



THE NATIONAL HOUSING FUND

An understanding of the economic benefits and implications for housing supply

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1 Introduction

ResPublica commissioned JLL to consider a collection of questions related to its proposed creation of a new £10bn pa National Housing Fund for England.

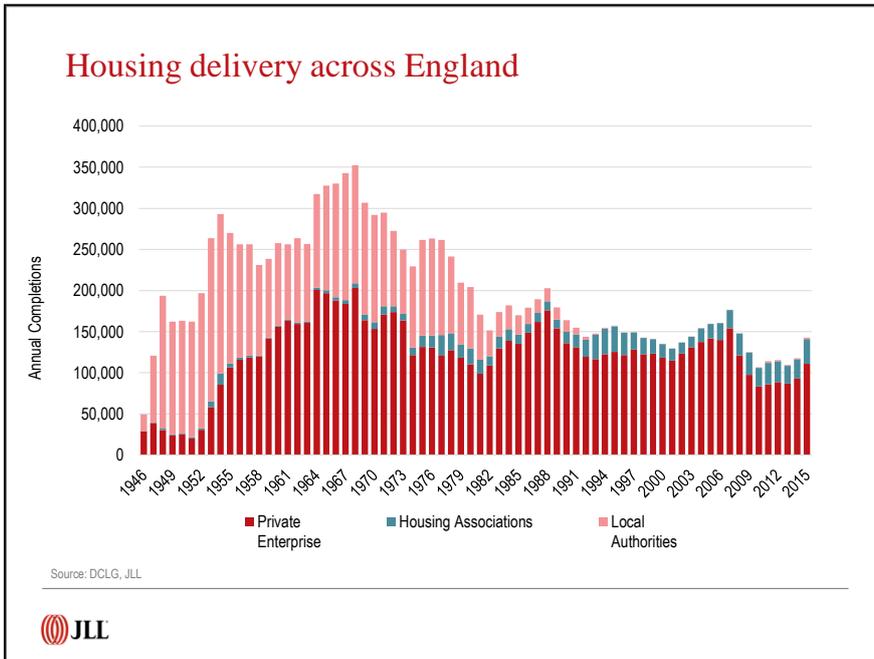
The questions are laid out in the chapters that make up this report – Future Housing Delivery, National Housing Fund and Accelerated Construction, Upscaling SME Developers, NHF Valuation & Economic Benefits, and Public Sector Net Debt and Net Borrowing.

This report follows a previous piece of work undertaken by JLL for ResPublica in which it was concluded that a minimum of **40,000** and a high of **75,000** additional homes per annum as a result of the proposed £10bn pa NHF.

The 10 year NHF would invest £10bn annually over its lifetime funded through 50 year gilts. The NHF would serve as a guaranteed buyer for market and submarket rented homes, managed and operated by housing associations and built by SME builders. With a Housing Investment Fund in place, small developers could take an option on a site and then approach the Fund with a plan for development of that land. The developer would then work up an agreement with the Fund on price, size, layout and timing. An agreement to purchase from the Fund would provide the security for SMEs to obtain development finance at a competitive rate with low equity investment.

2 Future Housing Delivery

The Government has set a target to deliver 200,000 homes per annum for England over the course of this Parliament to meet the housing needs of a growing population—although the most recent estimate coming from the House of Lords Economic Affairs Committee put the requirement at 300,000 homes pa. However, the targeted need is estimated, the country has not built housing at the required rate for nearly 30 years, as shown in the graph below.



2.1 Slowdown in new housing delivery

Over recent months a confluence of factors, including the vote to leave the European Union in June 2016, have increased caution among housebuilders that has resulted in a slowdown in construction volumes. Early figures from the Department for Communities and Local Government (DCLG) show that starts in Q3 2016 remained buoyant. However, this is not expected to continue. According to JLL's latest forecasts¹ the total number of starts in 2017 and 2018 is expected to be around 134,000 pa. This would be a major setback to the Government's ambition to deliver 1 million homes by the end of the current parliament.

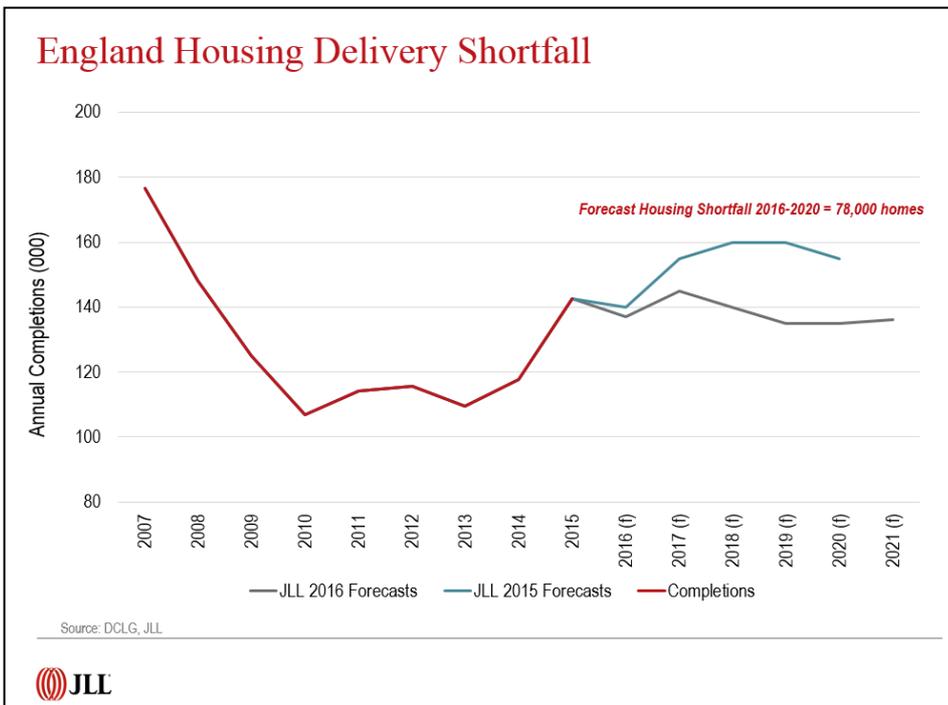


¹ JLL Forecasts were published in November 2016 and do not take into account any impact of potential policy initiatives announced in the forthcoming housing White Paper.

As a result of the housebuilders slowing down the rate of construction in coming years, JLL is forecasting a slump in completions across England, with an average of 138,000 dwellings delivered per annum over the next five years—significantly lower than both the 200,000 and 300,000 pa targets outlined earlier.



Comparing JLL's latest forecasts of housing completions from November 2016 to those produced the year earlier quickly highlights the dramatic impact that is expected in housing delivery. As shown in the graph below, the rate of completions is now forecast to be lower for each of the next five years, peaking in 2019 when completions are now expected to be 25,000 homes lower. This has resulted in JLL's housing completion forecasts to be nearly 80,000 homes lower between 2016 and 2020 than they were in 2015; thus leaving a growing hole in the government's plans to deliver 1 million homes.



Source: JLL

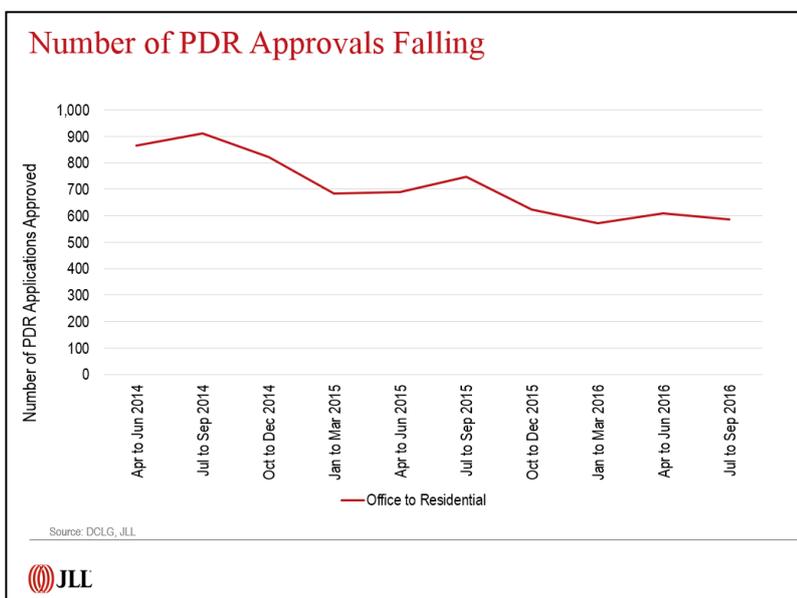
2.2 Impact on net housing supply

As well as new build completions the DCLG produce statistics on net housing supply, which also includes statistics on the number of new homes provided through conversions and changes of use as well as estimates on the number of

houses demolished each year. According to this data set almost 190,000 homes were added to England’s housing stock in 2015-16, the highest total since 2007-08.

Of the 190,000 new homes delivered in 2015-16, nearly 31,000 of these were delivered through change of use. This was an increase of 10,000 homes compared with the previous year and the highest number of change of use homes delivered over the past 10 years. It is unlikely that the rate of change of use delivery can be maintained. As previously mentioned the near 31,000 units produced in 2015-16 was the highest volume on record. Over the past 10 years this figure has averaged just under 17,000 units per annum, and has been as low as 11,500 per annum.

Office to residential conversions have been the primary driver behind the explosion in the number of conversion units being delivered. The introduction of a Permitted Development Right in May 2013 has meant that large numbers of secondary office buildings have been converted to residential units. However, as the graph below shows, the number of PD Right application approvals for office to residential conversions has been falling over the past 12 months. There were only 586 applications approved in Q3 2016, a 36% fall compared with their Q3 2014 peak of 910. The falling supply of oven-ready conversion opportunities supports the fact that we expect the number of conversions added to new housing supply will not maintain its present rate of 31,000 units per annum.



Source: DCLG

2.3 Knock-on effect on affordable housing delivery

Over the past two years an increasing proportion of net additional housing supply has been provided through change of use. This reached a total of 31,000 units in 2015-16, 16% of all new housing supply. The data from DCLG show that around half of the change of use delivery was done using PD rights, which are not required to provide affordable housing. This resulted in over 3,000 affordable homes not being provided, which otherwise would have been delivered based on the average of 22% affordable housing provision shown in DCLG data for the last five years.

Moving forward, while we do not expect change of use conversions to maintain their current volume, it is likely that with PD rights now a permanent fixture that they will account for a share of change of use delivery each year. This will have a knock on effect on affordable housing provision due to the lack of requirement to include any as a part of new PD Rights schemes.

Beyond the impact of PD right conversions, any fall in traditional new build private open market sale delivery will have a negative impact on affordable housing delivery. With the majority of affordable homes delivered as part of s106 obligations any drop in private market transactions will hinder the supply of affordable homes as well. Assuming the

proportion of affordable homes remained at 22%, then based on JLL forecasts for housing completions, 24,000 fewer s106 affordable homes would be delivered across England over the next five years than if the construction rate was maintained at a similar rate to 2015-16.

2.4 Housing associations impacted

Beyond the direct impact of the slowdown in housing delivery highlighted above, it raises concerns for housing associations who are becoming increasingly involved with private housing delivery. This has become the case due to the reduction of central Government affordable housing grant and the need to find new sources of capital to subsidise the delivery of affordable housing.

According to the latest Global Accounts from the HCA, 10% of registered providers have some level of exposure to the private sale market. Although beyond these there are a growing number who are looking to enter the market, highlighted by the 2013 Ambition to Deliver² report, which set out housing associations' desire to increase their total output to 120,000 homes per annum by 2035, of which 40,000 will be private homes.

This raises concerns over the impact of any private market slowdown on not only the housing associations that are actively engaged in the private sales market but also the ambitions of those yet to engage. The likely result is that those who see others negatively impacted will refrain from entering the market for the short term at least and calls in to question the ability of housing associations to meet their stated ambition of 40,000 private homes per annum. This represents a potential lost opportunity to diversify the delivery of private housing across the country. The NHF provides a quick intervention tool that enables the government to prevent this opportunity from being lost and supporting the housing associations' stated ambition of reaching 120,000 homes per annum.

However, if the number of private open market homes potentially delivered by housing associations was to fall, this will also likely mean that fewer affordable homes are delivered by housing associations. As mentioned earlier they have ambitions to deliver 120,000 homes, of which two thirds or 80,000 are to be affordable. However, if they are unable to raise the necessary additional capital required to reach this level through the private sector then they will be restricted by the availability of grant funding from Central Government to deliver these homes through other funding routes.

2.5 Government Interventions and the White Paper Implications

In an effort to counter the prevailing market dynamics suppressing the delivery of housing across the country, the government has already started to intervene in the market. The latest flagship policy is the £2bn Accelerated Construction fund, which is aimed at increasing the delivery of suitable land for residential development.

Furthermore the government has announced the £3bn Home Building Fund. This will provide loan funding from £250,000 to £250 million for development finance, infrastructure finance and to support innovative ways of delivering housing. This includes support for off-site manufacturing, new entrants and small builders. This is a welcome aim at dealing with the barriers to housing supply and could be helpful in allowing the companies that the NHF are targeting to deliver new supply.

Finally the government unveiled the long awaited Housing White Paper on 7th February 2017. It included a number of laudable aims, including pursuing modular construction, encouragement of Build to Rent, pursuing high density, increased provision of brownfield and small sites and getting tough on developers and local authorities that are holding up development. However, at the time of writing nothing announced in the White Paper is going to make JLL remodel its reduced housing delivery forecasts for the period from 2017-2021, which principally take account of economic and market factors.

² National Housing Federation, Ambition to Deliver, 2013

3 National Housing Fund compared with selected Government Initiatives

The Government currently has a number of initiatives and funding pots aimed at solving the housing crisis and delivering much needed housing. This section discusses three of the largest funded schemes and compares them to the NHF, highlighting differences and the additional benefits that the NHF provides the Government.

3.1 Accelerated Construction Fund

In October 2016, the government unveiled a £2 billion fund called Accelerated Construction, which would be administered by the HCA. The primary aim of the fund is to increase the delivery of housing across the country. This will be achieved through the HCA disposing of surplus public land and working through constraints on sites prior to disposal. The HCA will be looking to target medium sized builders/contractors to deliver the housing on the surplus public land. The HCA will also be exploring and promoting the use of off-site manufacturing. The initiative is targeted to deliver 15,000 starts by the end of the current parliament.

3.2 Help to Buy – Equity Loan

Help to Buy was one of the Coalition Government's first major housing market initiatives. Announced by then Chancellor George Osborne in his 2013 budget speech, the programme allows buyers to contribute a 5% deposit with the government providing an equity loan of up to 20% of the property value; although this was increased to 40% for London Help to Buy in February 2016. The property must be new-build and cost less than £600,000. The loan is interest free for five years.

In the first 42 months of the scheme up until September 2016, 100,284 properties were bought with the support of the Help to Buy equity loan scheme. The majority of sales were to first-time buyers, accounting for 81% of total sales. The average mean purchase price was £229,608. Help to Buy has cost Government an estimated £4.6bn over the 42 month period. One of the significant issues with Help to Buy is that it is a demand side stimulus, helping aspiring buyers to complete their purchase, but potentially having a negative contributing effect to house price inflation.

3.3 Affordable Homes Programme

The Affordable Homes Programme, is a multi-year funding pot administered by the HCA to fund housing associations to deliver affordable units. The current funding stream, Shared Ownership & Affordable Homes Programme 2016-2021. This totals £4.7 billion of funding and is targeting delivery of shared ownership as well as traditional affordable homes. Over the five year programme it is targeting starts on 135,000 shared ownership properties, 10,000 rent to buy homes and 8,000 supported and older people's rented accommodation. The initial round of bids were submitted in 2016 and in early January 2017 the HCA announced the allocation of the first £1.28 billion in funding to support the build of 39,403 homes.

3.4 Comparison of the NHF to Accelerated Construction, Help to Buy and Affordable Homes Programme

The table below provides a comparison of the three initiatives highlighted above and the NHF.

	National Housing Fund	Accelerated Construction Fund	Help to Buy – Equity Loan	Affordable Homes Programme
Government investment	£10 billion	£2 billion	£4.6 billion to date	£4.7 billion
Number of units delivered	40,000 – 75,000 units	15,000 units	100,284 so far	153,000 units
Does the Government get money back?	Yes	Yes	Yes	No
How much does the Government get back?	Circa £12.5 billion (based on forecast in Section 5.3)	Depends on land receipts but will be less than the £2 billion invested	At least the funds invested, but no interest accrued during that period. Will incur some house price uplift relative to stake invested	Zero
When does the Government recoup its money?	Assuming no sales then complete return at year 11. However, there may be sales from Year 5 onwards, which would return value to the Government earlier.	As land parcels are sold	Unknown	N/A
Nature of people supported	Mid-market renters/squeezed middle, stretched first time buyers	Open market sale purchasers	Discounted market sale first time buyers only	Range of affordable housing tenants and discounted market buyers

4 Upscaling SME Developers

4.1 Growing from Small and Medium

One of the ways in which the NHF will be able to deliver between 40,000 and 75,000 homes per annum is through enabling SME housebuilders to increase their volume of delivery. A recent report by the Home Builders Federation (HBF) on SME builders³ indicates that there are around 3,000 small housebuilders (1-100 units pa) and 125 medium housebuilders (101-2,000 units pa). It would require less than 15% of the small housebuilders to increase their delivery to 101 units and become medium housebuilders, to add over 40,000 homes to England's annual housing completions.

'If you've got to feed a machine of 12,000 houses, then the sites might not be there, but you can see from our size that if we were doing 200 units a year, we could, more or less double the size of the company.'
(Housebuilder interviewee, June 2016 – HBF SME Report)⁴

4.2 Improving access to finance

The access to development finance has been raised by both the HBF and Federation of Master Builders (FMB) as a significant roadblock constraining SME housebuilders increasing their size. Half of respondents to the most recent FMB housebuilder survey cited lack of finance as a major constraint on their ability to build more homes. This is an area in which the certainty provided by the NHF will likely make it easier for SMEs to access finance, as they will be able to go to lenders with a fully presold and importantly de-risked scheme.

4.3 Unimplemented planning permissions

One of the primary sources for expediting housing delivery is through utilisation of unimplemented planning permissions. A report published by the Local Government Association in October 2013⁵ analysed the total number of unimplemented planning permissions, finding that there were just under 370,000 units with planning across England. This figure had risen to almost 460,000 by 2015, as shown in the table below.

	2013	2014	2015
Unimplemented planning permissions - England	367,484	427,893	457,573

Source: Local Government Association

Within the 2013 report there was a breakdown of the proportion of unimplemented schemes by size. As the table below shows the majority of these were within the 10-49 unit band, which is a size that is typically overlooked by the large housebuilders because it is too small but is perfectly sized for SME developers. There isn't a more recent set of data, but assuming that the breakdown of scheme sizes has remained broadly similar then it is likely that there are still a significant proportion of unimplemented schemes in the 10-49 unit size bracket.

Proportion of unimplemented schemes by development size

	2008	2009	2010	2011	2012	2013	Average between 2008-13
Fewer than 10 units	3%	4%	5%	7%	11%	11%	7%
10-49 units	70%	68%	66%	62%	60%	59%	64%
50-99 units	13%	13%	13%	14%	14%	14%	14%
100-249 units	10%	10%	11%	12%	11%	11%	11%
250 units or more	4%	5%	5%	5%	4%	4%	4%

³ Home Builders Federation – Reversing the decline of small housebuilders

⁴ Ibid

⁵ Local Government Association – An analysis of unimplemented planning permissions for residential dwellings 2013

Total Schemes	8,813	7,140	5,982	6,061	6,780	6,500	
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Source: Local Government Association

Using the table above, JLL has estimated the potential total quantum of units that are contained within each size bracket, based on a reasonable average mid-point assumption of the average size of a scheme in each bracket. This is illustrated in the table below. Based on this analysis, it could be assumed there is just under five years potential supply for the NHF to acquire at 40,000 units per annum in unimplemented schemes of 100-units or less or 2.5 years supply at 75,000 units per annum.

	Assumed average units per scheme	Number of schemes (based on % of the 6,500 total in 2013)	Number of estimated potential units
Fewer than 10 units	5	715	3,575
10-49 units	30	3835	115,050
50-99 units	75	910	68,250
100-249 units	175	715	125,125
250 units or more	500	260	130,000

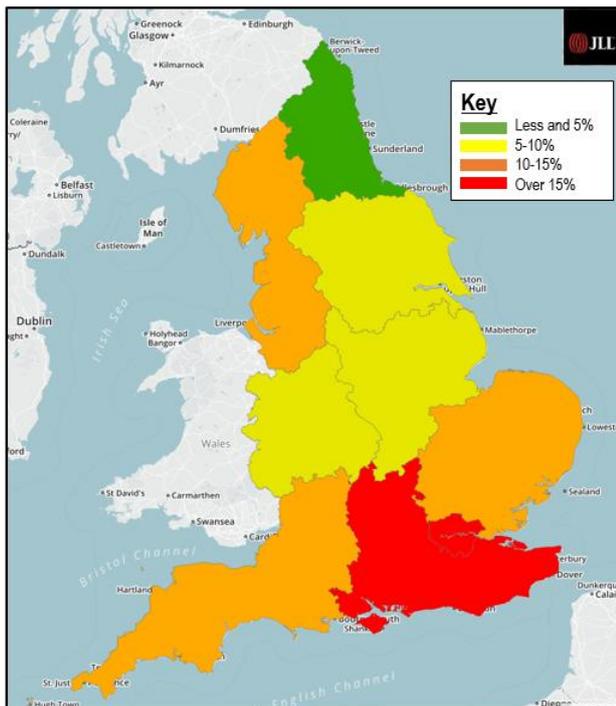
The same research document from the Local Government Association also analysed the regional spread of unimplemented planning permissions. The results are shown in the table below and map overleaf. They highlight that while London accounts for the largest proportion of unimplemented permissions, 17% in 2013, they were spread relatively broadly across all regions. Only the North East had a significantly lower proportion of permissions at 4%.

Proportion of unimplemented schemes by region

Region	2008	2009	2010	2011	2012	2013	Average between 2008-13
East Midlands	8%	7%	8%	8%	8%	7%	8%
East of England	11%	11%	11%	11%	11%	10%	11%
London	13%	14%	15%	16%	18%	17%	16%
North East	4%	4%	4%	4%	3%	4%	4%
North West	12%	12%	11%	12%	11%	12%	12%
South East	16%	16%	15%	15%	16%	16%	16%
South West	12%	13%	13%	13%	12%	12%	13%
West Midlands	8%	8%	8%	8%	8%	9%	8%
Yorkshire & the Humber	10%	10%	9%	10%	9%	9%	10%
Wales	5%	5%	5%	4%	4%	4%	5%
Total Schemes	8,813	7,140	5,982	6,061	6,780	6,500	

Source: Local Government Association

Heat map of proportion of 2013 unimplemented planning permissions by region



4.4 NHF impact on land prices

Questions could be raised around whether the availability of £10bn pa focussing on a particular section of the housing market could artificially inflate land prices. However, it is JLL's view that the NHF would not inflate land prices given that it is targeting acquisition of specifically mid-market rental property which by its nature will not be in prime locations where the largest amount of competitive land bidding occurs. The inherent factors regulating the cost of development land, including planning constraints and affordable housing mean that the NHF, which is focussing on development, under the caveat that it is paying market pricing, should not artificially inflate the land value in the areas it is targeting.

4.5 Tackling the skills shortage

Access to enough skilled works is one of the key barriers to increasing delivery, not only for SME developers but for many of the larger ones as well. One of the ways in which this can be solved is through the increase in the number of apprentices within the construction industry. According to the Construction Industry Training Board (CITB) it takes a minimum of 2 years for an individual to complete their apprenticeship, although it can take longer. During this time they are able to be onsite and working for a few days a week and studying on others. The length of time taken to train a new apprentice means that this will not be a quick fix solution to securing skilled workers, although must form part of the medium term solution.

Looking ahead, off-site or modular construction could be used to increase the supply of housing without the need for as many skilled craftspeople. While a relatively nascent industry in the UK, it doesn't rely upon the same level of skilled workforce and can utilise a wider breadth of semi-skilled workers. This means that there would not be a similar time lag in terms of sourcing a workforce as for traditional construction techniques.

Furthermore the Government has made a series of announcements of support for this growing sector. These include specific mention of off-site construction in the Housing White Paper and the use of money from the £2bn Accelerated Construction Fund and £3bn Home Building Fund for the advancement of offsite facilities. Although again this is unlikely to be a short term fix due to the lead-in time required to set-up a new factory.

5 NHF Valuation & Economic Benefits

In November 2016, in work undertaken for *Going to Scale: How a National Housing Fund Can Unlock Britain's House Building Capacity* – JLL established that the proposed £10bn pa NHF could support the delivery of between 40,000 and 75,000 homes each year depending on the regional allocation of where the funds are deployed.

For the purposes of this report JLL has assessed the implications of rental and price growth forecasts on the valuation of the £10bn per annum National Housing Fund (NHF), based around the delivery of a minimum of 40,000 homes pa.

5.1 Forecasts

JLL forecasts rental and price growth over five year periods. The latest JLL forecasts, released on 3 November 2016, are shown in the tables below. For the purposes of the NHF forward commitment purchasing model, JLL has assumed that rental growth will average 3% in years 6-10, and that price growth will average 2.5% in years 6-10.

Rental growth forecasts

	2017	2018	2019	2020	2021
UK	2.5	3.0	3.5	3.5	4.0

Source: JLL

House price forecasts

	2017	2018	2019	2020	2021
UK	0.5	1.0	2.0	4.0	5.0

Source: JLL

5.2 Transaction costs

It has been assumed that the NHF would incur transaction costs totalling 0.75% pa and Stamp Duty, less multiple dwelling relief. Multiple dwelling relief allows an investor to pay for the stamp duty costs of the mean value of each unit in a scheme, as opposed to the overall value of the scheme.

The following table sets out the current UK Stamp Duty charges. Since April 2016, second home/buy-to-let purchasers have incurred an additional 3% Stamp Duty. It has been assumed that the NHF will incur the second home rate of Stamp Duty.

Unit value	Standard rate	Buy-to-let/ second home rate
£0 - £125,000	0%	3%
£125,001 - £250,000	2%	5%
£250,001 - £925,000	5%	8%
£925,001 - £1,500,000	10%	13%
More than £1,500,001	12%	15%

Source: HMRC

The following example illustrates how Stamp Duty multiple dwelling relief has been applied to the NHF for a hypothetical 100 unit scheme with a total value of £25m.

Stamp Duty on £25m scheme without multiple dwelling relief (treated as a single £25m transaction)

Unit value	Stamp Duty Charge
£0 - £125,000	£3,750
£125,001 - £250,000	£6,250
£250,001 - £925,000	£54,000
£925,001 - £1,500,000	£74,750
More than £1,500,001	£3,525,000
TOTAL Stamp Duty	£3,663,750

Stamp Duty on £25m scheme with multiple dwelling relief (treated as 100 units x £250,000 average price)

Unit value	Stamp Duty Charge
£0 - £125,000	£375,000
£125,001 - £250,000	£625,000
£250,001 - £925,000	0
£925,001 - £1,500,000	0
More than £1,500,001	0
TOTAL Stamp Duty	£1,000,000

As the example above shows the saving through using multiple dwellings relief for a 100 unit £25m scheme would be £2,663,750.

Taking the above calculations into consideration, using multiple dwellings relief the £10bn pa NHF would incur Stamp Duty costs of £342m in Year 1.

In addition to this the NHF would incur £71m of transaction costs encompassing agency and legal fees totalling 0.75%.

5.3 NHF Valuation

Incorporating JLL's rental and price growth forecasts, and taking account of the transaction costs outlined above, the following table sets out the potential value increase of the £10bn deployed by the NHF in Year 1 alongside the potential increase to the annual rental income of the NHF from Year 1 to Year 11.

Year	Fund value	Rental Income
Year 1 (2017)	£9.56bn	£588m
Year 2 (2018)	£9.66bn	£603m
Year 3 (2019)	£9.85bn	£621m
Year 4 (2020)	£10.25bn	£643m
Year 5 (2021)	£10.75bn	£665m
Year 6 (2022)	£11.02bn	£692m
Year 7 (2023)	£11.31bn	£712m
Year 8 (2024)	£11.58bn	£734m
Year 9 (2025)	£11.87bn	£756m
Year 10 (2026)	£12.17bn	£778m
Year 11 (2027)	£12.48bn	£802m

Source: JLL

The following table sets out the same rental and capital valuation growth assumptions less the sale of 25% of the units in the NHF in Year 5 to tenants using the proposed Rent to Buy model which would allow them to purchase their unit at Year 5, based on its assumed Year 1 value. For the purposes of this exercise, JLL has assumed that 25% of the Fund has remained at Year 1 value with the remaining 75% growing. Rental growth has been assumed for each year, with 25% of the rental value then removed from Year 6 onwards following the sales. Under this scenario, the Government would recoup an estimated £2.4bn of its initial £10bn in Year 5. It implies the remaining £7.6bn invested in Year 1 would have grown in value to £9.4bn by Year 11.

Year	Fund value	Rental Income
Year 1 (2017)	£9.56bn	£588m
Year 2 (2018)	£9.63bn	£603m
Year 3 (2019)	£9.78bn	£621m
Year 4 (2020)	£10.07bn	£643m
Year 5 (2021)	£10.46bn	£665m
Year 6 (2022)	£8.27bn	£519m
Year 7 (2023)	£8.48bn	£534m
Year 8 (2024)	£8.69bn	£551m
Year 9 (2025)	£8.91bn	£567m
Year 10 (2026)	£9.13bn	£584m
Year 11 (2027)	£9.36bn	£601m

5.4 Economic benefits

As a bulk purchaser of residential property the NHF will incur Stamp Duty charges with the obvious net benefit the expenditure on this taxation would be returned to HM Treasury.

As outlined above, JLL has calculated that the amount of Stamp Duty the NHF would pay on an annual basis, less multiple dwellings relief. It would be circa £300m - £350m depending on the NHF’s weighting towards South East and London located higher value units.

5.5 Job creation

Oxford Economics calculates that the construction a house in the UK generates 2.3 direct jobs through work on site and off-site administration and a further 2.2 indirect jobs through the supply chain and associated activities.

This means that each home built in the UK is estimated to create 4.5 full time jobs per year per home.

JLL’s modelling work on the potential quantum of homes that could be delivered through the NHF estimates a range of between 40,000 and 75,000 depending on the weighting towards higher value South of England units and lower value North of England units.

Based on this range the following table sets out the potential annual job creation of the NHF depending on the total output.

Homes built pa	Full-time jobs created pa
40,000	180,000
60,000 (amount required to push England housebuilding to Government target for 200,000 homes pa)	270,000
75,000	337,500

Source: JLL

5.6 Council tax

The NHF would generate new local taxation benefits through increased council tax.

There are eight council tax bands ranging from Band A for dwellings valued at less than £40,000 on 1 April 1991 to Band H for dwellings valued at more than £320,000 on that date. Within an authority, the council tax for each valuation band is a fixed ratio to that for Band D. Dependent on their assigned council tax band dwellings pay a proportion of the Band D council tax set for the authority and local authorities set their council tax on the basis of the number of Band D equivalent properties in their area. Bands are assigned by the Valuation Office Agency (VOA). Band D council tax is the usual standard measure of council tax and is the council tax payable on a Band D dwelling occupied as a main residence by at least two adults, before any reductions due to discounts, exemptions or local council tax support schemes. According to the Department for Communities and Local Government, this definition is widely regarded as a benchmark when comparing council tax levels in different areas or over time.

The below overleaf sets out the potential minimum council tax taken depending on the number of homes delivered, based on the current average England Council Tax Band D charge of £1,484pa.

Number of new England average Council Tax Band D (£1,484pa) properties	NHF potential council tax receipts pa
40,000	£59.4m
60,000	£89m
75,000	£111.3m

5.7 Tax and Welfare State implications

The average full-time salary of a skilled construction worker in the UK is £27,500pa, according to the Office for National Statistics Annual Survey of Hours and Earnings 2016.

Based on this, several calculations can be undertaken to ascertain how much income tax and national insurance would be generated through the creation of jobs by the NHF.

	Average salary pa	Average income tax pa	Average national insurance pa (employer and employee contributions)
One full time skilled UK construction worker	£27,500	£3,300	£5,009
180,000 full time jobs (40,000 homes built pa)	£4.95bn	£594m	£902m
270,000 full time jobs (60,000 homes built pa)	£7.4bn	£891m	£1.35bn
337,500 full time jobs (75,000 homes built pa)	£9.3bn	£1.1bn	£1.69bn

Source: JLL, ASHE 2016

According to figures from the Office for National Statistics, there were 760,200 people claiming Jobseeker's Allowance and Universal Credit benefits as of Q2 2016. The Government spends circa £3bn pa on those unemployment benefits, equivalent to 1% of the UK's overall welfare spending.

Based on an assumption that all potential jobs that could be created by the NHF resulted in a reduction of those claiming unemployment benefits, it could be assumed that savings of between £720m and £1.3bn could be generated. However, given the necessary skills requirements that come with housebuilding, JLL has applied a more realistic assumption that a quarter of the jobs created by the NHF will be fulfilled through removing people claiming Jobseeker's Allowance and Universal Credits. This creates a reduction in UK welfare spending ranging from £180m for delivery of 40,000 homes pa to £325m for 75,000 homes pa.

Number of jobs created plus % reduction in the 760,200 claiming unemployment benefits	Maximum potential reduction in unemployment benefits	Realistic reduction in benefits
180,000 (24%)	£720m	£180m
270,000 (36%)	£1.1bn	£275m
337,500 (44%)	£1.3bn	£325m

5.8 Summary of employment and taxation benefits

The table below summarises the annual benefits outlined above of the NHF spending £10bn pa on the delivery of new homes.

	Stamp Duty	Income tax	National Insurance contributions	Reduction in unemployment benefits	Council tax	Total benefit
Amount generated pa	£300m-£350m	£594m-£1.1bn	£900m-£1.7bn	£180m-£325m	£59m-£111m	<u>£2bn-£3.6bn</u>

Source: JLL

5.9 Overall construction contribution to GDP

The Construction Industry Council (CIC), which is the representative forum for professional bodies, research organisations and business associations within the construction industry, found in a research study that every £1 spent on UK construction output generates £2.84 in total economic output.

This calculation takes into account direct and indirect impacts from the construction spending. From this calculation we could surmise that the £10bn spent per annum by the NHF would generate **£28.4bn** pa towards UK GDP.

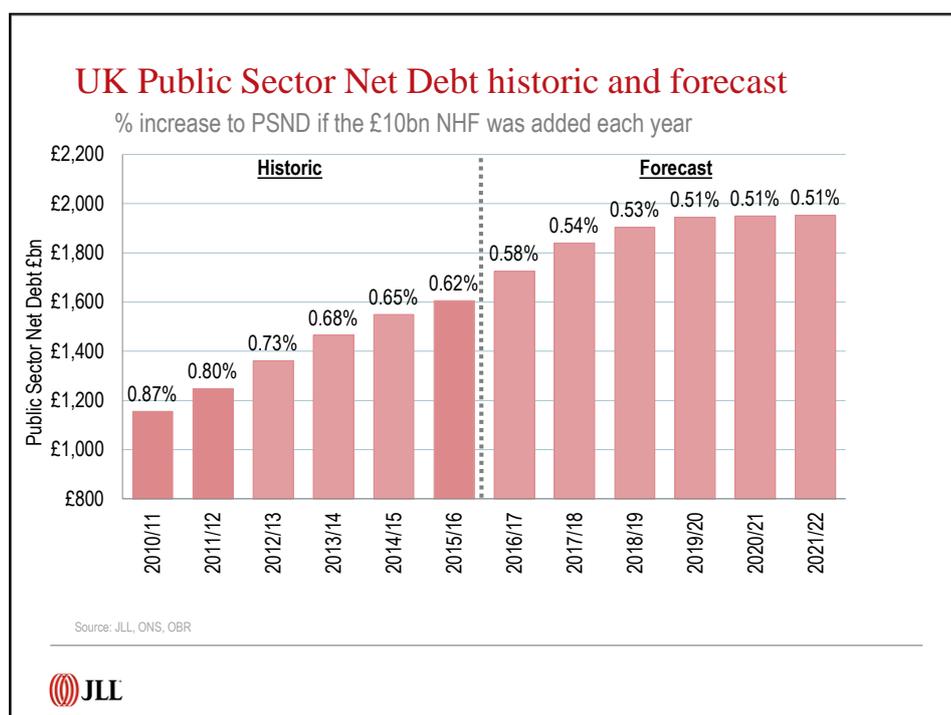
At the end of 2016, UK GDP totalled £1.87 trillion, according to the ONS. This means that at those prices, the NHF has the potential to increase UK GDP by 1.5% pa based on the assumption of an annual boost to GDP of £28.4bn.

6 Public Sector Net Debt and Net Borrowing

As the graph below shows, UK Public Sector Net Debt (PSND) totalled just under £1.7 trillion as of January 2017, equivalent to around 90% of the UK’s £1.87 trillion GDP, according to the ONS.

This PSND has risen over the past 10 years from £562.5bn as of January 2008 – at the on-set of the Global Financial Crisis, equivalent to 36% of UK GDP at the time.

A debt to GDP ratio of between 40% to 60% is frequently cited as a prudent long-term limit for advanced economies, such as the UK.



Under the 2010-2015 Coalition Government, an austerity programme was introduced to cut PSND and reduce it to within the long term desired limit of 40%-60% of UK GDP. As a result a proposal such as the NHF to increase Government public borrowing by £10bn pa over a 10 year period might be considered a difficult sell due to fears it would continue to swell PSND.

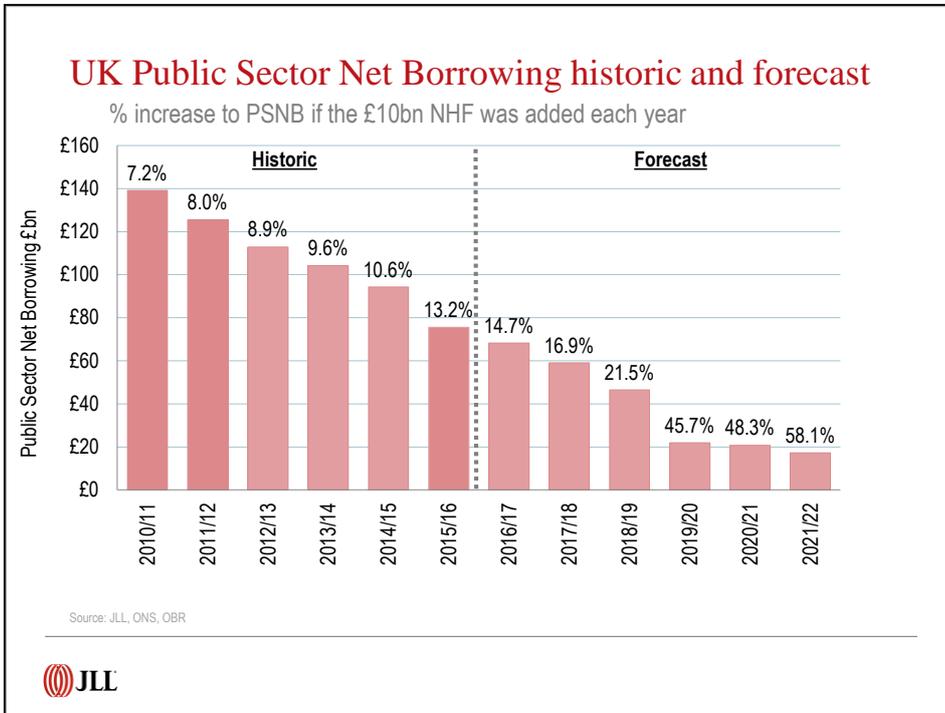
However, adding £10bn to the current PSND would be the equivalent to adding 0.6% more to the PSND. Furthermore, even when PSND was below 40% UK GDP in January 2008, adding £10bn would have been the equivalent of adding 1.8% to PSND. Using Office for Budget Responsibility forecasts for PSND, adding £10bn pa would be the equivalent of adding 0.5% to PSND, as illustrated in the graph above.

Adding circa 0.5% to PSND is a small addition in the context of the potential for the NHF to contribute between 40,000 and 75,000 new homes pa.

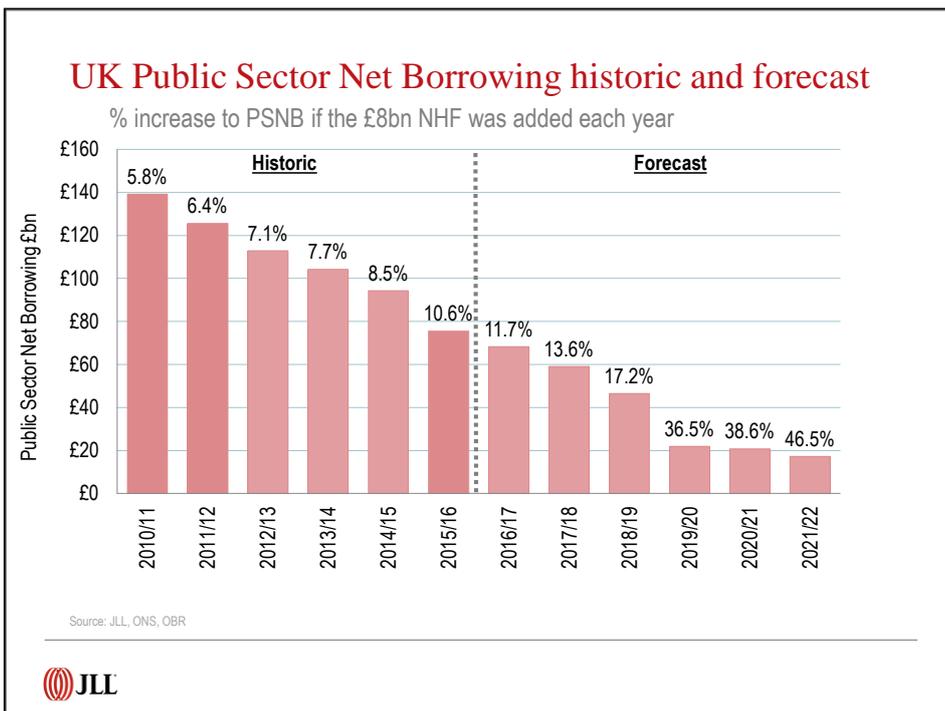
Furthermore, as was previously outlined, the NHF has the potential to boost UK GDP by £28.4bn or 1.5% pa, which would more than negate the potential contribution to PSND.

6.1 Public Sector Net Borrowing position

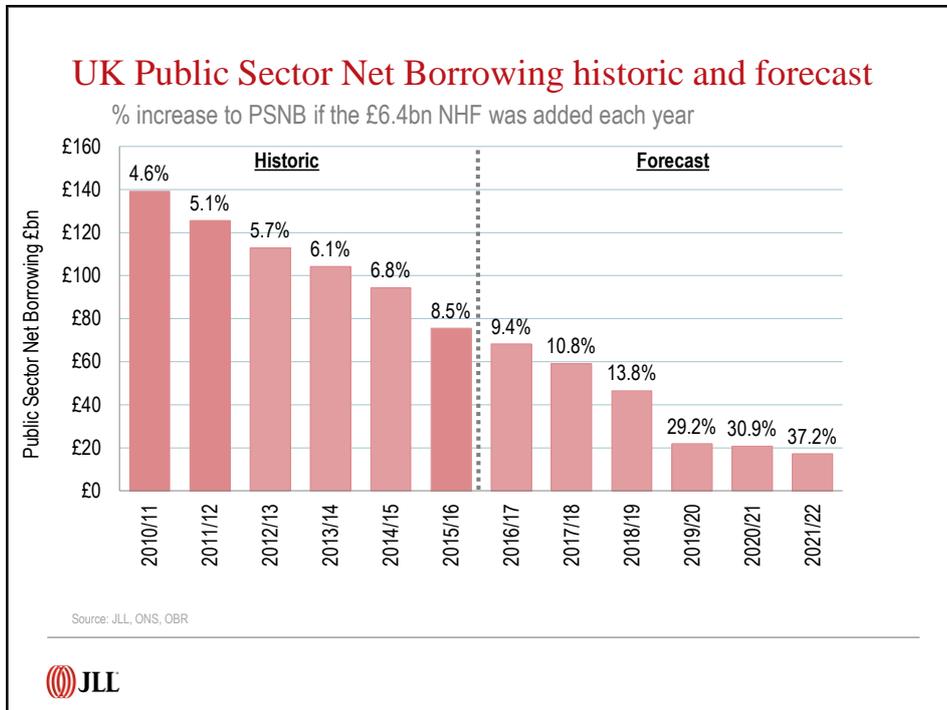
The graph below illustrates the potential implication of adding £10bn pa of borrowing to PSNB over the past six years and forecasted ahead based on OBR forecasts. It shows a range over the past six years that would equate to a net addition ranging from 7.2% to 13.2%. Looking ahead, as PSNB is expected to be reduced in line with Government policy requirements, the £10bn pa NHF would be expected to add a net addition rising from 14.7% in 2017 to 58.1% in 2022.



However, as was established in Section 5, the economic benefits in terms of tax generation and reduction in employment benefits of the £10bn NHF range from £2bn to £3.6bn, thus reducing the NHF's net borrowing to between £6.4bn and £8bn. The % increase of those figures are outlined in the following two graphs. The effect of assuming net borrowing of £8bn pa is to reduce the forecasted annual net addition to 11.7% in 2017 and to 46.5% in 2022.



The effect of assuming net borrowing of £6.4bn pa is to reduce the forecasted annual net addition to 9.4% in 2017 and to 37.2% in 2022.





Residential Research

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