

Persimmon PLC (2016) *Half Year Results for the Six Months ended 30 June 2016*. Accessed: 15 September 2016, available at: <http://corporate.persimmonhomes.com/media/291692/half-year-results-for-six-months-ended-30-june-2016.pdf>

Pickford, J. (2016) *Property buyers put purchases on hold in wake of Brexit vote* [online]. Accessed: 3 August 2016, available at: <http://www.ft.com/cms/s/0/0ff2e78e-3a10-11e6-9a05-82a9b15a8ee7.html#axzz4GFkHakss>

Savills (2015a) *Housing Market Note: The value of land* [online]. Accessed: 15 June 2016, available at: http://pdf.savills.com/documents/2015-06-04ValueofLand.pdf?_ga=1.84229468.41925027.1470058585

Savills (2015b) *Spotlight: Residential Development; Who will build the homes we need?* [online]. Accessed: 15 June 2016, available at: <http://pdf.euro.savills.co.uk/uk/residential---other/spotlight-residential-development-2015.pdf>

Scottish Government (2016) *Help to Buy: Monitoring Report* [online]. Accessed: 4 August 2016, available at: <http://www.gov.scot/Topics/Built-Environment/Housing/BuyingSelling/help-to-buy/MonthlyStats/MIR>

Shapps, G. (2011) *'Build Now, Pay Later' announcement* [online]. Accessed: 27 November 2013, available at: <https://www.gov.uk/government/news/grant-shapps-offers-build-now-pay-later-deal-to-developers>

Shelter (2015) *How much help is Help to Buy? Help to Buy and the impact on house prices* [online]. Accessed: 4 August 2016, available at: https://england.shelter.org.uk/_data/assets/pdf_file/0010/1188073/2015_09_how_much_help_is_Help_to_Buy.pdf

Standing, G. (2016) *The Corruption of Capitalism: Why Rentiers Thrive and Work does not Pay*: Biteback Publishing. footnote quote from: https://books.google.co.uk/books?id=qgX1DAAAQBAJ&pg=PT135&lpg=PT135&dq=guy+standing+%2B+contrived+scarcity&source=bl&ots=XQJOI2ebvp&sig=vD1CNCC3QkKJx4AOP_A9zNoLwsew&hl=en&sa=X&ved=0ahUKEwi8kOaWpObPAhXJtRQKHdvXDLUQ6AEIJTAB#v=onepage&q=guy%20standing%20%2B%20contrived%20scarcity&f=false

Swank J, Kakes J and Tieman A (2002) *The Housing Ladder, Taxation and Borrowing Constraints* [online]. Accessed 18 June 2016, available at: http://www.dnb.nl/en/binaries/ms2002-09_tcm47-147321.pdf

Taylor Wimpey (2011) *Results for the year ended 31 December 2010* [online]. Accessed: 12 April 2014, available at <https://www.taylorwimpey.co.uk/corporate/investor-relations/reporting-centre/2011>

Taylor Wimpey PLC (2014a) *Analyst and Investor Day: 13 May 2014* [online]. Accessed: 24 July 2016, available at: <https://www.taylorwimpey.co.uk/corporate/investor-relations/reporting-centre/2014>

Taylor Wimpey PLC (2014b) *Creating sustainable value* [online]. Accessed: 4 August 2016, available at: <https://www.taylorwimpey.co.uk/~//media/Head%20Office/IR%20Comms%20images/ARA%202014/Annual%20Report%20and%20Accounts%202014.pdf>

van der Zwan, N. (2014) Making sense of financialization. *Socio-economic Review*, 12 (1), pp. 99-129.

Wellings, F. (2006) *British Housebuilders: History and Analysis*. Oxford: Blackwell.

Welsh Government (2016) *StatsWales: Help to Buy Wales completed purchases by local authority and household income* [online]. Accessed: 4 August 2016, available at: <https://statswales.gov.wales/Catalogue/Housing/Help-To-Buy/completedpurchases-by-la-householdincome>

Zenghelis, D. (2016) *Building 21st century sustainable infrastructure (part 1): time to invest*. Policy Brief. London: London School of Economics.

Appendix 1: Technical notes on the data and analysis

Section four above draws on information extracted from eight years of annual reports, from the nine housebuilders with the biggest yearly revenues in 2015. As noted above, the tenth biggest housebuilder, Bloor Holdings, was excluded from the study on the grounds that, as a limited company, accessing information about their housing output and other financial performance would be difficult.

The information extracted from these housebuilding firms is largely confined to; their housing completions, revenues or earnings, profits, dividends, and their participation in the government's Help to Buy scheme. It is sufficient to say that, as those firms use different reporting conventions, and with some operating complex group structures, significant effort was required to ensure data comparability. This was aided, in terms of the financial data at least, by firms stated compliance with accounting procedures, such as the International Financial Reporting Standards (IFRS). Nonetheless, for each of the data fields above, certain considerations became apparent:

Completions

The UK government defines a *'housing completion'* as *'a dwelling...ready for occupation or when a completion certificate is issued'* (DCLG, 2013). It is difficult to know whether, in reporting their output, housebuilders apply the government's this definition strictly. For one firm, Berkeley Group, in certain reports this information is difficult to locate and a variety of phrases, such as 'units sold', are used to describe their output. For the purposes of this analysis we have had to assume that the governments definition is largely the one applied. One of the firms studied operates outside of the UK, and others undertake both housebuilding and commercial development. In light of this, for each firm we sought to isolate the data pertaining only to their UK housebuilding activity. This is in terms of both completions and financial performance (see below). Extracting information about the geographical location of each firm's output was much more difficult. Maps and boundary descriptions, provided in the annual reports, were used to make rough assessments of their regional output. Over time, for certain firms, their geographical reporting changed making it difficult to create time series data. For instance, Persimmon in 2012 appear to combine their figures for their south and central regional offices. Despite these difficulties, rough geographies could be established, particularly to isolate changes in output from north to south or vice versa.

Revenue

In assessing the revenues of the nine firms, we have tried to isolate housebuilding revenue from other income sources, using segmental analysis in the annual reports. Where firms reported commercial development and other trading separately, this was relatively straightforward. However, for others we had to establish non-housing income and subtract it from total earnings. The same principle was used for revenue generated outside the UK, for instance by Taylor Wimpey, so that the revenue reported only relates to UK housing.

Profit before Tax

As noted in section four, we have looked at a specific form of Profit before Tax (PBT), which is calculated before exceptional items, in order to throw light on the 'normal activities' and functioning of these businesses. As with revenue, the segmental analysis was used to isolate PBT for UK housebuilding/residential development, where those firms reported any other revenue generating activity. In trying to achieve some comparability across the firms, the PBT data collected was profit before financing costs, and other impairments or debt restructuring. Where profit from joint ventures was not included in these figures, this was added back in since reporting on housing completions tended to include this output. For certain firms it became unclear, after 2012, whether exceptional items were being included in their PBT, but efforts were made to identify such exceptional items. In calculating change in PBT over time, we selected years when, as a group, they posted positive values.

Profit/loss for the year

To ensure data comparability for 'net' profit or loss, we used the figures generally reported as 'profit/loss for the year', after exceptional items and discontinued operations. For those firms engaged in international housebuilding, or commercial developments, this figure includes any profits from such activities. The segmentation analysis in the annual reports enables the identification of revenue and PBT specifically for UK housebuilding, but not for profit/losses for the year.

Dividends

The value of dividends paid by each firm was identified in their consolidated cashflow statements, generally under the heading 'dividends paid to Company's shareholders'. This related to actual payments, rather than projected dividend payments which are often discussed in annual reports. This analysis was only performed on the biggest five firms.

HTB

The government's evaluation (Finlay et al., 2016) provided valuable information on the quantity and value of Help to Buy equity loans for the nine firms studied here. To supplement this information, relevant data was also extracted from 2014 and 2015 annual reports, which served to cross check the information in the government's evaluation. Unfortunately, there was large variation, across the nine firms, in terms of their reporting about completions linked to Help to Buy. This hindered the scope of analysis. As with any analysis of secondary data from different sources, there are questions about comparability, and whether one is comparing 'apples with apples'. As can be seen above, significant effort was made to understanding the underlying definitions and measures being used in each firm's reports

CRESR
Sheffield Hallam University
City Campus
Sheffield S1 1WB

+44 (0)114 225 3073
e: cresr@shu.ac.uk
w: shu.ac.uk/cresr

ISBN: 978-1-84387-4034

**Sheffield
Hallam
University** | Centre for
Regional Economic
and Social Research