One million homes
How to build a million affordable new homes in the next five years and still cut the public subsidy
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## Contents

Executive summary ............................................. 2  
1. The proposal in outline .................................. 3  
2. Reducing the cost of land ............................... 5  
3. Reducing the cost of capital ............................ 7  
4. Increasing operating margin ............................ 10  
5. The impact on public finances .......................... 12  
6. Conclusions and next steps ............................. 16  
Endnotes .......................................................... 17
Executive summary

What if there were a way of building a million new affordable homes within five years while at the same time cutting government spending radically? This paper shows that there is.

It involves:

1 *Measures to reduce the cost of land*: changes to capital gains tax and planning rules that help ensure more of the value created by planning decisions benefits taxpayers and tenants.

2 *Measures to reduce the cost of capital for new homes*: bonds with returns linked to the retail price index, and designed to allow housing benefit to be paid directly to bond holders, combined with new financial structures; these measures may push down the cost of capital to the point where it is economic to replace government capital grants (to build houses) with revenue grants (to support interest payments), but even if they don’t, they will make capital grants go a lot further.

3 *Measures to increase landlords’ operating margin*: a tier of housing between existing social housing and the private sector, with somewhat higher rents and lower operating costs than at present.

Depending on assumptions, these measures would lead to savings ranging from one-third of those proposed by the government to over £1 billion a year more than those proposed.

This paper is not a definitive analysis. It is illustrative and identifies a number of potential problems and uncertainties. We strongly believe, however, that the scale of the potential prize – serious inroads into Britain’s housing problems within existing public sector financial constraints – justifies examining the issue in more detail. Accordingly we are inviting others to join us in a more comprehensive project.
1. The proposal in outline

There are inefficiencies in the current housing system, and taxpayers and those living in inadequate homes suffer as a result. These inefficiencies could be reduced radically, as part of a new economics of housing.

The waiting list for social housing is now over 1.7 million households long. Last year there were 100,000 house-building starts in all sectors, but over 200,000 are needed just to keep pace with growing demand, let alone deal with the backlog. And now the government has decided to cut its support for social housing (the National Affordable Homes Programme; NAHP) by 60 per cent, setting a very modest target of just 150,000 new affordable homes to be built over four years.

Meeting even this target, the Government admits, will depend on significant rent rises; these, when combined with housing benefit caps, will almost certainly cause hardship, particularly in London and the South East.

But there is an alternative and it has three main elements:

1. **Measures to reduce the cost of land**: changes to capital gains tax and planning rules that help ensure more of the value created by planning decisions benefits taxpayers and tenants.

2. **Measures to reduce the cost of capital for new homes**: bonds with returns linked to the retail price index, and designed to allow housing benefit to be paid directly to bond holders, combined with new financial structures; these measures may push down the cost of capital to the point where it is economic to replace government capital grants (to build houses) with revenue grants (to support interest payments), but even if they don’t, they will make capital grants go a lot further.

3. **Measures to increase landlords’ operating margin**: a tier of housing between existing social housing and the private sector, with somewhat higher rents and lower operating costs than at present.

Our analysis shows that in combination these measures could deliver a million new affordable homes built to low carbon standards over five years.

We have modelled 30 scenarios but have focused attention on 8 which we believe are viable and potentially realistic. The government hopes to save £1.7 billion a year through the cuts to the NAHP proposed by the Chancellor. If capital grants are retained, the savings associated with our proposals range from approximately £0.6 billion a year to c. £1.8 billion a year (i.e. more than the government’s plans), depending on assumptions and taking into account the impact on housing benefit payments and of the (assumed modest) stimulus to the building industry. If capital grants can be replaced by revenue grants, then the entire £2.8 billion a year of the existing NAHP is saved.

The next three sections of this paper describe the three elements in more detail. The fifth section presents the consequences of our proposals for deficit reduction under different scenarios. The final section summarises the work now needed. Details of the calculations as well as references are included in the endnotes.
We are not claiming that this paper presents a definitive analysis: it depends on assumptions which need to be tested; some of the figures are estimates for the purposes of calculation (although inaccuracies in these do not overturn the main line of argument); and it presents an approach which will certainly need refinement and which further work may show needs a fundamental re-think. It is based on averages across the country and we are well aware that the problems and so the solutions in London, for example, are very different from those in the north of England. It does not consider the problems of the private rented or owner-occupied sectors except in passing. Nonetheless, we believe it is worth drawing attention to the potential prize that exists – and to call for further, much more detailed work to be conducted.

We also believe that the approach it implies is relevant not just to housing but more widely. This approach will be needed if we are to tackle many other problems, from an aging population to climate change, in a way that is effective and fair. It is characterised above all by self-confidence and optimism – a belief that what government does is valuable and that it is not powerless in the face of ‘the markets’ or ‘the facts on the ground’. This does not mean government has to be big – on the contrary, government should be agile, using the profit motive and markets when they are useful as well as the third sector. It does, however, mean standing up to vested interests.
2. Reducing the cost of land

Almost all the value of housing land is created by the planning system. This value could be captured in a way that would make more homes affordable.

We estimate that social landlords (housing associations and local authorities) are paying on average the equivalent of c. £1.1 million per acre or £40,000 per home for land. Almost all of the value represented by this price is created by the planning system – green field land with no prospect of development might sell at 1 per cent of this level.

We believe that there are politically feasible measures which would ensure that a much higher proportion of this value is retained by those who create it – i.e. by the citizens and taxpayers whose representatives grant planning permissions. This could then be used to buy land for social housing, in effect recycling the value so that social landlords pay much less for land and more tenants can benefit.

Retaining the gain means there will be losers – there is no way of avoiding this. To make big inroads means there will be some very substantial losers and there will therefore be strong opposition from powerful (i.e. moneyed) vested interests. The challenge is to design a way of appropriating the gain that is both broadly fair (and can thus command public support) and which works – which will not exacerbate the land-hoarding problem, for example.

Let us be clear: we are not proposing this so as to be nasty to land owners, but because so many people in Britain live in inadequate homes. In the end you have to decide which is the worse evil: homeless families or depressed profits for developers. To put the point another way: the current debate about housing benefit and rents pitches the taxpayer against the tenant – but there is a third player in this game: the land owner. Why should he always win?

Compulsory purchase at a ‘fair price’ – say £250,000 an acre – would not pass both our tests. It would certainly work – the land would simply be commandeered – but it would create a very unfair pattern of gains and losses: some people who had bought land with planning permission, or with the prospect of planning permission, would lose heavily, and might be driven into bankruptcy, while others, who had bought the land when there was little prospect of development, would gain.

However we believe a combination of the following three measures would pass both tests (N.B. they are designed to deal with standard green field developments associated with large land value increases; some modifications will probably be needed for other types of development):

1. An 80 per cent capital gains tax on all land sales where the price per acre is greater than £80,000 (say), the margin over the standard rate (i.e. 52 per cent of the gain) to be hypothecated to a national land fund which would use the money to subsidise social landlord land purchases (or to buy land to rent at low prices).

2. New residential planning permissions above a certain minimum size to be granted to registered social landlords (housing associations) and local authorities only; they would be entitled to sell on the land to other developers, including those in the owner-occupied sector, but would be
subject to detailed regulation on the extent to which they do this and how they account for and spend the profits, and they would, of course, be subject to the 80 per cent tax rate on any gains.

3 Some tightening of the existing rules on planning permission time limits, combined with good enforcement measures.

Why would this work? First of all, of course, the tax would create a fund which would reduce the net price of land to social landlords.

Second, land without planning permission but with some prospect of development – the bulk of the land in the privately owned ‘land banks’ – would suddenly only be of value to social landlords. This would reduce but not destroy the value in the land – the social landlords would compete for the land, particularly given their right to sell some of it on.

Third, social landlords would profit from their right to sell on land to other developers and so appropriate more of the gain. In addition, their exclusive right would stimulate transactions and therefore increase the proportion of gain caught by the 80 per cent tax.

Finally, the existing pressure on owners of land with planning permission to develop the land or sell it to someone else would be strengthened, driving down the price slightly. It would also increase the number of transactions slightly and hence the proportion of gain caught by the 80 per cent tax.

We cannot at this stage tell exactly how much of the value in land these measures would channel to social housing – further work is needed to model the impact on this as well as on the owner-occupied sector. Accordingly we have modelled three scenarios: one in which net prices are 12 per cent lower, one in which they are 33 per cent lower, and one in which they are 65 per cent lower than at present. We have treated the land fund subsidy as part of this saving rather than as a government grant.

Would this be fair? The key point is that it involves universal measures – there is no use of compulsory purchase or confiscation. Some people would be forced to sell at prices less than they paid, but for the most part these would be speculators who currently profit from the system. Some protection might be needed for very small investors, and it might be necessary to restructure major building firms, who, rather like the banks, combine speculative businesses (buying and selling land) with solid everyday businesses (i.e. building homes): some of the speculative businesses would be put under threat but it would be important to protect the building operations.

We suspect that there are other ways of achieving the same objective and would encourage more discussion of these and similar measures.
3. Reducing the cost of capital

A major building programme will require very large amounts of borrowing. Currently housing associations are paying around 6 per cent p.a. on their bank loans. By contrast, United Utilities Water PLC claims that the ‘all in funding cost’ of some of its index-linked bond issues over the last five years is 1.381 per cent.6

If the social housing sector could get even half-way to this level – say with a 3.5 per cent cost of capital – it would slash the subsidy per unit required and thus massively increase the number of homes it could build for any given level of government support. If it were to drive its cost of capital even lower than this, there would come a point at which it would become efficient for it to finance the entire cost of new homes from a mixture of debt and equity, and take its support from government in the form of annual revenue grants rather than as now in the form of up-front capital grants. This would dramatically reduce the level of government grant required over the short to medium term.

We propose that social housing be primarily financed through bonds with features that significantly reduce housing associations’ cost of capital. The features are:

1. returns linked to the retail price index, and

2. a set of options which allows housing benefit net of costs, and potentially revenue grant, to be paid directly to bond holders.

We also propose that new entrants and financial structures are encouraged.

New entrants and financial structures

A million new homes is an increase of over 40 per cent on existing housing association stock,7 which would represent a real organisational stretch were it all to be provided by existing landlords; in any case association directors would probably consider such fast expansion financially imprudent. So while existing associations would, of course, expand to some extent, new entrants should also be encouraged, including profit-making new entrants: given the right incentive structures, it is possible that profit-making firms could contribute to efficiency in the sector (we have not investigated this in detail at this stage, but note that since April 2010 there has been a relaxation in the rules preventing profit-making companies from registering as social landlords8).

This – and the need to make very substantial bond issues – would encourage new financial structures. New entrants – and indeed existing associations or housing departments – could set up legal entities financed by a mixture of bonds and preference shares (in effect subordinated debt but not counting as such in debt to asset value ratio calculations), government grants or investment,9 and in some cases by ordinary equity.

In our costing model we have applied the financing constraints currently applied to the sector (80 per cent debt to asset value ratio, 90 per cent rent net of costs to interest ratio).

Bonds with returns linked to the retail price index

Housing associations’ income – rent – rises with inflation (rents are regulated and the formula rises with inflation); however, they do not currently use index-linked borrowing. If they did, they could cut their costs very substantially, as other utilities with inflation-linked revenues, such as United Water Utilities, have already done.
The 10-year gilt (UK government bond) yield is 3 per cent and the 10-year index-linked gilt yield is 0.5 per cent, i.e. 2.5 per cent less than the standard yield. We might suppose, other things being equal, that housing associations would also pay 2.5 per cent less were they to use index-linked bonds. They currently pay 6 per cent, so our estimate is they would end up paying 3.5 per cent.

As already implied, we are proposing the use of preference shares in order to satisfy the 80 per cent debt to asset ratio without depending on existing assets or government investment more than is absolutely necessary. We have assumed the yield on these could also be index linked and our initial assessment is it would require a premium of 2.5 per cent – i.e. a yield of 6 per cent.

Currently most housing association borrowing is from banks, but there are likely to be institutional constraints on a significant increase in bank borrowing.\textsuperscript{10} On the other hand, our initial research suggests that there would be strong demand for relatively high yielding index-linked bonds amongst pension funds, insurance companies, and (to a lesser extent) private investors. This investment would match funds’ liability profile (i.e. an obligation to pay out that rises with inflation) and help them respond to actuarial pressures to reduce risk. The size of the required issues is a challenge, however – our estimate is that between £12 billion and £20 billion per year for five years would be needed.\textsuperscript{11} This is a reasonably large chunk (1.5 per cent to 2.5 per cent) of the total holding of bonds in the UK pension fund and insurance sector – £877 billion (of which £178 billion are index-linked gilts).\textsuperscript{12} Fortunately there is now a very substantial international market in index-linked bonds.\textsuperscript{13}

To facilitate this we recommend that the issues are handled by a central body such as the National Housing Finance Corporation. It would package up debt from associations across the sector – investors’ risk would be fully diversified in advance. Of course, this kind of packaging can create problems of its own, as we have seen in the securitised mortgages market, and more work will be needed to minimise this. (It should be said though that the social housing sector to some extent already stands or falls together in the capital market, with takeovers of weaker associations smoothing returns and de facto packaging the debt).

**Government guarantees tied to housing benefit**

Introducing index-linked bonds would reduce the cost of capital from 6 per cent to 3.5 per cent – but this still represents a premium of 3 per cent over index-linked gilts and 2 per cent over United Water Utilities. The cost could be reduced further if the fact that the bulk of social rents are paid for and in effect guaranteed by the government (via housing benefit) were more skilfully exploited.\textsuperscript{14} It is not that this is currently ignored by lenders when they assess the risk of lending to housing associations, but the existence of the 3 per cent premium, even though no housing association has ever defaulted on its debts, suggests that the full benefits of the guarantee have not been harvested.

The difficulty, of course, is that individuals will go on and off benefit and some will receive part of their rent as benefit. In addition, rates of benefit may change. As a result the overall proportion of the association’s income which is guaranteed is not fixed. A similar issue would arise were the government to replace its capital grant with a revenue grant: the challenge would be to find a way of reassuring capital markets that this grant was guaranteed for the long term so as to achieve the most efficient cost of capital possible.

Accordingly, we recommend investigating the impact on overall borrowing costs of structuring the 3.5 per cent bonds into two tranches. One tranche would be guaranteed by the government – it would be a gilt in all but name; housing benefits after costs plus any revenue grant would be paid directly by the government into a fund mandated to pay the interest on this tranche (rather than as at present, with government paying housing benefit to tenants who pay it to housing associations who pay it to banks and bond holders). The second tranche would be financed by other income. Because the proportion of income to be guaranteed in this way could not be predicted precisely in advance, bonds
would have to come with options enabling and obliging the investor to swap a proportion of the guaranteed bonds for unguaranteed bonds at a higher yield were there a fall in the level of housing benefit and revenue grant.

Because the impact of this structuring is impossible to predict without market research – the lower interest rates on the guaranteed tranche might be balanced by higher rates on the unguaranteed tranche – we have modelled two scenarios: one in which it made no difference, and one in which it reduced average borrowing costs by 1 per cent to 2.5 per cent.

This discussion calls into question whether the government should in fact guarantee the entire debt. The whole scheme is a kind of private finance initiative and it is arguable that the cost of off-loading the risk to the private sector is more than it is worth. There can be moral hazard connected with guaranteeing private or third sector debt, but this can be avoided with the right structures. We have not investigated extending the government guarantee in detail but believe it is worth further thought.\textsuperscript{15}
Rent levels
The government has proposed that social landlords should be able to charge up to 80 per cent of the market rent to new tenants,\textsuperscript{16} including, as we understand it, for existing stock. We oppose this since, in combination with the proposed housing benefit cap, it could gradually erode the stock available to those who can only afford current rent levels and cause real hardship. There is a case, however, for rethinking rent levels on new stock.

It is arguable that as things stand there is a gap in housing provision between owner occupation and social tenancies – a gap which low-cost home-ownership schemes have started to fill – and that these million new homes could help continue to fill this gap, while at the same time relieving the acute needs of the homeless and others supported through the housing benefit system.\textsuperscript{17} If we assume benefits continue to provide targeted support, the question becomes how widely we should spread the available universal subsidy. The answer will determine the average level of rent we should aim for on the new stock.

Some figures may help. New housing association tenants are currently paying £76 per week on average.\textsuperscript{18} On new stock, this represents a government subsidy of £35 per week (plus a cross-subsidy by housing associations themselves).\textsuperscript{19} The 1.08 million private sector tenants in receipt of Local Housing Allowance (‘LHA’ – the private sector equivalent of Housing Benefit) are receiving £113 per week on average (pre-cuts),\textsuperscript{20} as it happens almost exactly equal to the average housing association rent plus the government subsidy. Put simply, £76–£113 can be seen as the possible range for the average rent for the million new homes: rises above £113 would create additional net burdens on the housing benefit/LHA budget and in any case would probably be politically unacceptable.

Approximately 66 per cent of new housing association tenants are currently eligible for housing benefit, and we are assuming that this 66 per cent eligibility level will continue or be exceeded (for the mix of tenants targeted, see the end of this section). Those tenants on full benefit should in principle be indifferent to the level of rent – provided, of course, it is covered by benefit, which given current policy is an important proviso. It is true that other tenants will care, but then these are people whom the benefits system deem capable of paying the rent at the level it is set at. Given the absolute need to reduce the deficit and thus limits on subsidy, the higher the rent, the more likely it is we will be able to build the homes we need.\textsuperscript{21}

Having said this, the higher the level of rent, and thus of housing benefit, the more people are caught in the benefits system with its attendant work-incentive problems – we have here a classic example of the (quasi-) universal versus means-tested benefits dilemma (the current £35 per week per unit subsidy is a kind of universal benefit which does not create incentive problems). And it may be that even some of those not in receipt of benefits would struggle with the higher level of rents, perhaps deterring them from attempting to buy equity in their homes through low cost home-ownership schemes. Finally, bond holders may have a view: high rents may be less secure and investors may demand higher interest rates if they feel that the levels of subsidy are so low that rents could fall in future.

Accordingly we have modelled outcomes using three levels of average rent: £93, £103, and £113. Rent levels of £76, i.e. the current level, would only be viable – i.e.
achieve savings of around 20 per cent of existing expenditure while permitting construction of a million homes – if we could achieve 2.5 per cent interest rates and falls in unit land price to around £12,000.

Given the government’s proposals on tenure, we want to make clear that none of this is an argument for limited-term tenancies. It is arguable that tenants should not have a permanent right to subsidy as their circumstances change, but that is a quite different point. Tenants and their families do need security and that means long-term security of tenure.

Our proposals are consistent with mixed developments – in fact, we are assuming for modelling purposes that 15 per cent of the new homes are allocated to the homeless, 5 per cent to existing social housing tenants, 25 per cent to low cost home-ownership (LCHO) schemes (all of these figures very roughly in line with the current picture), and 55 per cent to current private sector tenants in receipt of LHA recipients. This last figure would require some targeting (and possibly some changes to the allocation rules for new stock) as currently only 37 per cent of new social housing tenants come from the private rented sector. However, it could have the additional benefit of putting pressure on private landlords to improve the quality of their stock and release a significant proportion into the owner-occupied sector – although we haven’t tested this assumption and of course recession may increase demand for low rent housing.

**Operating costs**

It is also arguable that the managers of an intermediate level of housing should aim for operating-cost levels closer to those of private landlords than the social sector. The new entrants and new legal entities referred to in Section 3 would build organisations from scratch with far lower costs – and new stock would have lower maintenance costs.

At the moment, operating costs (i.e. excluding debt-servicing costs and depreciation) in most associations accounts on average for just under 75 per cent of rental income, the equivalent of £56 per unit per week. Of this, management and routine and planned maintenance are £36 per unit per week. In our scenarios we have assumed the latter can be reduced to £20 per unit per week, a 44 per cent reduction, but have retained existing depreciation and bad debt ratios. This represents both efficiency gains and lower levels of service for the new homes than for the existing stock, potentially achieved by having housing benefit paid directly to the landlord or bondholder; by delegating more responsibility (but not costs) to tenants, perhaps by structuring management through local housing co-operatives; and by eliminating waste. Clearly we cannot be definitive about this target and more work is needed to establish what is realistic, and on this basis what level of subsidy is needed.
5. The impact on public finances

The measures described in the previous sections would lead to a very substantial fall in the subsidy required per home, which has been running at £54,000 per unit. What it falls to – and thus the cost of a million homes (or the number of homes achievable for a given annual expenditure) – depends on the assumptions adopted; even the most pessimistic assumptions, though, imply very substantial falls.

The measures will also have an impact on housing benefit and will form a stimulus to the building industry, both of which also affect public finances, although we make very cautious assumptions about the effect of the latter.

In this section, we summarise the impacts, setting out our assumptions and predictions under various scenarios, all of which involve building a million new homes over the next five years. As already emphasised, the figures are illustrative – but they demonstrate the potential scope for a much more financially efficient social housing system.

We present two central cases with sensitivity analyses on each of them. The first assumes capital grants and shows the impact on public spending over the next five years. It assumes savings on land prices of 65 per cent (i.e. £30,000 leading to a £16,000 unit price), a 3.5 per cent interest rate and rents of £103 per week. The sensitivity analysis shows the effects of land price savings of £15,000 and £6,000, a 2.5 per cent interest rate and rents of £93 and £113 a week.

The second central case assumes revenue grants and shows the impact on public spending on an annual basis once the building programme is complete. Because revenue grants are only feasible if we reduce the cost of capital to 2.5 per cent, the central case assumes a 2.5 per cent interest rate and we do not consider a 3.5 per cent rate. Again we assume savings on land prices of 65 per cent and rents of £103 per week. The sensitivity analysis shows the impact of savings on land prices of £15,000 and £6,000 and rents of £93 and £113 a week.

Obviously, in the case of revenue grants, the capital grants would be eliminated and thus there would also be very substantial savings over and above those proposed in the Comprehensive Spending Review (CSR) over the next five years.

Because our proposals are for a five-year period and the CSR period is four years, where we have made comparisons we have adjusted the CSR figures, increasing four year figures by 25 per cent. The current NAHP is for three years and we have adjusted that by 66 per cent as appropriate.
1. Assumptions for all scenarios

- Unit building costs including meeting low carbon standards: £100,000
- Unit land costs at open market prices: £46,000
- Maximum interest to free cash flow ratio: 90 per cent
- Maximum debt to asset ratio: 80 per cent
- Valuation method of assets: NPV
- Management and maintenance costs per unit per week: £20
- Bad debts as proportion of rental income: 1 per cent
- Depreciation as proportion of rental income: 5 per cent
- Interest rate on index-linked preference shares: 6 per cent
- Proportion of homes in LCHO scheme: 25 per cent
- Average equity sold initially in LCHO scheme: 50 per cent
- Proportion of homes let to tenants claiming LHA: 55 per cent
- Proportion of homes let to existing social housing tenants: 5 per cent
- Average level of LHA: £113
- Average level of benefit paid to existing RSL tenants: £78
- Multiplier effect of building expenditure on economy: 1.6
- Proportion of generated activity that increases GDP: 7.8 per cent
- Proportion of extra GDP that accrues to the Exchequer: 37 per cent
- Size of the construction industry workforce: 2.3m
- Proportion of industry workforce programme will take off benefits: 2 per cent
- Annual cost of the NAHP pre-CSR: £2.8bn
- Annual cost of the NAHP post-CSR: £1.1bn

2. Central case (capital grant) assumptions and predictions

2.1 Assumptions

- Unit land costs at scheme prices (central case): £16,000
- Rent per week (central case): £103
- Interest rate on index-linked bonds (central case): 3.5 per cent

2.2 Predictions

<table>
<thead>
<tr>
<th>Table 1</th>
<th>5 years £m</th>
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<tbody>
<tr>
<td>Total government investment in social housing</td>
<td>£10367</td>
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<tr>
<td>Net saving on benefits</td>
<td>-£457</td>
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<td>Savings on post-CSR NAHP programme</td>
<td>-£5500</td>
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<td>Total extra spend excluding gains from stimulus</td>
<td>£4410</td>
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<td>Tax and benefit gains from stimulus</td>
<td>-£4755</td>
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<tr>
<td>Total net saving as compared with post-CSR plans</td>
<td>-£345</td>
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<tr>
<td>Plus savings already achieved through CSR</td>
<td>-£8500</td>
</tr>
<tr>
<td>Total net saving as compared with pre-CSR plans</td>
<td>-£8845</td>
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</table>
3. Sensitivity analysis – capital grants
The sensitivity analysis produces very different results depending on the assumptions used. We focus on four which we think are realistic and viable, i.e. meet a test of achieving 20 per cent savings as compared with pre-CSR levels of expenditure. Table 2 highlights these four; one actually generates savings over and above those proposed in the CSR. There are several which do even better but which are unrealistic: there is no mechanism for capturing all the savings they generate, and in any case one would be lucky to achieve the combination of factors required – for political reasons if nothing else.

Table 2. Extra spend (- = saving) over five years as compared with CSR plans £m

<table>
<thead>
<tr>
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<th>£93</th>
<th>£103</th>
<th>£113</th>
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<tbody>
<tr>
<td>3.5 per cent interest and £40,000 land price</td>
<td>33,726</td>
<td>23,656</td>
<td>13,585</td>
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<tr>
<td>3.5 per cent interest and £31,000 land price</td>
<td>24,726</td>
<td>14,656</td>
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<tr>
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<tr>
<td>2.5 per cent interest and £16,000 land price</td>
<td>-9,446</td>
<td>-22,190</td>
<td>-34,934</td>
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</table>

It can be seen in Table 3 that all four represent savings of more than 20 per cent on the pre-CSR situation.

Table 3. Extra spend (- = saving) over five years as compared with pre-CSR plans £m

<table>
<thead>
<tr>
<th></th>
<th>£93</th>
<th>£103</th>
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<tr>
<td>Rent</td>
<td>25,226</td>
<td>15,156</td>
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<tr>
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<td>2.5 per cent interest and £40,000 land price</td>
<td>6,054</td>
<td>-6,690</td>
<td>-19,434</td>
</tr>
<tr>
<td>2.5 per cent interest and £31000 land price</td>
<td>-2,946</td>
<td>5,690</td>
<td>-28,434</td>
</tr>
<tr>
<td>2.5 per cent interest and £16,000 land price</td>
<td>-17,946</td>
<td>-30,690</td>
<td>-43,434</td>
</tr>
</tbody>
</table>

4. Central case (revenue grant) assumptions and predictions

4.1 Assumptions
- Unit land costs at scheme prices £16,000
- Rent per week £103
- Interest rate on index linked bonds 2.5 per cent

4.2 Predictions
There would be no need for a revenue grant at this rent level – the housing would pay for itself. In fact, there would be a surplus (but as there would be no mechanism for capturing Table 4 shows the grant as £0) and government would want to lower rents below £103 in order to reduce housing benefit payments. Note that the NAHP would be saved in its entirety. The Exchequer would also benefit from the effects of stimulus as set out in the capital grant central case.

Table 4

<table>
<thead>
<tr>
<th></th>
<th>Ongoing £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total annual revenue grant after five years</td>
<td>0</td>
</tr>
<tr>
<td>Net saving on benefits</td>
<td>-228</td>
</tr>
<tr>
<td>Total extra spend (- = saving)</td>
<td>-228</td>
</tr>
</tbody>
</table>

One million homes 14
5. Sensitivity analysis – revenue grants
Were we to move over to revenue grants, we think that in addition to the central case, there are three other potentially realistic scenarios, highlighted in Table 5. £113 rents are not realistic as they would simply increase the surplus enjoyed by landlords at the expense of the housing-benefit-paying taxpayer.

Table 5. Ongoing revenue grants (- = surplus) £m p.a.

<table>
<thead>
<tr>
<th>Rent</th>
<th>£93</th>
<th>£103</th>
<th>£113</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 per cent interest and £40,000 land price</td>
<td>£828</td>
<td>£401</td>
<td>£0</td>
</tr>
<tr>
<td>2.5 per cent interest and £31,000 land price</td>
<td>£540</td>
<td>£113</td>
<td>£0</td>
</tr>
<tr>
<td>2.5 per cent interest and £16,000 land price</td>
<td>£60</td>
<td>-£0</td>
<td>£0</td>
</tr>
</tbody>
</table>

Net saving on benefits £m p.a. -£539 -£228 £83

Total extra spend (- = saving) £m p.a.

<table>
<thead>
<tr>
<th>Rent</th>
<th>£289</th>
<th>£172</th>
<th>£83</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 per cent interest and £40,000 land price</td>
<td>£1</td>
<td>-£116</td>
<td>£83</td>
</tr>
<tr>
<td>2.5 per cent interest and £31,000 land price</td>
<td>-£479</td>
<td>-£228</td>
<td>£83</td>
</tr>
</tbody>
</table>
6. Conclusions and next steps

This paper has identified that it may be possible to reduce social landlords' cost of land and capital at the same time as increasing their operating margins. If this is so, the subsidy required per unit of housing would fall significantly and thus the number of homes that could be built for any given level of subsidy would increase very substantially – potentially to a million over the next five years.

Throughout the paper we have identified problems and uncertainties – and of course there will be more which we have failed to identify. We strongly believe, however, that the scale of the prize – serious inroads into Britain's housing problems within existing public sector financial constraints – justifies examining these in more detail.

Thus we are proposing a project to investigate among other things:

- Alternative ways of reducing the effective cost of land to social landlords, and their impact in different parts of the country on land prices and the number of new starts in all sectors, as well as their likely political impact.

- Alternative ways of reducing the cost of capital to social landlords, government's role in this, and the viability of replacing capital grants with revenue grants.

- The impact of different levels of rent on tenants and landlords in different parts of the country.

- Ways of reducing landlords' construction and operating costs – bearing in mind the need to build low carbon homes.

- The net impact of all the above on the private rented sector and the owner-occupied sector.

- The net impact of all the above on government finances in the short and long term, including through the housing budget and the benefits budget, and as a result of any net stimulus to the construction sector.

Please contact us if you are interested in contributing or in hearing more.
The savings and the sensitivity analysis are described in Section 5.

Our land price estimates are based on reviewing Valuation Office Agency Property Market Report January 2010 for land prices and http://www.uklanddirectory.org.uk/index.asp [2 November 2010] for current offer prices of parcels of land suitable for social housing development and typical densities, and netting out the average impact of any planning gain benefits. We weighted the price to reflect likely future building patterns based on length of waiting lists in different parts of the country (as per Shelter’s website http://england.shelter.org.uk). This gives £1.1 million per acre. At densities of 27 units to the acre (66 to the hectare) which are typical of new developments across the country, this represents a unit land price of £40,000. We estimate that the average cost to housing associations of new units, net of any planning gain and weighted in the same way is approximately £140,000 (based on National Housing Federation Member Briefing – Analysis of NAHP 2009-10 Q4, available at: https://www.housing.org.uk/default.aspx?tabid=318&mid=833&ctl=Details&ArticleID=3194) and thus that the construction element in this is approximately £100,000. See note 25 for the assumptions we have made about future building costs, including meeting tougher carbon standards.

That is, £11,000 an acre. A large sum for purely agricultural land with no prospect of development.

12 per cent is in line with our estimate of current planning gain appropriation through Section 106 agreements between local authorities and developers. This is £6,000 per unit if spread across all new units, whether or not any planning gain was received. This is lower than in the past as Section 106 agreements have been in decline over the last few years but it may be an overestimate. Given the £40,000 net figure for land (see note 2) this implies a gross land cost before any gain of £46,000. Thus 33 per cent and 66 per cent falls in effective price equate to a £15,000 and £30,000 per unit saving given the £46,000 average land cost.

Major house-building firms are developers and builders and own large amounts of land. They have borrowed extensively to buy this land, and measures which reduce the imputed value of the land could put them in breach of their banking covenants and drive them into bankruptcy. This is a problem for the public interest to the extent that they also employ large numbers of people to build homes – they are both a source of employment and provide the organisational infrastructure needed for the programme proposed. In this respect, the situation is very similar to that in the banking industry and the solution is similar: a restructuring, if needed, to allow the building as opposed to property development businesses to survive unscathed. Of course there could also be knock on effects in the banking sector which would have to be watched – having said which, these effects would almost certainly be exaggerated by the industry itself.

Since the beginning of October 2005, United Utilities Water PLC (UUW) has sold a total of £300 million 30-, 35-, and 40-year index-linked bonds. UUW claims on its website that ‘the all in funding cost’ is 1.381 per cent per annum. Available at: http://www.unitedutilities.com/2319.aspx [2 November 2010].


Until April 2010, registered social landlords could not be profit-making and accordingly were not able to issue equity, voting or non-voting, preference or ordinary, and this restricted their ability to borrow against their assets. The Housing and Regeneration Act 2008 relaxes these rules.

The grant could be replaced by non-voting ordinary equity to protect the taxpayer’s long-term interests, provided this did not create any problems with public sector borrowing rules.


The variation arises because the amount borrowable is 80 per cent of the asset value of the stock, and this is valued at the NPV of cash flow after costs and depreciation. The amount borrowable is thus sensitive both to the level of rents and the rate used to discount the cash flow. The latter is the weighted average cost of capital and thus depends on the interest rates at which the sector can borrow.

The sovereign market – the bulk of the total – was worth £1,000 billion in 2006 according to Barclays Capital, quoted in European Central Bank (2007) Inflation Linked Bonds from a Central Bank Perspective. Occasional Paper Series No. 62. Available at: http://www.ecb.int/pub/pdf/scpops/ecbocp62.pdf [2 November 2010]. Very long dated securities would be rolled over and refinanced on maturity. Since the asset values on which they are secured would be based on cash flows, provided real rent levels were sustained refinancing should not present a serious problem.


In this context it is worth remembering that while the government deficit is high relative to other G20 countries, the national debt is not exceptionally high. Given this, there is no rational reason why capitalising existing government expenditure (which is what providing guarantees is in effect doing) should upset anyone, especially if the effect is to reduce that expenditure.

The proposals may change to up to 80 per cent of the maximum Local Housing Allowance (private rented sector equivalent of Housing Benefit) payable for the type of property and area.

An analysis of social housing in different European countries conducted in 2001 concluded that ‘the social rented sector in other countries performs a greater role in enhancing housing affordability for a wider range of income groups than is the case in Britain…British housing exhibits a greater level of inter-tenure polarity than in the other countries studied’. Stephens M, Burns N, MacKay L (2001) Social Market or Safety Net: British Social Rented Housing in a European Context (London: The Policy Press)

The sector’s income from social homes was £9.48 billion in 2009, while operating costs amounted to £7.31 billion. Tenant Services Authority (2010) 2009 Global Accounts of Housing Associations (London: TSA). Available at: http://www.tenantservicesauthority.org/upload/pdf/Global_accounts_2009_20100324102409.pdf [2 November 2010]. The latter break down as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>£2.09 billion (£893 per unit)</td>
</tr>
<tr>
<td>Routine maintenance</td>
<td>£1.60 billion</td>
</tr>
<tr>
<td>Planned maintenance</td>
<td>£0.71 billion (routine and planned: £987 per unit)</td>
</tr>
<tr>
<td>Major repairs and refurbishment</td>
<td>£1.92 billion</td>
</tr>
<tr>
<td>Costs of services and care</td>
<td>£0.32 billion</td>
</tr>
<tr>
<td>Bad debt</td>
<td>£0.09 billion</td>
</tr>
<tr>
<td>Other</td>
<td>£0.38 billion</td>
</tr>
</tbody>
</table>

Medium-sized associations have a cost ratio 10 per cent more efficient than the largest associations, perhaps partly because of differences in the stock owned.

The current £8.4 billion programme will deliver 155,000 homes. Homes and Communities Agency (HCA) website. Available at: http://www.homesandcommunities.co.uk [2 November 2010].
Our starting point was the £100,000 we estimated the sector is currently paying – see note 2. Meeting tougher carbon standards will increase this, almost certainly by more than £10,000. However, we believe that economies on existing building costs are possible. For example, www.building.co.uk has a cost model for a development of 10 affordable homes – a mix of 2- and 3-bed units – which comes to £670,000, including meeting current standards. Hence we believe £100,000 is a realistic estimate.

See note 4

NPV of cash flow after costs and depreciation discounted at weighted average cost of capital.


In line with current rates used. Ibid.


Ibid.

As calculated by The Scottish Government. This is a relatively conservative estimate: Oxford Economics, cited by the Homes and Communities Agency in its Top housing and regeneration facts, estimates the multiplier at 2.6. Available at: http://www.homesandcommunities.co.uk/public/documents/housing-regeneration-facts.pdf [2 November 2010]

This estimate is based on current levels of unemployment in the UK, as a proxy for the spare capacity that would be taken up. The assumption is the other 92 per cent would displace other activities.


A cautious estimate – less than the current 7.8 per cent unemployment rate reflecting the possibility of migrant labour and the downturn resulting in people taking lower paid jobs.

That is, the £8.4 billion programme cost divided by the three years of its operation.


The total government investment in social housing is the subsidy required per property times a million. The subsidy per property is calculated as the cost of the building plus land (at the reduced price) less the average amount the landlord receives from equity sales through the LCHO scheme (i.e. 25 per cent x 50 per cent of the open market price under our assumptions), the amount it can borrow against each property (the lesser of 80 per cent of the asset value and 90 per cent of the average rent – taking into account equity sales – less costs and depreciation) and the amount it can issue in preference shares per property (determined by the amount of preference share dividends that can be met by the rent less costs and depreciation less interest).

The net savings on benefits are the savings DWP makes as people transfer from LHA funded accommodation to social housing, less any additional costs as people transfer from other, cheaper social housing accommodation. We assume that this builds up over five years, with no savings in the first year, 20 per cent in the second, etc. Annual savings are only maximised after the building programme is complete but are then ongoing.
These are the post-CSR costs of the programmes the government plans to implement which our proposals would replace. They equal the total programme cost (£4.4 billion) divided by 4 (£1.1 billion) and then multiplied by 5 to get the equivalent cost over five years (£5.5 billion).

This is principally additional tax revenue, calculated as the building costs of a million homes less the costs of those planned under the proposed programme (including an additional year’s building at the same rate), all times the multiplier times the share of the activity that is taking up unused capacity rather than displacing other activity times the tax take’s share of GDP – see notes 34, 35, and 36 for the numbers we use for these calculations. We have added a small amount for savings on benefits: £140 million a year, equal to £3000 pa (Job Seekers’ Allowance level) for 46,000 individuals. See notes 37 and 38 for the basis for these numbers.

These are the savings announced in the CSR on the NAHP which our proposals would replace, i.e. £1.7 billion a year (i.e. £8.4 billion divided by three – the pre-CSR programme was a 3-year programme – minus £4.4 billion divided by the four years of the spending review period) multiplied by the five years of our programme period. We include this to allow us to compare the cost of our programmes with pre-CSR plans.

The revenue grant is the grant required per property times a million. The grant per property is the revenue required per property to service debt and preference share interest, less the average rent received (taking into account equity shares sold) less costs and depreciation. The revenue required per property is the cost of the building plus land (at the reduced price) less the average amount the landlord receives from equity sales through the LCHO scheme (i.e. 25 per cent x 50 per cent of the open market price under our assumptions), all divided by the weighted average cost of capital – 80 per cent times the bond yield and 20 per cent times the preference share yield.

See note 42.
The centre for well-being at nef (the new economics foundation) aims to enhance individual and collective well-being in ways that are environmentally sustainable and socially just. Set-up in 2006, the centre builds on nef’s established well-being programme and significantly expands our work in this area.

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Grounded firmly in the latest scientific research, our understanding of well-being is nuanced and dynamic. We aim to influence all levels of policy and practice, from developing innovative new indicators for national governments and international agencies, to helping practitioners understand how to promote well-being in the most effective and sustainable ways.

To find out more contact us at well-being@neweconomics.org or visit www.neweconomics.org

For more information please call 020 7820 6300