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Report

Original citation:
Holmans, Alan and Scanlon, Kathleen and Whitehead, Christine M. E. (2002) Fiscal policy instruments to promote affordable housing. Research Report, VII. Cambridge Centre for Housing and Planning Research, Cambridge, UK.

This version available at: http://eprints.lse.ac.uk/29958/

Originally available from Cambridge Centre for Housing and Planning Research

Available in LSE Research Online: November 2010

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Final Report:

POLICY OPTIONS TO PROMOTE AFFORDABLE HOUSING
19 February 2002

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With Jim Shilling and John Hills

Cambridge Centre for Housing and Planning Research

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EXECUTIVE SUMMARY

Introduction

Terms of reference

1. The Cambridge Centre for Housing and Planning Research was asked to undertake a scoping study into the potential for using fiscal instruments to help tackle the problem of affordability in the housing market.

Approach

2. The research was undertaken in two stages:

   a review of the full range of possibilities based on secondary source material and a questionnaire to international experts; and

   a more detailed analysis of a short list of proposals examining their potential attributes, operation, impact and additionality, based on economic principles and national and international evidence and leading to advice as to the policies to be taken forward.

Principles

3. The effectiveness of any instrument depends on certain basic market and administrative attributes. The principles suggest that demand and supply subsidies can give equivalent benefits. However there are good reasons in the UK context, especially given the emphasis on non-profit suppliers, to concentrate more on supply subsidies.

4. Both demand and particularly supply are price inelastic so there will always by some loss of benefit into higher prices. The cross elasticities between different sub-markets (e.g. social housing and lower-cost home-ownership provision) is less well understood but will also reduce net benefits. Concentrating on policies that can bring net additional land into affordable housing provision is likely to generate the highest longer-term benefits.

5. All policies will have some associated deadweight loss—that is, some actors who did not require the subsidy will benefit. Social Housing Grant provides deep subsidy for those in particular need. Fiscal instruments will normally provide less subsidy per unit and are therefore likely to be more appropriate for intermediate markets – including different forms of owner-occupation as well as rented property, especially for those entering the housing market for the first time.

Developing a short list

6. A typology of instruments was developed categorising possible measures into demand- and supply-side approaches against tax, subsidy and regulation.

7. The UK position with respect to this typology was then set out. The UK has very few fiscal instruments specifically addressing affordable housing. The majority of assistance is in the form of direct income, rent or equity and supply subsidies. Regulation is important in the form of rent controls in the social sector and S106 agreements to generate new affordable housing.

8. Across the world almost every possible type of fiscal instrument, and indeed regulation, can be found – including in particular depreciation allowances, tax credits, preferential treatment of housing-related savings, as well as interest-rate subsidies and grants for house purchase, new build and renovation.

9. The agreed short-list took account of the international evidence and of the UK-specific environment and experience. Six fiscal instruments and associated measures were included for further analysis:

- Tax incentives for construction of affordable housing, allowing a percentage of costs to be set against other income or against tax due. These incentives could be applied to provision of rented or owner-occupied housing, to shared-equity schemes, and/or to particular areas, types of dwelling or occupant categories.

- An instrument, similar to Homebuy and the Starter Homes Initiative, that would not be limited to helping buyers with first purchases, but would concentrate assistance in high-price areas. This might be targeted at particular geographical areas or groups of people.

- Savings schemes for first-time buyers, which might include an employer element - including for instance allowing reliefs equivalent to pensions for mortgage savings.

- Fiscal instruments to increase employer involvement in housing provision, either directly or indirectly. In part this would reintroduce an old established policy and make it tax efficient for employers to play a direct role in assisting their workers. Guidance on the "best consideration" rule would also be assessed.

- Ways of encouraging mixed-use or housing-only development on sites previously designated for non-residential development.

- Reduction of VAT on renovation of affordable housing (perhaps in the first instance by exempting Registered Social Landlords (RSLs)).

In-depth analysis of policies

Policy 1: Tax incentives for construction

10. The majority of experience on tax incentives for construction of affordable housing comes from the US Low Income Housing Tax Credit programme. A stream of credits is provided to developers building housing that will remain affordable (as defined by income group) for a set period of time. These incentives can be sold on, capitalising the benefits.

11. The evidence suggested that the credits have been effective but inefficient in terms of transactions and other costs. The depth of subsidy is a matter for decision, but in the UK context could be the marginal income-tax or corporation-tax rate.

12. The subsidy in England could be equity-based, covering rental property or the equity proportion of shared equity. The programme could also be designed to cover loans. The instrument could be used, probably together with measures to expand land supply (Policy 5) and employers as relevant partners, to generate significant additional affordable housing. There could be significant costs in terms of crowding out market housing and transactions costs. The Business Expansion Scheme and assured-tenancy accelerated-depreciation

schemes provide some evidence on how such a scheme might work in the UK. DTLR could undertake the relevant designations.

Policy 2: Government assistance to purchasers in high-cost areas

13. This would be an extension of existing policies including Homebuy and the Starter Home Initiative. It directly addresses the problems which arise because house prices vary more than incomes across the country and is a cheaper approach than varying public-sector salaries.

14. The depth of subsidy is a matter for decision. The case for providing a more coherent set of polices is strong. However targeting is important – the less well the subsidy is targeted, the greater the deadweight loss. There will also be an impact on prices unless supply-side questions can also be addressed. This policy can be concentrated on particular groups and areas and varied in relation to economic conditions. The scheme is likely to remain cash limited.

Policy 3: Savings schemes for first-time buyers

15. Such schemes have become tax inefficient in the UK because the 'subsidy' is regarded as taxable income and there is little reason to tie savings particularly to housing. There is some evidence that a range of employers would wish to reintroduce these schemes were they to be tax efficient. They would probably prefer to assist with mortgage payments if such payments were tax efficient, as they are in many other countries.

16. The depth of subsidy is determined by the saver's marginal tax rate – which is likely to be the standard rate. It can only be targeted by defining groups. This might be difficult to police and could go against other legislation. Employers can be of relevance here – especially if it were agreed that pension-style reliefs would be available or that the early years of a pension could be used for house purchase.

Policy 4: Employer involvement

17. This is more a mechanism by which the fiscal incentives above can be delivered, since employers can already set any payments to employees against costs. They may, however, have important roles in developing savings schemes, reducing mortgage costs, helping with shared-equity arrangements and perhaps making land available.

18. There is evidence that employers would like to provide assistance with savings and mortgage costs but are discouraged by the employees' tax position.

19. On the supply side, employers would normally be expected to work in partnership with RSLs and developers and to purchase nomination rights either for rented property or shared equity. They would normally be looking for ways to keep the property as affordable housing into the longer term. They could be important players in the introduction of Policy 1. In addition many employers, particularly in the public sector, may be able to offer land rather than direct payments, especially if it were clear that 'best consideration' included assistance with the provision of accommodation at below-market prices.

20. Important practical issues relate to ensuring transparency with respect to the principles of best consideration and helping to develop workable larger-scale shared-equity instruments. It should be noted that equity-sharing schemes have not been popular with consumers in the past.

Policy 5: Providing affordable housing on nonresidential land

21. This is fundamentally a planning issue. The most obvious way forward would be through an extension of the rural exceptions policy to urban areas and of S106 for affordable housing to nonresidential land. Such a policy is foreshadowed in the Planning Regulations green paper. It would probably be unpopular with landowners and developers unless there were additional fiscal incentives as under Policy 1. On the other hand, it would remove a distortion which currently provides a disincentive to residential development.

22. There could be benefits in the context of large-scale urban redevelopment schemes, in achieving mixed-development objectives, and perhaps making it easier to raise institutional funding.

Policy 6: VAT reduction for renovation of affordable housing

23. VAT reduction restricted to RSLs would make Social Housing Grant (SHG) go further. It might also be possible to cover property on longer leases (e.g., at least five years) from the private rented sector, helping to bring property back into use.

Overall assessment

24. A version of Policy 1 has just been introduced in the form of the Community Investment Tax Credit. This makes it easier to develop a broader scheme concentrating on particular areas, dwelling types and occupant groups. It will work effectively only if the credits can be traded and land supply can be increased.

25. Extending Homebuy and the Starter Homes Initiative into a more coherent but carefully targeted scheme appears appropriate, as it can help fulfill reasonable aspirations of lower-income employed households.

26. Savings schemes can only provide very limited help. Extending income-tax relief to employer contributions to mortgage payments would have more impact but goes against general tax principles.

27. Employers clearly have a potential role as partners in Policy 1, in providing land, developing shared-equity schemes and facilitating the implementation of other fiscal instruments. Whether employers become involved depends partly on whether they perceive particular relative advantages to providing housing assistance rather than increased pay.

28. Providing a flatter playing field between residential and non-residential sites in terms of the requirement to provide affordable housing, as envisaged in the Green Paper, could increase the number of sites coming forward for residential and particularly affordable housing use. However, the policy would have to be combined with fiscal incentives such as Policy 1 to generate large-scale changes.

29. Reducing the VAT rate on renovation to 5% (the minimum permissible under EU regulations) would reduce the cost of providing affordable housing through renovation. Restricting the tax reduction to RSLs would concentrate the policy on affordable housing and make it easier to monitor.

30. There are a number of non-fiscal modifications which could make the system work very much better. They include in particular (i) clarifying the definition of best consideration so it includes allocating land for affordable housing at sub-market prices and (ii) developing standard contracts and transparent frameworks for shared-equity arrangements so that both employers and employees can better evaluate the schemes. There could be large benefits from increasing the scale of shared-equity schemes to provide incentives for institutional investors to become involved, but these are a long way off.

31. Overall there is a strong case for experimenting with Policy 1 and for developing a more coherent approach to demand assistance as defined in Policy 2. The other policies can act in support of these two more fundamental changes.

32. None of these policies will effectively address the same needs as SHG, which is concentrated on lower-income households with longer-term needs, and provides higher subsidies and greater targeting. Instead they can supplement that provision by bringing in different players, greater choice and a more market-oriented approach. They will however generate significant deadweight losses from transactions costs and inadequate targeting. They work best if their use can be directly combined with expansion of land supply.

I INTRODUCTION

Terms of reference

The Department of Transport, Local Government and the Regions (DTLR) together with the Government Office for London (GOL) and Affordable Housing Unit asked the Cambridge Centre for Housing and Planning Research to undertake a scoping study into the potential for using fiscal instruments to help tackle the problem of affordability in the housing market.

The specific objectives included:

(a) to identify what fiscal instruments might be available to increase the supply of affordable housing;
(b) to identify what fiscal instruments might be available to tackle the problem of affordable housing through routes other than supply;
(c) to evaluate how such instruments might be applied successfully in the UK and to analyse their likely impact;
(d) to recommend a short list of the most promising instruments; and
(e) to compare value for money between the short listed instruments and grant- or loan-based mechanisms for increasing affordable housing.

Methodology

The project was divided into two stages:

- a review of the full range of possibilities leading to a proposed short list; and

- a more detailed analysis of the nature of the short-listed instruments, evidence of their effectiveness and their likely impact on the provision of affordable housing in the UK.

The first stage of the research involved desk research to collect information on fiscal incentives for affordable housing in other countries. Relevant books and journals were consulted, a web search conducted, questionnaires sent to housing-finance experts from Germany, Australia, France, Denmark, Sweden, the Netherlands, Finland, and the US, and discussions held with other academics in the UK.

Having collected information about these international fiscal instruments, we categorised the policies according to whether they affected supply or demand, and whether they were subsidies or worked through the tax system. From this analysis we identified a range of policies with some potential in the UK context. After discussion with DTLR and GOL, a shortlist was drawn up of six policies – two concentrating on demand and four where the likely impact was directly on supply.

In the second stage of the research we carried out a more detailed analysis of these six policies focusing on the stylised facts about the suggested instruments; their economic rationale; appropriate targeting; international experience in implementation; and the practical issues that would arise in their introduction. This analysis led to an assessment of whether and how they might be applied in the UK and the likely value for money in introducing such measures.

Framework for assessment

The objectives of fiscal incentives include (i) to change consumer income and therefore the capacity to pay for affordable housing; (ii) to change the price of affordable housing to consumers in order to increase the incentive to purchase or rent adequate accommodation; and (iii) to increase the incentive to suppliers to provide affordable housing.

Comparative static analysis has traditionally suggested that income subsidies give higher utility to consumers, mainly because of the benefits of choice. Similarly, price subsidies without constraints on choice give higher value than constrained-choice price subsidies – which may operate to increase the capacity to purchase other goods and services rather than housing itself. Therefore in well-operating, rapidly adjusting markets the emphasis tends to be on helping low-income households directly.

However, where there are additional social benefits to ensuring housing standards, or constraints on supply adjustment or distributional objectives, it will often be more appropriate to concentrate assistance on supply and prices. In particular, where the price elasticity of demand for a basic necessity is limited above a certain quality, price subsidies to help people achieve a minimum of quality will meet both distributional and efficiency aims as compared to income subsidies (Bos, 1991). These attributes are usually thought to apply to minimum standards of affordable housing.

The question as to whether price subsidies should be directed at demand or supply has been a matter of much academic and policy discussion. In principle in well operating markets the question is irrelevant - as Figure 1 shows, both the impact on output and on the price paid by the consumer will be the same. However reality is likely to be different because of the transactions and adjustment costs involved as well as because of the relevant institutional framework. In the United States the presumption in the literature is heavily in favour of demand-side subsidies for efficiency reasons (Housing Studies special issue, 2002). Galster, for instance, who is well aware of the arguments, suggests that "Problem definition, goal weighting, and metropolitan, housing market, socio-economic and governmental characteristics collectively must be considered before an unambiguously 'best' housing strategy can be identified" but then concludes "The demand-side approach, however, can claim a wider range of goals over which it demonstrates comparative advantage" (Galster, 1997). The reason for this conclusion is that housing markets should be seen as a series of sub-markets. Demand-side subsidies allow people to be mobile upwards into higher-quality sub-markets and supply and price will then adjust to that shift in demand. Yates and Whitehead (1998) responded by suggesting that, at the least, there should be greater agnosticism as to their relative effectiveness. They argued that the US market was not typical of most housing markets, especially in Europe. The particular context in which markets operate, the specific design of delivery mechanisms, in particular the role of the social sector, and the potential effects on social segregation should all be taken into consideration before coming to a conclusion. Equally the political pressures towards using lower taxes rather than increased public expenditure can be important. Even so, it is recognised that there is no guarantee that supply subsidies delivered through bureaucratic procedures will necessarily be more effective because administrative failures are just as prevalent as market failures (Maclennan and More, 1997). What therefore is most important is not the debate about demand versus supply subsidies *per se*, but an examination of what prevents either from achieving their goals.

These conclusions support the approach taken by this project. They suggest in particular that much of the emphasis should be on the effectiveness of the administrative framework, the linkages between different instruments, the potential impacts and, especially, relevant price elasticities.

Evidence on price elasticities

The most important price elasticity in terms of the likely outcome of any fiscal instrument is the price elasticity of supply - of affordable housing, housing in general, and land in particular. If, for instance, the price elasticity of supply of housing were to be completely inelastic then the impact of either a demand subsidy or a supply subsidy would be wholly to increase price (Figure 2). Any impact would then be limited to redistribution between affordable housing, where the subsidy was concentrated (reducing the relative price faced by consumers and suppliers in this submarket), and the unsubsidised sector where prices would increase.

If, which is somewhat more realistic, it is the price elasticity of the supply of land which is completely inelastic it may be possible to obtain some additional housing through the impact on increased densities. However the greatest effect will still be on prices rather than output. The evidence on price elasticities of supply of land, and therefore the supply of new housing overall, suggests that adjustment in Britain is very slow and that price elasticities are low (Whitehead, 1999; Malpezzi and Maclennan, 2000; Bramley 1993; Monk *et al*, 1996). Empirical evidence in England suggests that they do vary between regions and that, rather surprisingly, elasticities might be higher for London than for many other regions (Cheshire and Shepherd, 2000). What is undoubtedly the case is that the land-use planning system plays a major role in determining production in its effect both on the amount of land made available and the capacity to vary density in response to price increases (Bramley *et al*, 1995). The most important pressures to adjust land supply and densities may also be as much political as direct responses to price change (Barter and Jarvis, 2000).

This evidence suggests in the UK context that policies that can achieve additional land and housing are likely to be particularly effective in the addressing the affordable housing problem. At the present time, while affordable housing is a material consideration, its provision will not generally directly affect overall land supply. Two mechanisms that aim to modify overall supply are rural exceptions sites and their equivalent in urban areas (as operated in Hammersmith and Fulham), and greater preparedness at the local level to agree to proposals providing appropriate S106 affordable housing proposals (of which there is some, very limited, anecdotal evidence (Crook *et al*, 2002)).

It is suggested that the supply of accommodation from within the housing stock may be rather more price elastic, and that an increase in price may elicit responses, such as bringing dwellings back into use, conversions to smaller units and the transfer from commercial and other uses to housing. However the empirical evidence on this is limited and there are obvious problems in relation to standards and the location and appropriateness of vacant units (Kleinman *et al*, 1999).

The extent of substitution between affordable and market housing – i.e., the extent to which market housing is crowded out as a result of any increase in the provision of affordable housing-- is equally unclear, although there is undoubtedly some such substitution. In the other direction, to the extent that affordable housing comes from the existing market sector, assisting one group of households put pressures on the other.

On the demand side, the evidence suggests that price elasticities are certainly less than one and may be very much less, while income elasticities are probably close to one (Whitehead, 1999). Thus, if

additional income is provided, demand will rise roughly in proportion. There will be limited supply response. To restrict demand in the market sector will require therefore significant price adjustment. Additional complications arise from expectational changes in response to price increases in both supply and demand.

The evidence on price elasticities, in particular, suggests that it is important to direct fiscal instruments in such a way as to increase responsiveness as much as possible – both in the administered and market sectors. It also suggests that, however well directed, any instrument large enough to have a significant effect on affordable housing provision will add to the pressures on house prices, particularly in highly constrained areas.

Deadweight losses/additionality

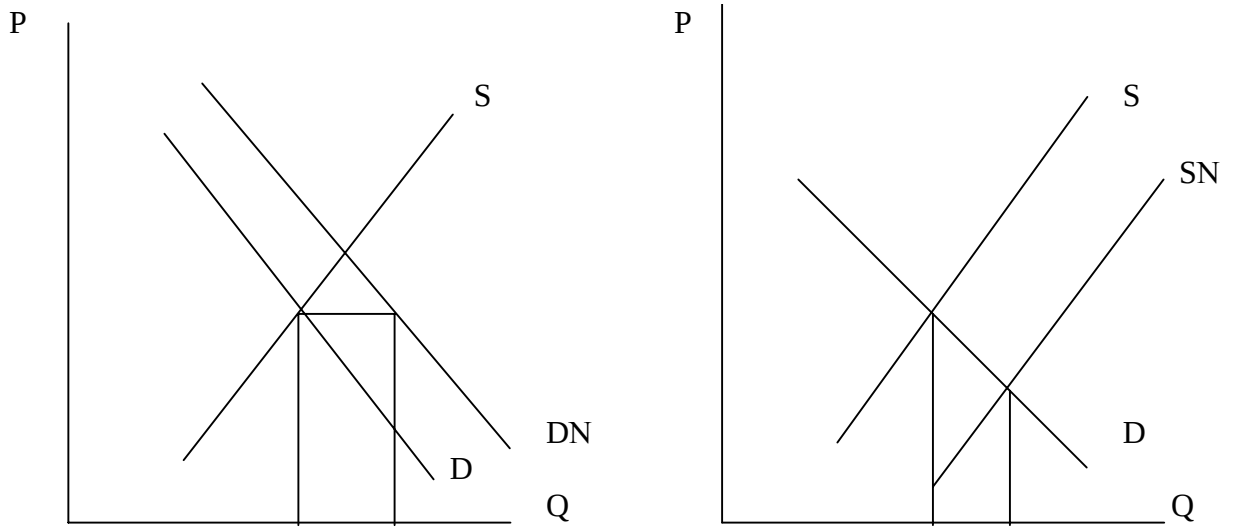
An important element in any assessment of fiscal measures must be the extent to which the cost to the Treasury will directly impact on demand or supply. If, for instance, a tax benefit is given to suppliers to produce more affordable housing, how much of that payment might go to suppliers who would anyway have been provided the accommodation (Figure 3)? Other things being equal, the lower the amount of benefit, the higher the proportion that will go on helping dwellings that would anyway be provided. Larger payments will bring forward additional investment, so increasing the proportion. The two most important questions are therefore (i) how well targeted can the instrument be (so as to exclude those that would anyway be prepared to supply) and (ii) what are the elasticities of the demand or the derived demand and supply in the relevant housing market? In addition, as the instrument will almost certainly be applied to a sub-market, there is a question of the extent of output loss in other markets. These questions are addressed in Annex 2a.

The relevant comparator

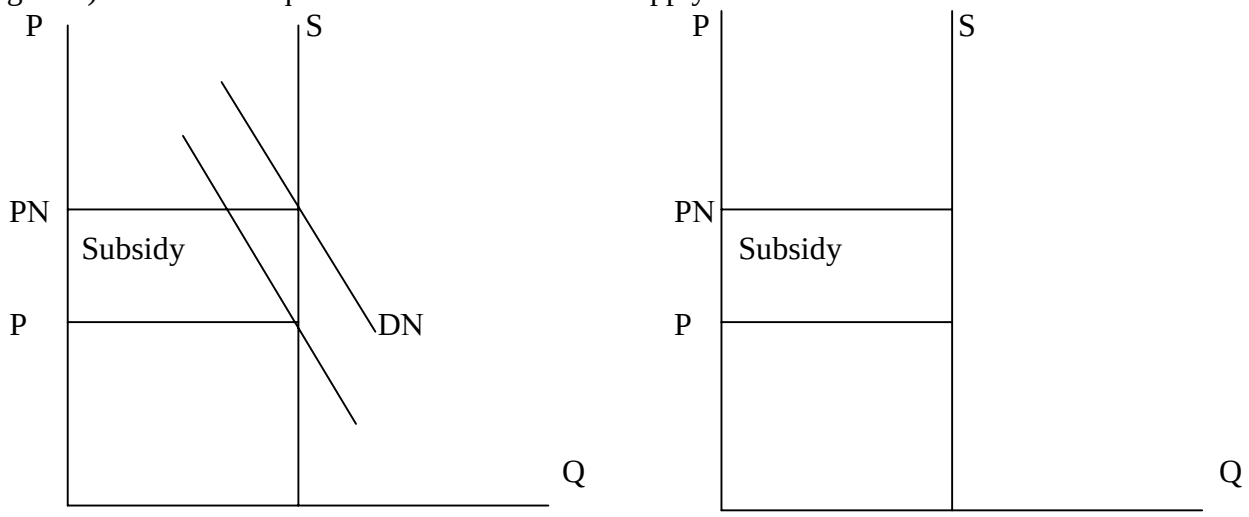
The current method of provision of additional affordable housing is through Social Housing Grant (SHG), together with contributions from S106. Social Housing Grant is an up-front subsidy (implying that all the direct impact on public expenditure is taken in the first year). The headline grant rate is 68%. The actual level depends upon the bidding process and how the impact of rent restructuring. All payments must be directly used for additional provision (including large-scale rehabilitation and transfers from the market sector). The deadweight losses are therefore restricted to the impact on costs of production – including land costs and any crowding-out effect, e.g. with respect to RSL provision of market accommodation as well as the potential loss of demand in other sectors. Except for the RSL substitution effect these are likely to be small.

The depth of subsidy under SHG is very considerable. However allocation systems ensure that this is targeted at low-income households except to the extent that there is little pressure to move on when circumstances improve. The vast majority of the benefits of SHG are tied to renting from housing associations. This may be a desirable option for many households, but some households may prefer a smaller amount of cash and greater freedom of choice.

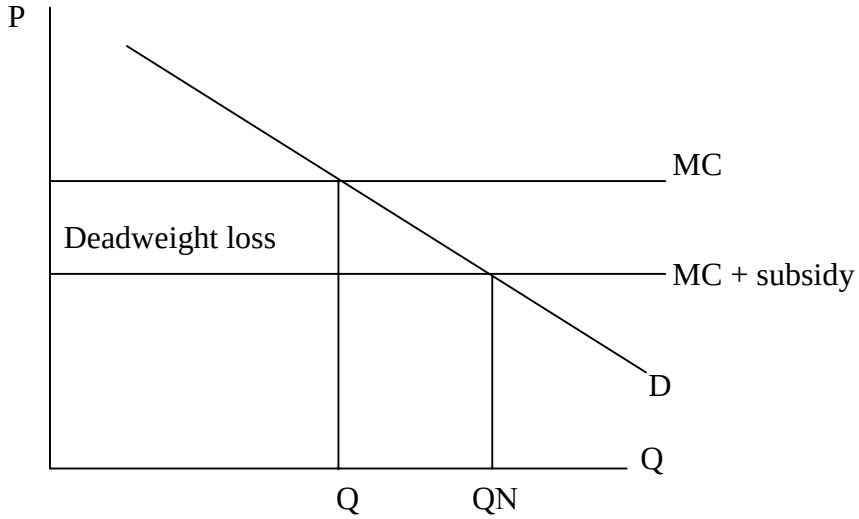
In comparing potential instruments with the existing system it is therefore appropriate to take account not just of the depth of subsidy and its impact on affordability but also the extent to which the subsidy is effectively targeted, the freedom of choice provided to the consumer and the benefits of spreading the public expenditure costs over time.



(Figure 1) Formal equivalence of demand and supply subsidies



(Figure 2) Impact of supply inelasticity



(Figure 3) Deadweight loss from subsidy

P = price PN = price with subsidy Q = quantity QN = quantity with subsidy D = demand
DN = demand with subsidy S = supply SN = supply with subsidy MC = marginal cost

II ARRIVING AT A SHORT LIST OF POLICIES

Introduction

Our approach to developing a possible shortlist of fiscal instruments was:

- first, to determine a typology of possible instruments;
- second, to clarify how the UK currently fits into this typology;
- third, to allocate all the observed policies in other countries to the matrix typology; and
- finally, on the basis of discussion of the appropriateness of different instruments to determine a short list for further analysis.

The typology

The following matrix sets out the possible types of government intervention, in the form of subsidies or tax relief, to encourage affordable housing.

More general fiscal measures, such as the lack of tax on imputed rents and exemption from capital gains tax, are in no way directed at affordable housing *per se* and so are excluded from the matrix.

	Tax	**Subsidy**	**Regulation**
Demand	***Category 1*** 1) Mortgage interest tax deductible 2) Owner-occupiers can claim depreciation 3) Preferential tax treatment of home-savings plans 4) Rent payments tax deductible 5) Tax credits for low-income tenants 6) Exemption from transfer tax for first-time buyers 7) Tax relief for employee on employer-run house savings schemes, to equate with treatment of pension contributions 8) Property tax relief for low-income households 9) Exemption from transfer tax for new homes	***Category 2*** 1) Housing allowance 2) Subsidies to savings for house purchase (interest subsidies or one-off grants on house purchase) 3) Subsidised mortgages for low-income households 4) Grants and other assistance to first-time buyers 5) Grants for low-income buyers (not tied to savings) 6) Right-to buy and other discounts for council tenants 7) Improvement grants for low-income owners	***Category 3*** 1) Government assigns housing to low-income households
Supply	***Category 4*** *Income tax* *1)* Providers of social housing exempt from income tax *2)* Tax relief on investment in construction of affordable housing for rent or sale, to be set against income from all sources *3)* Depreciation for rental units *4)* Landlords can deduct interest on loans and operating expenses *5)* Landlords can set rental losses against other income *6)* Lower tax rate for landlords' capital gains *7)* Tax relief for interest from mortgage-backed securities used to fund low-interest mortgages or low-income housing *8)* Allow capital outlays on construction/conversion of rental property to be offset against rental income *9)* Preferential treatment for housing-finance institutions *10)* Preferential tax treatment for employer-provided housing *Land/property tax* *11)* Taxation of empty land to encourage housebuilding *12)* Taxation of empty property to bring back into use *13)* Discount for new/renovated houses, or abatement for specified period *VAT* 14) Reduced rate on conversions, new build *15)* RSLs pay lower VAT	***Category 5*** 1) Grants for construction or renovation of affordable housing 2) Subsidised loans for developers of affordable housing 3) Provision of land for affordable housing at below market value or free 4) Grants to bring empty homes back into use with allocation attachments 5) Government guarantees for housing association loans 6) Government guarantees of rent or mortgage payments from low-income households	***Category 6*** 1) Require developers to include certain % of affordable housing 2) Rent control 3) Require employers to provide housing 4) Prohibit move of rental flats to owner occupation

The UK position

Current, and some past, UK policies are classified below according to the preceding matrix. Categories omitted are not represented by existing policies in the UK.

Category 1: UK demand-side tax measures

1.1 Mortgage interest tax deductible
Owner-occupiers can no longer deduct mortgage interest payments in the UK. Landlords in the private rented sector can deduct interest payments as a business expense.

1.8 Property tax relief for low-income households
Low-income households are eligible for council tax benefit.

1.9 Exemption from transfer tax for new homes
The government recently announced the abolition of stamp duty for purchases of dwellings in certain low-demand areas. A price ceiling applies.

Category 2: UK demand-side subsidies

2.1 Housing allowance
Housing benefit.

2.4 Grants and other assistance to first-time buyers
Starter Home initiative; cash-limited payments to certain key workers

2.5 Grants for low-income buyers
Shared ownership and DIYSO: subsidised rental element of either newly built home or one from the existing market sector. Homebuy: Interest-free loan for a proportion of asset to make home ownership affordable.

2.6 Right-to-buy discounts for council tenants
Council tenants have the right to buy their dwelling at a discount from the market price. The size of the discount depends on how long they have lived there and the type of property. Tenants incentive schemes provide assistance to transfer to the private sector.

2.7 Improvement grants for low-income owners
Local authorities give grants to enable low-income owners to carry out certain essential repairs.

Category 3: UK demand-side regulations

3.1 Government assigns housing to low-income households
Yes, for social rented housing through RSLs and local authorities.

Category 4: UK supply-side tax relief

Income tax

4.1 Providers of social housing exempt from income tax

Yes--as non-profit organisations, housing associations pay no income tax.

4.4 Landlords can deduct interest on loans and operating expenses
Yes. Landlords receive unlimited marginal-rate tax relief on interest payments.

4.8 Allow capital outlays on construction/conversion of rental property to be offset against rental income
Only in the flats-above-shops programme, which ran from 1992 to 1995.

Land/property tax

No reliefs given.

VAT

4.13 Reduced rate on conversions
New build is zero-rated. Renovation work attracts VAT at the full rate, except for certain conversion work (changing the number of units in a building), where VAT is applied at a reduced rate.

Category 5: Supply-side subsidies

5.1 Grants for construction or renovation of affordable housing
Providers of social housing receive Approved Development Programme (ADP) funding for construction or acquisition and rehabilitation of rental units and shared ownership accommodation. Local authorities also provide Social Housing Grant.

5.3 Provision of land for affordable housing at below market value or free
Local authorities may provide their own land for social housing. Traditionally they built the housing themselves; more recently they have developed it in partnership with either housebuilders or housing associations. Where a local authority sold land for less than market value it would normally expect to receive nomination rights to social housing in return.

5.4 Grants to bring empty homes back into use with allocation attachments
Yes. These are local-authority based.

5.6 Government guarantees of rent or mortgage payments from low-income households
The possibility exists but it is not used, except in the case of payment of mortgage interest for certain unemployed people on income support. Mortgage Payment Protection Insurance is not government guaranteed.

Category 6: Supply-side regulations

6.1 Require developers to include certain percentage of affordable housing
Section 106 can be used to enforce such requirements. There is a minimum development size (smaller in London than elsewhere). At the moment this is applied only to residential development, not commercial except in one or two authorities.

Rural exceptions sites may be identified at the parish level to provide affordable housing for local needs. Public-sector organisations must sell land at the best consideration – this may enable them to sell at below market value in order to obtain nominations.

6.2 Rent control
Yes, for social housing.

Outside above categories

7 Advice to low-income households on homeownership
Some.

Summary

In the UK owner-occupation is now effectively treated as a consumption good. It is therefore tax-free except for stamp duty and the price-related part of council tax, while the costs of owner-occupation are taxed. For private rented housing, on the other hand, the landlord is subject to income tax (with cost deductions, but no depreciation) and to capital gains tax – housing is thus treated as an investment good.

Other interventions – especially housing benefit – lower the cost of renting to low-income households, but there is nothing to provide regular assistance for low-income owners. There is a patchwork of other policies, including right-to-buy discounts, Homebuy, the Starter Homes Initiative, and improvement grants, but with the exception of right-to-buy these have a limited effect.

In general there is much less subsidy now than a few years ago. The main remaining subsidies are concentrated at the bottom end of the market, mainly through housing benefit. There are very few mechanisms outside Social Housing Grant directly to assist additional provision.

Policies in other countries

Policies in other countries are summarised in the matrix on the following page. Details of the policies followed by other countries can be found in Annex 1. Details of those schemes relevant to the chosen short list of policies are set out in Section III. *Note: the table is not a complete summary of affordable housing policies of these countries; it is indicative only.*

International affordable housing policies (followed now or recently)

Cate-gory	**Policy description**	UK	USA	F	SP	N	DK	B	IT	IR	G	FI	AU	SW	CA
1.1	Mortgage interest tax deductible	●	●	●		●	●	●		●					
1.2	Owner-occupiers can claim depreciation										●				
1.3	Preferential tax treatment of home-savings plans			●							●				●
1.4	Rent payments tax deductible								●	●					
1.5	Tax credits for low-income tenants		●												
1.6	Exemption from transfer tax for first-time buyers														
1.7	Tax relief for employee on employer-run house saving schemes														
1.8	Property tax relief for low-income households	●				●									
1.9	Exemption from transfer tax for new homes	●								●					
2.1	Housing allowance	●	●	●	●	●	●	●		●	●	●	●	●	●
2.2	Subsidies to savings for house purchase				●						●	●			
2.3	Subsidised mortgages for low-income households			●	●	●									●
2.4	Grants to first-time buyers	●			●						●				
2.5	Grants for low-income buyers	●	●												
2.6	Right-to-buy discounts for council tenants	●													
2.7	Improvement grants for low-income owners	●													
4.1	Providers of social housing exempt from income tax	●				●	●				●				
4.2	Tax relief on investment in construction of affordable housing		●								●				
4.3	Depreciation for rental units		●								●		●		●
4.4	Landlords can deduct interest on loans and operating expenses	●	●								●				●
4.5	Landlords can set rental losses against other income		●								●	●			●
4.6	Lower tax rate for landlords' capital gains		●												
4.7	Tax relief for interest from mortgage-backed securities for housing		●												
4.8	Landlords can set capital outlays against rental income	●							●	●					
4.9	Preferential tax treatment for housing-finance institutions										●				
4.10	Preferential tax treatment for employer-provided housing														
4.11	Taxation of empty land to encourage housebuilding														
4.12	Taxation of empty property to bring back into use														
4.13	Property-tax discount for new/renovated houses, or abatement	●		●										●	
4.14	Reduced rate of VAT on conversions, new build				●										
4.15	RSLs pay lower VAT			●											
5.1	Grants for construction or renovation of affordable housing	●		●	●						●			●	
5.2	Subsidised loans for developers of affordable housing		●	●	●						●	●		●	●
5.3	Land provided for affordable housing at below market value/free	●			●				●						
5.4	Grants to refurbish empty homes w/ allocation attachments	●													
5.5	Government guarantees housing association loans						●								
5.6	Government guarantees rent/mortgage payment of low-income households	●	●	●							●				

F = France SP = Spain N = Netherlands DK = Denmark B = Belgium IT = Italy IR = Ireland G = Germany FI = Finland AU = Australia SW = Sweden CA = Canada

The preliminary short list

The most immediate finding from our preliminary research was that the UK framework is currently unusually simple – concentrating most supply assistance through Social Housing Grant and thus the allocation of affordable housing to those in need at the time of allocation. In addition, Section 106 agreements and rural exceptions policies act through regulation to assist provision. Housing benefit makes housing affordable for eligible tenants. There are a number of specific schemes especially to help particular groups become owner-occupiers, but very few that operate through the tax system.

Across countries there are a wide range of both demand-side and supply-side instruments. These have been applied both quite generally to increase production and concentrated on affordable housing or particular groups. Almost every element of our typology can be found somewhere in the countries that we examined.

More generally, some countries have emphasised tax reliefs, while others concentrate on grants – the choice relating to their general fiscal ideology and the problems which they addressed. Often the policies look more as if they just grew in response to particular political pressures rather than representing a coherent approach to ensuring adequate affordable housing. In most countries the move has been towards less general assistance and increasing concentration on particular low-income groups and localities. Evaluation of these policies will depend in part on a reasonable understanding of the overall tax systems and housing markets in the relevant countries.

The proposed list

Our analysis of both what has been tried and the gaps that seem to remain suggested a set of instruments which might have added value in the UK context.

These included:

1. Tax incentives for construction of affordable housing. These have the potential to involve the private developer and to give incentives for new investors. They could also involve employers in a fairly direct manner.

2. An instrument which integrates Homebuy and the Starter Homes Initiative, structured to bring in a wider range of lower income workers and probably geographically targeted.

3. Savings schemes for first-time buyers, which could include an employer element – including, for instance, allowing reliefs equivalent to pensions for mortgage savings. Schemes of this type, while they have fallen out of general use, have been reintroduced to help particular groups in a number of countries.

4. Subsidised loans from employers – which would reintroduce an old established policy and make it tax efficient for employers to play a direct role in assisting their workers.

5. Extending section 106 agreements to non-residential sites – which have both the potential for providing additional land for housing and may generate the need for more affordable housing.

6. Reducing the rate of VAT for renovation work carried out by Registered Social Landlords.

A number of smaller schemes were seen as having some potential merit, including;

- grants to bring empty property back into use with an incentive or requirement to lease these to nominated tenants;

- improved tax treatment for small landlords – including widening the tax exemption for lodger income.

- schemes to support low-income owner occupiers in high-risk properties where there is concern about the neighbourhood.

III THE SHORT LIST: DETAILED ANALYSIS

Introduction

Each of the six policies was examined in detail in order to cover:

- the definition of the instrument;
- how it is expected to work;
- evidence on international experience;
- suitability to the UK; and
- practicalities.

Policy 1: Tax incentives for construction of affordable housing

Definition of instrument

Tax incentives for provision of affordable housing, including new construction, provision of flats by conversion, and substantial renovation of residential buildings. They could be applied to housing for rent, for outright sale, or provided on shared ownership terms.

In the UK there is little experience with tax incentives that offer a pound-for-pound reduction in the amount of tax payable, and the terms "tax relief" and "tax credit" are sometimes used interchangeably. In the discussion that follows, pound-for-pound reductions in the amount of tax payable will be called "tax credits" (following the American usage), while reductions in the amount of taxable income will be called "tax relief." Tax credits are more flexible than tax reliefs, because tax credits can be designed to have any value, while the value of tax reliefs depends on the investor's marginal rate of tax, and so in practice is limited to 40%. (This is the top rate of income tax for individuals. For companies, the top rate is 30%, but companies with profits in the band £300,001- £1,500,000 pay corporation tax at a marginal rate of 32.5%.) Both tax credits and tax relief are described on this page.

The heart of the schemes are that tax incentives are given to investors in housing to be let at below market rents or sold at below-market prices. The incentives could take either of two forms: investors would be permitted to deduct part or all or the amount invested from their taxable income from all sources (tax relief); or receive a credit of part or all of the amount invested to be set pound-for-pound against their tax bill (tax credits). These incentives would be conditional on the dwellings being let at below market rents for a specified period, or sold at a sub-market price to a house buyer with income below a specified maximum. They could also be targeted at schemes providing housing for key workers. Any such scheme would be directed towards households able to pay more for their housing than housing-association rents, though

less than full market rents and house prices. It would not be intended as an alternative to Social Housing Grant (SHG).

The tax incentive would reduce the net cost of the housing to the investor and so enable a commercial return to be obtained from letting at lower rents (or selling at lower prices) than would otherwise be required. In economic terms the tax relief or credit would be essentially a subsidy from central government, in the first instance to investors but ultimately to tenants and purchasers who are enabled to rent or buy at sub-market prices or rents.

Provisions would be required to ensure that as far as possible the dwellings were sold or let to households that could not afford full market prices or rents, and for the protection of public funds. There could well be some tension between making the scheme attractive to investors and the restrictions that would be required for effective targeting. For individuals wishing to participate, funds could be pooled – rather like an ISA or the old BES schemes. This could widen the attractiveness to include the private investor with a social conscience.

The same effect could be achieved with a straightforward expenditure subsidy from central government to developers. Because the government can borrow more cheaply than can a private developer, a direct grant (where 100% of the amount is theoretically received by the beneficiary) would normally be more efficient in economic terms than a tax relief (see for instance McClure p. 111). However, there are several advantages to working through the tax system. First, government grants do not normally involve investors or end users. Providing tax incentives to investors brings commercial discipline to bear in a way that grants do not. Second, tax incentives can be a way of preventing undesirable grant dependency in certain sectors. Third, tax incentives are often paid only *after* performance is demonstrated, whereas a significant proportion of grant is usually provided up-front. Fourth, most investors already deal with the Inland Revenue, so a tax-based scheme would build on an existing relationship rather than requiring additional contact with other government departments.

International experience

The main example of a similar policy internationally is the US Low-Income Housing Tax Credit (LIHTC), which is now the principal federal subsidy for low-income housing. This programme was introduced in 1986 and has been operating, with some modifications, since then.

The essentials of the programme are as follows:

> "The intent of the program is to provide enough incentives to ensure that there will be an adequate supply of low-income housing by granting tax credits to the owners of selected rental housing developed for occupancy by low- or moderate-income households. Although the subsidy is provided entirely through the federal tax code, it is administered through state government agencies, generally the state housing finance agency. States may allocate these tax credits annually up to a total equaling $1.25 per capita. (*Note: This has now been raised to $1.75 per capita.)* (McClure p. 92)

The tax credits are always tradeable instruments, and investors pay between 60% and 95% of their face value (depending on the type of project and the risk involved). If incentives are not tradeable, it limits involvement in tax-incentivised projects to large companies—those that have enough resources to fund projects on their own, and that are certain to have enough tax liabilities, for a long enough period, to make use of the tax incentives. This rules out charities and other exempt bodies such as pension funds, which do not pay corporation tax. If the incentives are tradeable, however, even small firms or charities can participate in the programme by selling the tax incentives to investors for cash. The US rule of thumb is that a liquid (tradeable) instrument is worth about 20% more than an illiquid (nontradeable) one.

> The program is discretionary; the subsidy is not given as an entitlement to all housing developments occupied by low- or moderate-income rental households. Rather, proposed developments are selected by the state administrative agency through a competitive process. Winners must develop their project, either through new construction or rehabilitation of an existing property. When the property is occupied, the program begins to grant tax credits against the tax liability of the property owners over a 10-year period, provided that the units maintain restricted-income occupancy for at least 15 years. (…)
>
> The development's owners may claim credits only against units occupied by income-eligible households No credits may be claimed unless either of the following conditions is met:
>
> 1. At least 20 percent of the units are occupied by households whose income is less than 50% of the metropolitan area's median family income, or
>
> 2. At least 40 percent of the units are occupied by households whose income is less than 60 percent of the metropolitan area's median family income.
>
> The developer must choose to meet one of these two standards before the housing begins operation. (McClure pp. 92-94)

The programme has been characterised by continuous beneficial evolution, some of it reflected in administrative practice, some codified directly into statute. For example, the original affordability period was 15 years; later it was amended to 15 plus 15 (the latter based on a formula price), and most recently to 30 years (with many states requiring longer affordability periods, some up to perpetuity).

These income ceilings—50% or even 60% of median family income—are low. In 1999-2000 median gross income of household head and partner in England was £310 a week (*Housing Statistics 2001*, Table 7.8), so 50% and 60% of the median would be £155 and £186 respectively. The figure of £155 a week is close to the median for social rented sector tenants; between 60 and 65% of social rented sector tenants had incomes of less than 60% of the median for all households.. The American LIHTC scheme can therefore be seen as directed at housing for people whose British opposite numbers are provided for by Registered Social Landlords (RSLs) with subsidy from Social Housing Grant, not households that can afford more than housing association rents but not full market rents and prices. The LIHTC scheme in the US is nevertheless of interest as a scheme with a substantial amount of operating

experience, and evidence about its efficiency in economic terms. Further details of the mechanics are in Annex 2c.

What does US experience suggest about the effectiveness of LIHTC?

US experience suggests that this is an effective programme for increasing provision of affordable housing. It is estimated that the programme has so far aided the construction of more than 1 million affordable-housing units. This compares to a total US stock of public (local authority) housing of 1.2 million units. It should be noted that in the US there has been no addition of public housing) in the last 20 years--rather there has been a net loss.

While the programme is effective, US analysts point out that it is not particularly efficient in economic terms. "If the federal government grants tax credits of $1000 ($100/year for 10 year) then the present value of these credits to the government is about $780, discounting at the government's long-term cost of borrowing. When evaluating tax credits as an investment, however, investors employ an even greater discount rate, found here to be about 11%. This means that the $780 of housing subsidy from the government will produce only $590 in housing. Clearly this is a significant loss of value (about 24 percent) from the use of tax credits as the vehicle to deliver the housing subsidy." (McClure pp. 110-111)

The process can be represented as follows:

Government allocates $100 tax credits p.a. for 10 years	$1000 nominal
Discounted at government rate--present value of say	780
Discounted at investors' rate—present value of say	590
Less administration fees, syndicator profits (total 11%) results in sum to developer of	$530 cash

The relevant fraction is thus $530/780, or 30%. Over time this discount has narrowed substantially, as investors have learned about the process and competition for credits has driven prices up. As the programme has matured, spreads against like-term safe rates have compressed to less than 150 basis points (e.g. if Treasury rates are 7.0%, investors expect 8.5% or less). Additionally, credit allocators have used the LIHTC to create much deeper affordability than the law requires. As a result, the allocable credit per property has remained quite high: the current net present cost to the US Treasury per housing unit provided through the credit is estimated to be about $40,000.

British experience with tax reliefs for investment in housing

Two schemes operated in the 1980s and 1990s. The first was the Business Expansion Scheme as it applied to assured tenancies. The scheme operated from 1989-1993 in a form similar to the LIHTC, albeit using tax reliefs rather than tax credits, for private rented housing. Syndicators put together packages of BES developments and marketed them to investors. Individual investors got income-tax relief on up to £40,000 investment each year in BES firms; if they owned the shares for at least five years, capital gains were tax free. Research (see Crook et al, 1991) indicated that "the provision of tax relief was a more important stimulation than the deregulation of rent to the setting up of BES assured-tenancy companies" (Crook p. 4) and that "without

the incentive of tax relief, directors would not have set up the BES rental housing company" (p. 6). Estimated tax expenditure per dwelling was in the range of £25,000 to £31,000.

Crook and his colleagues judged the BES policy a success in that it "produced the first significant wave of new investment in the privately rented sector since the Second World War" (p.35). In addition, "the scheme can be regarded as having induced investment that was wholly additional" (p.33). It was structured, however, in a way that encouraged short-term rather than long-term investment.

The second relevant scheme was introduced in the 1982 Finance Act and brought to a premature end in 1984. Under this scheme (discussed in Kemp, 1988), capital allowances were given to approved landlords providing assured tenancies under the 1980 Housing Act. This Act deregulated rents for new-build units let on assured tenancies. Take-up was slow, however, so the government introduced tax allowances in the 1982 budget. "Approved bodies" could deduct 75% of the cost of construction of dwellings to be let on assured tenancies from income in the first year, followed by 4% per annum from the date of first letting for the remaining expenditure.

The scheme did not lead to an enormous amount of new supply (only 609 assured tenancies were let in the period 1983-86, according to Kemp), but most of what was built was thanks to the capital allowances. Kemp's survey of approved landlords, carried out after the withdrawal of the scheme, showed that 62% had invested because of the tax shelters. Kemp wrote:

> Much of the initial interest in the scheme was provided by the capital allowances but these were available for only a short period. The importance of these capital allowances, as perceived by the approved bodies, was clearly indicated by the survey reported in this chapter. The figures are quite striking: 87 per cent of respondents claimed that the existence of capital allowances influenced their decision to apply for approved status under the scheme; 68 per cent of those respondents who had not built any assured tenancies stated that this was because of the phasing out of the allowances; 81 per cent of all respondents to the survey said that this removal had affected their future investment intentions on assured tenancies; and 60 per cent cited the reintroduction of capital allowances as a change they would like to see made. (pp 93-94).

The reasons why the scheme was withdrawn early related to wider changes in the tax system rather than to the success or failure of the scheme. There was undoubtedly some concern in Treasury and elsewhere that introducing depreciation allowances to a perpetual asset could cause legal difficulties in the context of company-owned property. There was equally concern that the principle of assured tenancies into perpetuity was not turning out to be consistent with government objectives to free up the sector. For all this, there a growing feeling at the time that, left in place, the approach might be successful in generating private rented output for the first time since the war.

Both the BES and the assured tenancy schemes are now dead, but a new urban-regeneration tax-incentive scheme should begin operating later this year. This is the Community Investment Tax Credit (CITC). Under this scheme (which is now

undergoing scrutiny in Brussels to make sure it does not breach state aid regulations), investors will receive credits equal to 25% of investment in approved community development institutions, spread over five years. These credits will be claimed through the normal self-assessment process. The aim of the scheme is to encourage private investment flows into local businesses by enhancing the return.

When the programme starts to operate, the government will allocate a certain amount of tax-credit consents to local agencies (Community Development Funding Initiatives, or CDFIs) working in disadvantaged communities (defined either geographically or socially). The total amount to be allocated will not be set in advance, but will depend on how many of the CDFI bids meet the government's standards. Investors in these CDFIs (which can be likened to community development banks) receive tax credits, and the CDFIs lend the funds received to approved projects in their areas. The return to the investor consists of the return on the loans made by the CDFI, plus the tax credit. The credit amount is 5% of eligible investment per year for the first five years. There is no carry-back, carry-forward, or sale of the credits allowed; they are therefore not attractive to nontaxable entities. There is a five-year holding period required. Investment can be either in the form of debt or equity (unlike the LIHTC, where only equity investment qualifies). It is not yet clear how the eligible communities will be defined, or whether tax-credit recipients will be permitted to invest in property.

This review of UK practice to date shows that several of the building blocks of the US tax-credit system for affordable housing are already within the UK experience, or will be when CITC comes into effect. The following table summarises.

Policy element in the US LIHTC system	**BES**	**Assured tenancy**	**CITC**
Credit against tax payable			•
Incentives received over several years	•	•	•
Limited allocations	•		
Lock-in period for affordability/investment	•		•
Lock-in period longer than incentive period			
Local allocation of incentives			
Tradeable incentives			

How it would work in the UK

There are many possible permutations of the scheme. One possible version is as follows: Central government would allocate a certain amount of tax incentives for affordable housing to administering bodies in each region (possibly DTLR regional offices, RDAs, or Housing Corporation offices). We will assume that the incentives are in the form of tradeable tax credits. Non-tradeable credits or reliefs could also be used although, for reasons given above, they would be sub-optimal. Companies (either for-profit or nonprofit—RSLs would be eligible) would request allocations of the tax incentive in order to construct or renovate particular units of affordable housing.

Once a company received an allocation of credits, it would raise funds from investors; the investors would receive the tax credits. (Allowing the credits to be traded or assigned in this way would give the development companies an important tool for managing cash flow. If the companies that receive the tax credits were not permitted to transfer them to investors, then only large firms would be able to benefit from the programme.) The credits might be available for equity investment only, or for debt and equity. The proportion of the investment given as a tax credit, and the period of years over which the credits should be spread, would be decided in light of the levels of rent that were sought and costs.

Construction of dwellings for rent or sale at affordable rents or prices would be promoted by organisations that might be called Approved Affordable Housing Companies. For audit and accountability reasons they would have to be self-contained. They would raise their funds to finance construction by taking deposits or issuing equity shares, which would be eligible for tax relief in consequence of the approved status. The tax relief would be given as a proportion of the amount invested, subject to a maximum. That proportion would be a policy question; the goal would be to balance the expected cost reduction against the amount of tax relief that could be afforded. The investor would get his return partly from the interest or dividends paid by the company and partly from the tax relief. The cost of capital to the company, and hence the price or rent that it would have to charge to operate profitably, would therefore be lower than in the absence of tax relief. The tax relief could be given in several ways—it could be spread over a run of years, or in a lump sum. More details on how it might work are in Annex 2b.

How tax incentives for building affordable housing might work in practice.

The effective cost of construction houses for sale or rent could be reduced to affordable levels either by tax reliefs, or by tax credits on the American model. Tax reliefs are familiar in the UK but tradeable tax credits are not. On the other hand, the present marginal tax rate limits the maximum value of a tax relief to 40% of the amount invested, whereas tax credits are not constrained in this way. To use both tax reliefs and tax credits in the illustrations would be unwieldy and possibly confusing. Tax credits are used so as to introduce the concept to British readers, but that is not to suggest that tax credits on the American model are being recommended against more conventional tax reliefs, except where more assistance is required than can be given by tax reliefs when the marginal tax rate is 40%.

Example 1: Credit for equity investment, rental housing

This example parallels the American experience. Assume that a unit of housing costs £100,000, and must rent for no more than £450/month to be accessible to low-income households. The investor has a 40% marginal tax rate, and looks for a gross return of 9% on his investments. With these figures he would not choose to invest in a low-income housing development, which would give him a gross return of only 5.4% p.a. (£450 x 12)/100,000). However, a tax credit of 6% of his investment annually over ten years would have a present value of 46.13% of the investment cost, discounted at 6%. This would reduce the investor's effective cost to £53,870. At this level he would achieve a return of 10% ((£450 x 12)/53,870), greater than his required return of 9%.

Example 2: Credit for debt financing, rental housing

Here we assume a total credit equal to 25% of the amount invested spread over ten years, and debt financing. The credit would be 2.5% annually of the sum invested.

The credit should pass through into a lower cost of capital; the size of the reduction depends on the investor's expected holding period for the new loan amount. For example, if the market interest rate were 6%, and the investor thought the loans would be outstanding for ten years or less, a 2.5% annual credit would mean the investor would receive an annual combined return of 6% from 3.5% net interest plus 2.5% tax credit. The development company might on that basis raise funds at 3.5% net. In practice, of course, a combined rate of net interest plus tax credit higher than the market rate would have to be offered, especially in the early years when the scheme was unfamiliar.

If the development company were calculating its rents as housing associations do, with a cost of capital at only 60% of the market level (or possibly to start with 65-70%) the capital-cost element in a rent that covered costs would be much lower than with purely market financing. With a market-level full capital cost of £80,000, the capital element in the rent at 6% interest would be £4,800 a year, plus approximately £800 for management and maintenance and £400 for contributions to a reserve for major repairs, which would give a weekly rent of £115 (or perhaps rather more to allow for voids). For the same dwelling, with the cost of capital 30-35% lower due to tax relief, the capital element in the rent would be about £3,120 - £3,360, and the weekly rent £83 to £88 a week—that is, 72-77% of the full-cost level.

If rents were, as above, derived from cost figures, a formula would be required that linked the rent to the capital cost, the net cost of capital to the company, and adequate provision for management and maintenance and contributions to a reserve for major repairs. This would ensure that the dwellings produced by the tax credit were let at rents which in effect passed the bulk of the incentive through to tenants. It would be preferable if *rents* were derived by a formula (based on average area incomes, for example, as in the US); in this case, rent is the given and cost is a derived function. This approach forces developers to look for ways to reduce costs.

Tax-credit recipients could manage their dwellings themselves if they wished, but would be free to sub-contract the job, for instance to a housing association. The exact detail of the rent-setting formula could well be contentious, not only fairly minor detail like voids and bad debts but also maintenance and management, and how much to allow to be put to reserve. The goal would be to get value for money from the tax credits without making the scheme so rigid that it would be unattractive to investors.

Example 3: Credit for debt financing, building for sale

The capital would be raised from loans from investors who would be paid a market rate net of tax credit, and would receive the credit for ten years (in this example). When completed the dwellings would be sold to "eligible" households, who would finance their purchases with ordinary mortgages. The proceeds of the sales would be invested, and the interest used to pay the interest due to investors. Because the

company would be receiving interest at market rates, the proceeds of a sale at a price below the cost of construction would be sufficient to pay the net rate of interest on a sum sufficient to finance the full cost of construction

To illustrate, as in the renting example, the market interest rate is taken to be 6%, with tax credits equal to 25% of the amount invested. The net interest rate would be 3.5%.

(a)	The cost per dwelling (site, fees, construction, etc.):	£100,000
(b)	The amount raised from investors (per dwelling):	£100,000
(c)	The net interest payable annually on £100,000 raised from investors (at 3.5 percent net):	£3,500
(d)	The capital sum required to pay £3,500 a year, if invested at 6%:	£58,333
(e)	So with a margin of £10,000 for uncertainty and risk, the dwelling could be sold for:	£68,333

In explaining how the tax credit could fund more than a 30% reduction in the selling price, it is important to emphasise that the amount of the credit is determined by the amount invested, not by the rate of interest. The amount of credit would therefore be the same at all rates of interest. If, for instance the market rate of interest were 4%, the net rate of interest (on the same assumptions) would be 1.5%, the net interest payable on £100,000 would be £1,500, and the capital sum required to pay £1,500 at 4% would be £37,500. With the same margin for uncertainty and risk the dwelling could be sold for £47,500. If, however, the rate of interest were 8%, following the calculation through would show the selling price to be £78,750. The amount of tax credit required to produce a given reduction in the selling price relative to cost depends on the interest rate.

As with rents, a formula would be required to ensure that enough of the value of the tax credit was passed through to the buyer. This would inevitably be contentious, especially how much margin to allow for a margin for uncertainty and risk. Also required would be an official valuation, probably by the district valuer, of the market price so that the difference between the market value and the sale price could be established. That would be important for resale restrictions to prevent the household that buys at sub-market price from selling the dwelling on the open market and pocketing the price difference (see Annex 2b).

Elasticities

The success of such a programme depends on the degree of supply elasticity in the housing market—that is, to what extent will housing suppliers increase production of affordable housing if their effective cost falls? To put it another way, by how much would the production cost of affordable housing have to fall to induce the new supply we want? The answers may differ by area, and are of particular concern in London.

Evidence from the US experience is positive—the programme has increased the amount of market-quality housing available for rent by low-income households. New housing has been supplied in both high- and low-cost areas, and in areas with significant barriers to development such as zoning or wetlands-protection requirements. After a slow start, developers now make use of all available tax credits.

The results will also depend on the elasticity of demand. The aim of the programme would be to meet some of the unfilled demand for affordable housing in certain parts of the country. But could the programme have the effect of increasing the level of demand for new dwellings. For example, if some percentage of the dwelling units produced were designated for, say, primary-school teachers, some might be taken up by teachers who were already adequately housed—this is deadweight loss.

Practicalities

- The economic principles behind the scheme are straightforward. Its operation would be more complex. Rules and enforcement mechanisms would be needed to define eligible developers and allowable expenditure; to identify those areas and households eligible for housing under the programme; to set allowable rent levels or sales prices; to set out how long rental housing must remain "affordable", and provisions for maintaining affordability of owner-occupied housing. These should be established in any enabling legislation and are discussed in Annex 2b. In addition, such a scheme could not operate as an entitlement scheme, but would have to be "cash-limited" (though no actual cash payments would be involved).

- In a scheme such as this there is an inherent tension between offering sufficient incentives to private enterprise to operate the scheme and provide the houses, and ensuring value for money by seeing to it that the houses are sold or rented to the households for whom they are intended (targeting) and that the selling prices or rents are reasonable in relation to costs and the amount of the tax relief. Procedures that might appear bureaucratic and off-putting to developers could be essential for ensuring value for money from public funds. How large profit margins must be to attract investors is inevitably uncertain. If they were so high as to make the scheme poor value for money, then an alternative means of involving the private sector in producing affordable housing would be a subsidy on the lines of that provided by the Housing Act 1923. The 'Chamberlain' subsidy was £6 a year for 20 years or a £75 lump sum, equivalent to £150-£160 a year or £1,950 at 2001 prices. The lump sum was equal to about one fifth of average cost per new dwelling.

Suitability for the UK

The experience in the USA with the Low Income Housing Tax Credit would not necessarily transfer to Britain because the structure of financial markets is different, and the government has not yet accepted the principle of tradeable tax credits. US experience does show that tax measures can be used to produce privately funded affordable housing, though at a price. It should be noted that the longer the lock-in period for affordability, the greater value for taxpayer money—the BES scheme provided for only five years, which was clearly too short. The minimum for the LIHTC in practice is 30 years or more.

Developers would have to be allocated tax credits, possibly by the regional offices of the DTLR or by RDAs, before they could seek investments with the benefit of the credits. The Inland Revenue would *not* therefore have to determine which house-

building projects qualified as affordable housing. Its role would be to deal with claims for tax relief, and check where appropriate that the amounts in respect of which tax relief was claimed had in fact been invested. That would be similar to the Inland Revenue's role of Business Expansion Scheme relief and currently the Venture Capital Trust relief.

The policy has the flexibility to address particular shortages as well as the broadly defined intermediate market. It could be targeted at dwelling types that are seen as being in short supply as well as areas where Social Housing Grant is regarded as inappropriate.

Policy 2: Government help for individual purchasers in high-cost areas

Definition of instrument

An instrument, similar to Homebuy and the Starter Homes Initiative, that would not be wholly limited to helping buyers with first purchases, but would concentrate assistance in high-price areas. This might be targeted at particular geographical areas or groups of people, including key workers.

How it works

This instrument would allow certain households (selected individually or by category) to pay market prices for housing that they could otherwise not afford. It could be used to assist first-time house purchase, but would be designed so that it could also be used to help households that needed higher-priced housing—for instance, those moving for employment purposes to a part of the country where house prices were higher, or moving from a house that was too small or in poor condition.

Recent interest in such schemes stems from the fact that geographical variation in house prices is much greater than variation in pay for comparable occupations (Holmans, 2001). The impact appears greatest in public services with national pay structures (though eligibility for the programme would not necessarily have to be confined to public servants). Recruitment for these jobs has been increasingly difficult in high-house-price areas—notably London and the Home Counties, but also other "hot spots" across the south of England.

Payments would be made to selected individual households, not to all that applied and qualified--it would *not* be an "entitlement" programme. Interested households would apply to the agency administering the scheme (probably a housing association or a local authority) which would approve the application (or not) according to whether it met policy criteria and whether sufficient funds were available.

The assistance could be in the form of a grant (as with the Starter Homes Initiative), an equity loan (like Homebuy) or interest-free or low-interest loan (also to be included in the Starter Homes Initiative). Homebuy provides a loan equal to a specified proportion of the purchase price (for instance, 25%), interest-free but with an obligation to pay, when the dwelling is sold, the same proportion of the price received. Another form of loan would be a non-interest-bearing second mortgage loan to be repaid when the dwelling is sold. An outright grant is a third possibility.

The purpose of the loans or grants would be to make house purchase affordable for selected categories of household that could not afford it from their own funds. First-time purchasers would be eligible, but so too would households that were already owner-occupiers but needed mainly for employment purposes to buy a more expensive house. A move to a high-house-price area would probably be the most common reason, but there could be others—for instance, to move from an overcrowded or physically substandard dwelling or from an area designated for clearance.

The schemes discussed would attempt to deal with the disparity between the geography of house prices and the geography of pay. The intervention would take place in the housing market, not in the labour market. The advantages and disadvantages of treating geographical differences in pay as given, and compensating by selective assistance with housing costs, are not discussed in detail here. As far as the public services go, though, we would note that selective assistance with housing costs is far less costly to the public purse than across-the-board increases in public-service pay in high-house-price areas, and is more flexible in allowing differences in house prices between fairly small areas to be recognised and taken into account.

Elasticities

This is a demand-side measure that would have no direct effect on supply. We can assume that such a scheme, by giving certain households more money to spend on house purchase, would increase demand for owner-occupied dwellings in certain areas (and probably in certain price ranges). Without any increase in supply, one effect would be an increase in house prices in those areas—which would enrich existing owners, and make affordability more difficult for those households not eligible for the programme. The magnitude of the effect would depend on the price elasticity of demand for owner-occupied housing in high-house-price areas, which we assume to be considerably less than one. *Small* schemes would help targeted groups, but large schemes would just shift prices.

In principle it would be possible to link this type of instrument to new private-sector developments designated as affordable homes (e.g. under Section 106). While this would be an indirect way of expanding supply it would make the scheme extremely inflexible from the point of view of consumers as well as administratively difficult to implement.

Practicalities

- Would the amount of assistance be income-related in any way—for example, would there be a sliding scale with respect to income, or an income limit? An upper income limit would be far simpler to administer although it would have to vary by area. Relating the amount of assistance to the purchaser's income would make little sense without relating it to house prices as well. Making the amount of assistance a function of income and house prices would be a step in the direction of a version of housing benefit. If the demand for assistance exceeded the amount on offer, an upper income limit would be mainly a matter of form. The administrative process of selecting the applicants to receive assistance could be used to screen out applicants with incomes high enough generally to afford market prices unaided.

- How would the amount of assistance be determined? The possibilities are: i) a flat figure, fixed area by area according to the level of house prices there; or ii) an amount that varied with the price being paid—either a uniform fraction of the house price, subject to a maximum limit; or a flat amount for dwellings within each of several house-price bands. These would be set so as to ensure that the

difference in the amount of assistance did not fully match the difference between the price bands.

- Under what circumstances should all or part of the assistance be "recaptured" if the recipient moved to a part of the country where house prices were lower, or changed jobs and earned a higher income? This would apply primarily to grants, but "re-cycling" of equity mortgages or interest-free second-mortgage loans would make a given budgeted amount go further. Recapture would be feasible if tied to sale of the dwelling. This could be done through a charge on the dwelling requiring the grant or loan to be repaid unless a dispensation had been given by the agency administering the scheme. The dispensation would be automatic if the home owner was moving to another house within the same house-price zone. Partial or full repayment would be required according to the level of house prices in a different zone. A declaration of income could be required from applicants for a dispensation, which could be used for recapture of the assistance if the income were above the scheme maximum.

- Should the subsidy be recaptured even if households remain in the same area? This is the case for Homebuy, where the risk is shared, as is the equity on resale. This policy as part of other equity-sharing mortgage and improvement schemes has not proved popular. Grants will not be recaptured in these circumstances, but interest-reduced or -free loans could be linked to evidence of income.

- What criteria would be used for allocating assistance (assuming that the scheme were cash limited)? Should there be an element of employer nomination? This would appear appropriate if the scheme were particularly concentrated on key workers or if it were associated with employer involvement (see Policy 4).

- Which agency would administer the scheme? Local authorities and housing associations are the obvious candidates to operate the scheme as agents of (in England) DTLR.

- Given that the purpose of the scheme would be to enable people in jobs whose pay structures did not fully reflect differences in house prices to buy in places where house prices were higher, it would seem reasonable to give preference to people in those occupations where local staff shortages were worst. The assistance would probably not, however, be tied to a particular employment except at the point of allocation. To require someone who gave up teaching in order to take a different job to repay the assistance would seem impracticable.

International experience

There is much international experience of subsidies for first-time and/or low-income buyers. Many such programmes only apply to new-build housing, and are aimed at stimulating the construction industry as well as providing affordable housing. We have found few examples of schemes that are geographically targeted or open only to those in certain occupations. Also, in many countries these are generally entitlement programmes, rather than budget-limited.

In Hungary, the state gives a grant to assist with down payments or construction costs for families. This can cover up to 45% of construction costs, depending on the number of children in the family. (Harsman & Quigley p. 228)

Spain subsidises mortgages for low-income purchasers of new units of "regulated housing", which must met certain criteria and be registered with the government. The amount qualifying for a subsidy depends on the buyer's income and the size of the dwelling. If the buyer sells in less than five years he must return the subsidy with interest; if not, after five years he is re-assessed for continuing subsidy. There is a similar programme for used dwellings (Bartlett & Bramley p. 165 et seq).

In the Netherlands the government offers three types of subsidy, depending on house values. For the cheapest houses, the government pays the principal and interest on a part (up to 48,000 florins, depending on the buyer's income) of the mortgage. The subsidy is treated as taxable income. For somewhat more expensive houses there is a fixed contribution from the government for five years (also taxable, income cap applies). For the third band of houses there is a price cap but no income cap; these attract a one-off contribution from the government. (Harsman & Quigley p. 143)

In New Zealand before 1993 the government subsidised loans for low-income wage earners. (Kemp p. 29)

Norway and Finland have both emphasised the benefits of helping particular low-income groups of first-time buyers. Finland introduced a subsidised mortgage scheme for first-time buyers under the age of 39 in the early 1990s, which included a 5% interest subsidy. Norway had a similar scheme seen initially as helping single parents in particular (Turner and Whitehead, p56).

In Canada in the mid-1970s the Assisted Home Ownership Programme was designed to enable low-income families to buy homes using less than 25% of their income to repay principal and interest. A government corporation provided interest-free loans to buyers for five years (Boleat p. 47).

The Spanish region of Catalonia offers grants to buyers under 30 (Bartlett & Bramley p. 165 et seq). Australia gives AUS $7000 to first-time buyers, with an additional $7000 for those who buy new homes (reduced to $10,000 total for 2002). There are no income or dwelling-cost restrictions (e-mail from Judy Yates). Germany offers tax credits to first-time buyers, related to their income level and the number of children they have. (Balchin p. 60; Ball p. 55)

In New Zealand from 1986 to 1993 the Homestart programme offered grants to bridge the gap between the savings of low-income households and the required deposit (Kemp p. 29).

Argentina has a scheme which provides a proportion of the equity on a new home, together with a proportion of the mortgage. This is all to be repaid at low interest at the end of the original mortgage, and is directed at particular income groups in certain parts of Buenos Aires. Like many of the schemes mentioned above it is seen as a way of levering in additional affordable provision (Slemenson, 2000).

Suitability for UK

The most important benefit of introducing such schemes in the UK is that the principles are already in place in rather more limited schemes. Therefore the majority of practical and administrative problems have already been addressed. There are clear concerns about delineation of either areas or categories of households, especially given the instability of household formation and the possibility of movement between jobs and areas. These however can be designated and implemented through DTLR.

The broader based the scheme, the more likely it is to include households that would anyway have been prepared to pay for their accommodation (thus the greater the deadweight loss). Ideally the instrument should be designed to meet the gap between affordability and house prices. However this will vary between household types and other factors such as job stability. Addressing these targeting concerns too specifically would however make the administration that much more complex.

Additional questions relate to the extent to which these schemes can and should be linked to shared-equity and shared-ownership programmes. Logically, assistance could be better targeted if these were included. It would also be easier to include some linkages to new development, particularly through RSLs.

It might also make it easier to increase the amount of funding generated by these schemes to levels where a secondary market could operate effectively. However this would involve standardising contracts and financing arrangements and should undoubtedly be addressed as a separate issue.

The extent of subsidy involved can be varied to address the specifics of the area and the stage of the economic cycle. However the more complex the scheme the less likely it is to be taken up either by final consumers or intermediaries/providers. In particular, any uncertainty about whether, when, or how much assistance must be repaid, would make this type of scheme unattractive.

The latest evidence (2000/2001) on the average subsidy cost of shared ownership – i.e. the ADP cost of building a shared-ownership dwelling – is that it stands at just under 27%. This is the amount which will not be recovered because of staircasing.

The level of subsidy for the Starter Homes Initiative ranges from an interest-free loan or grant of £25,000 to £30,000 per household, considerably less than that for shared ownership. That for Homebuy is up to 25% of the equity – but this is expected to be repaid. The value of the subsidy therefore depends on the outcome in terms of capital gains. It would appear unlikely to be effective if the initial funding is less than 20%-25% of the average value of relevant properties. The final cost and the popularity of the scheme will depend particularly on recapture conditions.

The scheme appears to be an inappropriate means of incentivising supply in the UK, which is its role in many other countries. This is because it aims to address a much broader issue of the mismatch between the incomes of certain groups and area-specific house prices. A subset of the policy could be linked to specific new-build initiatives as with shared ownership and the Starter Home Initiative.

Evidence from Cambridge and elsewhere suggests that, while the SHI is not yet fully functional, it has been perceived by both employers and employees as helping recruitment and retention (Monk *et al*, 2002, forthcoming). However this may be more a response to publicity than a longer-term effect. Evidence on Homebuy (Jackson, 2001) is that the levels of subsidy and price constraints are inadequate to solve the immediate problems they address.

Overall it is important to clarify the objectives of the scheme and to evaluate the social benefits of assisting particular groups into home ownership. If the scheme aims at too many different objectives it will fail.

Policy 3: Savings schemes for first-time buyers

Definition of instrument

Savings schemes for first-time buyers, which might include an employer element—including for instance allowing reliefs equivalent to pensions for mortgage savings.

How it works

This scheme would provide tax relief or subsidies for savings schemes to build up sums for use as a house-purchase deposit. Regular payments of specified sums into a fund would attract tax relief, and interest earned would be exempt from tax. These tax privileges would apply only if all of the fund were used to provide part of a deposit to buy a house. If it were used for other purposes the relief would be withdrawn.

The scheme could be designed to accommodate employer contributions, as with money-purchase personal pensions. Employee contributions to these attract tax relief at the contributor's marginal tax rate. The employer's contributions are part of employees' remuneration, and hence are business expenses in the same way as other parts of the remuneration of employees. The investment income of the fund is tax-free. A savings scheme for house purchase could be structured in the same way, with tax relief for employees' contributions and employers' contributions treated as a business expense. It would not be necessary for contributions to come from both employer and employee; it would be entirely possible for the contributions to come from the employee alone, or from a self-employed person. Equally it would be possible for employers to use it as a means of attracting or retaining key staff.

An element of subsidy could be introduced, if desired, by having a Treasury contribution alongside the employer's and employee's. This would be analogous to the original financial structure of National Insurance. The 1911 weekly contributions were 4d for employers, 3d for employees and 2d from the Exchequer, hence the slogan coined by Lloyd George (Chancellor of the Exchequer and responsible for the scheme): "ninepence for fourpence".

Elasticities

This is a demand-side measure that would have no effect on supply. We can assume that such a scheme, by giving participating households more money to spend on house purchase, would increase demand for owner-occupied housing. If the scheme were large this would have the effect of raising prices, benefiting existing owners.

An example of how the scheme might work in practice appears below.

Example: Contributions from employer and employee only

The employer and employee each contribute £50 per month. The employee's contribution is net of tax, with tax relief (at 22%) added at the end of the year, as with Gift Aid relief for charities. The fund is invested at 5% gross. The value of the fund at the end of three years would be £4,401.

Contributions: £50 per month each from employer and employee
£3600 total over 3 years

Interest on contributions: 5% gross (and net), compounded monthly. This is equivalent to approximately 0.4% per month, so a payment of £100 per month for 36 months will grow to £3,867. The amount of interest earned is therefore £267.

Tax relief: With relief at 22%, the tax relief per annum on employee contributions is equal to 0.282 times the *net* amount on which relief is given—i.e., £169.20 for net payments of £600 per year. Total for three years is £507.60.

Interest on tax relief: The tax relief paid into the fund at the end of the first year remains invested for two years, and at the end of the second year for one year. The amounts of interest are therefore £17.30 and £8.50 respectively, giving a total of £26.00.

The fund at the end of Year 3 is therefore made up of:

Contributions	£3,600
Interest on contributions	267
Tax relief on employee's contributions	508
Interest on the employee's tax relief	26
TOTAL	£4,401

If the fund were not exempt from tax, then interest would be subject to tax at 20%. The tax relief on the interest would therefore be £59, and tax relief in total £567.

Practicalities:

- How would the use of the fund be limited to paying for house purchase? A declaration might be required, stating details of the property, the lender, and the solicitor acting for the purchaser. This would make it possible to check that a house had been bought and that the difference between the purchase price and the loan suggested that all of the fund had been used to help finance the purchase. Alternatively, the fund could be paid over to the purchaser's solicitor.

- How could it be limited to first-time buyers? This is not a concept that is always easy to define. The strictest definition would be that the purchaser (or all purchasers if more than one) had never owned a dwelling before. Less strictly, the rule might be that they had not owned a house in the previous five years. With registered title, ownership of dwellings leaves a record that can be checked.

- Would there be minimum or maximum savings periods? Would the scheme be contractual? If so, there could be a penalty element if missed contributions were not caught up within a defined period. Alternatively, there could simply be pro-rata reductions in tax relief. There would presumably need to be provision for

contributors to withdraw their past contributions in an emergency, forfeiting tax reliefs if they did so.

International experience

In Canada during the 1970s any resident non-homeowner could contribute $1000 per year, up to a total of $10,000, in a registered home-ownership savings plan. Contributions were tax-deductible and the income was not taxed while in the plan. No tax was payable if the capital and interest were used to buy an owner-occupied house (Boleat p. 47 *et seq*).

In 1965 France introduced Housing Savings Schemes, under which households could save up to FF 100,000 for construction or repair of a house. Interest was paid tax-free. There was no requirement for regular deposits, and after 18 months the saver had the right to a loan related to the size of his savings. In 1969 Housing Savings Plans were introduced. The new regulations required regular annual deposits, and the account had to be maintained for a minimum of four years (Boleat p. 64, Ball p. 51). France pays an interest premium to savings for homeownership (Ball p. 51).

The German *Bausparen*, or contract savings and loans system, offers loans on the basis of specific house-savings contracts, under which borrowers have to make regular deposits in advance until a certain savings target is reached. Then they become eligible for a mortgage. The government pays 10% of the annual savings amount as a subsidy to low-income households. Holders of the accounts whose income is too high for subsidy can receive interest tax-free (Ball p. 13).

Spain gives grants to buyers with housing-savings accounts at the time of house purchase (Bartlett & Bramley p. 165 et seq). In Hungary the state pays a premium on top of savings for house purchases (Harsman & Quigley p. 228), as does Denmark (Whitehead & Turner p. 230).

From 1995 in Switzerland, people covered by an occupational pension scheme were allowed to use part of their accumulated equity to acquire an owner-occupied dwelling, pay down existing mortgage debt, or buy shares in a housing co-operative. If they were under 50 years old they could use all their equity; if over 50 they could use equity to the value of what they had at 50, or one-half (Balchin p. 34).

Suitability for UK

Again this would be more about re-introducing a programme than breaking new ground, since historically taxpayers who saved with building societies received favourable tax treatment. This was eroded though deregulation and tax simplification during the 1970s and 1980s. The *Bausparen* approaches, widespread in Germany and other continental countries, have also been eroded by deregulation so that they now account for a relatively small proportion of the down payment or mortgage. They worked best when it was expected that people would save for some years at low, but subsidised, interest rates and benefit from their own and other people's savings when they came to purchase. This style of approach has become outdated in most countries and certainly with the UK framework.

The amount of assistance that can be provided is limited by the tax framework. It can have the benefit of allowing employers to provide specific aid to particular groups of employees. The alternative is instead to allow tax-relieved help with mortgage payments (equivalent to payments in kind, which used to be untaxed but are now taxed at the marginal tax rate). This would be consistent with wider government policies of directing interest-rate relief at partial or first time buyers. As such it links to Policy 2.

The most important objection is that it goes against the goal of simplifying the tax system and of ensuring that all payments in kind are treated as income. On the other hand it increases the incentive to save, overcomes a constraint in the system and can concentrate assistance on particular groups – notably first-time buyers. It is for this reason that new, highly targeted versions have been under discussion in Scandinavia. Equally the approach could be simplified by allowing it to cover all owner groups as is the case in most other countries. Clearly the greater the targeting, the lower the deadweight loss – which otherwise is likely to be considerable. The most important objection however remains that it is a demand-side subsidy with no direct supply implications. If the incentive is large enough to have a significant impact on demand it will also impact on prices.

Policy 4: Fiscal instruments to increase employer involvement in housing provision

Definition of instruments

Employers can be involved in provision of housing in at least five different ways:

(i) They can make a contribution to savings schemes, to down payments, to mortgage payments or to rent. This is fundamentally an hypothecated salary contribution. It counts as a cost to the employer and is therefore set against corporation tax.

(ii) They can pay moving and relocation costs, which may include short-term housing provision or subsidy.

(iii) They can provide land for affordable housing from their own land assets, or make a contribution to purchase other land holdings, either to build housing that they own and manage themselves or as a contribution to RSLs or other providers in return for nomination rights. Again these might be either for rented properties or shared-equity and ownership schemes to assist their employees.

(iv) They can build and manage housing on either a rented or shared-equity basis for their employees.

(v) They can make a contribution to building and running costs for others to provide rented or owned housing.

The first two are means of increasing the employees' capacity to pay for housing, to overcome wealth constraints (in the form of down payments), or to offset removal and disruption costs for new employees without increasing their longer-term salary. The other three aim to increase the supply of appropriately affordable housing through either a capital or revenue contribution to make it feasible to provide this housing.

All such costs are allowable against corporation tax for profit-making organisations, or, if they use their own land, taxable capital gains will not be realised. Employers who see housing assistance as an appropriate means of recruiting or retaining staff should therefore already be providing such schemes.

The appropriate fiscal instruments must therefore make it worthwhile to take part. It will be worthwhile if because of these benefits employees will be prepared to take up or retain employment more cheaply. This will occur if employees face a reduced tax burden; if employers gains some direct tax relief; or if a tax credit is provided to the employer.

How they would work

1. *Income-tax reliefs on savings schemes and other payments in kind/hypothecated cash as described in Policy 3 above.* This makes it

worthwhile from the point of view of the employee to accept assistance in this form and reduces the cost of employment to the employer. The employer will be able to set all costs against income. Incidence of the benefit, which would normally be a maximum of 40% (and more generally the standard rate on income tax), will depend on 'negotiation' between employer and employee. Take-up will depend on how much the scheme is hedged around and the resultant reduction in benefit to the employer and employees of any such constraints. One possibility is to apply the rules for pension contributions to housing-related costs for particular groups, or to allow people to use early years of their pension contributions on housing – this would entail changes in the current law. Any scheme could in principle apply to either (i) or (ii), although schemes which covered relocation costs would have to be very closely delineated.

2. *Tax incentives for the construction (or major rehabilitation) of affordable housing.* Here employers would be simply one of the organisations able to benefit from the tax-credit approach set out under Policy 1. The incentives would enable those with some comparative need or advantage to act in partnership with RSLs, probably to provide intermediate market housing. Tax incentives would be available for the direct provision of accommodation or for contributions to RSLs and others to provide affordable housing in the form of shared-equity or rental property. As long as the incentives are tradeable they can be of value to non-profit-distributing as well as to profit-making organisations.

3. *Depreciation allowances, including accelerated depreciation, for employer owners (or partners) of affordable housing.* These would be exactly similar to the approach taken in 1982 with respect to assured tenancy construction and can also be subsumed under Policy 1. They would not help non-profit employers.

4. *Relief from capital gains tax on land and residential property sales for affordable housing.* This would provide an incentive to employers with appropriate land holdings to make land assets available to affordable-housing providers rather than simply to develop the land themselves. This would formally be separate from the question of the appropriate level and type of S106 contributions should be negotiated and to the purchase of nomination rights. However, in practice, they are likely to be closely linked. This would apply only to profit-making organisations.

5. *In the public sector a related approach would be to ensure that the Treasury rules include affordable housing within the definition of 'best consideration'.* At the moment many public-sector and agency landowners do not see this as a possibility for fear that it would be questioned. Were the position to be made clear it would become automatically acceptable for certain employers to sell land for the provision of affordable housing in return for nomination rights. Thus, for instance, the NHS or educational trusts might make land available to RSLs in order to obtain nomination rights for either rented units or shared ownership or equity.

6. *An hypothecated payroll tax*. This is a rather different approach, which provides a fund to enable additional affordable housing to be provided or mortgage interest rates to be subsidised. It has been common in many countries aiming to provide a large-scale new-build social programme, but has generally been phased out.

International experience

We found no evidence of specifically employer-based schemes for the direct provision of affordable housing, except in the context of regulations requiring provision as were found in transition economies. There has been no attempt to replace that approach in transition economies by fiscal incentives to employers.

Switzerland does allow housing costs to be treated in the same way as pension contributions and so provides an incentive to employees and employers to make higher contributions.

The idea of a fund to help provide affordable housing or make mortgages affordable has been tried in a number of countries, notably in France and in many South American countries. In France this fund was used to finance provision of *Habitations a Loyer Modere* (HLMs—broadly equivalent to housing associations) and loans for home ownership. It can now also be used to subsidize the demolition of bad HLM dwellings. In Brazil, Argentina, and a range of other countries, the funds were used to provide mortgage loans at below-market interest rates. All such funds have been phased out partly as finance markets have been deregulated, partly on competitiveness grounds, and partly for distributional reasons. In particular. subsidised interest rates tended to mean that all employees across the income range funded those on higher incomes able to afford to purchase their own homes.

Suitability for the UK

The history of employer housing provision in the UK

Large numbers of employers have traditionally provided housing for their employees for a range of reasons including:

- they need these employees to locate near their work – e.g., caretakers, police, nurses;
- they are the main employer in an area (and they can bear the risk of variation in demand more effectively) – e.g., company towns, notably for coal mining;
- employees need housing at a particular stage in their careers – notably student professionals;
- their employees are particularly mobile – teachers, construction workers;
- they themselves have accommodation as part of their activities – hotel and catering, caretakers; or
- they have altruistic motives – Rowntree, New Earswick, Port Sunlight, Bournville.

Equally employers have provided housing-specific elements in remuneration packages because they are the cheapest/most acceptable way of recruitment and

sometimes retention; the employer can overcome constraints, such as on down payments or borrowing costs, more effectively; or because they have a fiscal incentive so to do.

Before the 1970s there was large-scale employer involvement in housing and housing finance provision. Some 25- 30% of the private rented stock was held by virtue of employment and many employers provided housing-specific assistance. Since that time employer involvement has decreased very significantly, in part because fiscal incentives have been removed. In particular the provision of accommodation at below market rents or loans at below market interest rates became taxable as income. However there were other important changes that reduced the benefits, including:

- deregulation of the finance system – so individuals have been able to borrow for themselves;
- rising aspirations, notably with respect to owner-occupation and freedom of choice;
- a lack of comparative advantage among employers in owning and managing housing;
- government sell-off policies, which have affected the NHS, police and nurses housing in particular; and
- the decline of some of the industries that had traditionally provided housing – notably the coal mining industry.

From the employee's point of view, unhypothecated income is normally more desirable than hypothecated money unless their costs are reduced or constraints overcome. This has tended to mean that employer assistance has been concentrated on removal packages where costs can be readily identified and negotiations are transparent. They can also be based on individual circumstance and be cost limited.

Equally, employees have generally wanted to be able to separate their housing and employment decisions and have not wished to be tied to their job by living in employer accommodation. They also perceive such housing as adversely affecting their capacity to get on the housing ladder. Employer housing has therefore tended to concentrate on new entrants and student accommodation--although even here aspirations with respect to the quality of accommodation and its location are rising rapidly.

The current position in the UK

The evidence from a number of studies in Greater London (GLA, 2000 and 2001), Surrey (Monk et al, 2000) and Cambridge (Monk et al, forthcoming) suggest that there is considerable appetite among employers in pressure areas to be involved in the provision of affordable housing.

In Surrey, for instance, there was at least one example of an employer allowing employees to use pension funds for housing purposes. Others argued that it would be a desirable approach. However, without any fiscal incentive this is quite expensive. Reliefs equivalent to pension rights would almost certainly result in large-scale take-up. The obvious cost relates to reduced pension rights in the longer term. On the

other hand, it would be a mechanism by which assistance could be provided without re-introducing the problem of payments in kind within the general tax system.

The National Health Service has taken the initiative of providing new accommodation for those at the beginning of their careers, mostly in the form of cluster accommodation. There is concern even in the NHS about location, longer-run viability given aspirations, and the extent to which there are even now vacant units. Some of the same concerns apply to the police. Such initiatives may also tie up significant capital unless ownership can be transferred to financial institutions or other investors.

A number of employers in London, notably those involved in the Keep London Working consortium, have been prepared to make contributions to the provision of affordable rented housing in exchange for nomination rights.

There is considerable evidence that some employers would be prepared to take an equity stake in shared-equity schemes if they could be certain that these could be maintained into perpetuity. However, this is currently a complex issue, which cannot readily be addressed in the context of individual schemes. If pension funds and other institutions are to be prepared to purchase the shared-equity element, then a minimum scale must be achieved. It will require government support to achieve such scale.

More general evidence showed that the majority of individual employers, even for instance in education, were not certain that they could effectively manage vacancies -- or indeed accommodation. The preferred approach is therefore to make contributions to a group scheme run by RSLs or other organisations and to purchase nomination rights, which could then be transferred between employers as required.

Finally, there was a great deal of evidence that public agencies were unclear as to the extent of their powers to include nominations to affordable housing as a reasonable reason for transferring land at a discount.

In all cases, if the subsidy in submarket rents continue to count as income for tax purposes, the numbers of employees wishing to take up the option is likely to be limited. The position with respect to shared equity could be more positive, if more complex, in that the employer maintains ownership over a proportion of the asset.

The most important immediate requirements if employers, notably public agencies, are to take a larger part in affordable housing provision relate not so much to fiscal instruments but to (i) ensuring that nominations for affordable housing are clearly included in best consideration and (ii) improving the regulatory framework to assist in developing the shared equity market for employees.

The most fundamental limitation from the employees' point of view is that submarket rents and interest rates are counted as income in kind. This makes them uneconomic for employers to provide – even though there is considerable interest in such provision. In the context of interest payments, reliefs such as those available for pensions can help to address this problem. Otherwise provision is likely to be limited to the types of dwelling where transactions costs can be most effectively reduced, in

particular hostel or similar accommodation for new entrants and trainees and those in the area for short periods of time.

The limitations for employees in employer-based shared equity include: implications of moving job; difficulty of realising their own equity given the lack of a secondhand market; incapacity to staircase up *in situ*; and a general lack of understanding of the nature of the contractual arrangements. Employer-based schemes are likely to be most successful when they concentrate on large employers with a particular need to house trainees or mobile workers. Schemes might therefore be concentrated on hostel or cluster-style accommodation, as long as they were flexible enough to be transferred to other uses were the market to change.

Employer-based schemes also provide an opportunity for developing shared-equity approaches more broadly. However there are many practical issues, including the organisation of the resale market and the specification of contracts, which would have to be addressed before large-scale take-up could be assured. Equally, most employers do not want to tie up funds in residential assets for long periods of time. The overall scale would have to be large enough to allow the transfer of ownership to pension and insurance company funders.

Including employers in the broader policies already discussed depends significantly on solving problems not directly related to fiscal incentives, notably the definition of best consideration in the public sector and standardisation approaches to shared-equity contracts, as well as broader questions about how to develop large enough markets to interest institutional funders.

The most obvious approach to enable employer involvement is to count them as appropriate providers under Policy 1. Certain types of employer would clearly find it beneficial to act as partners and equity providers to RSLs and developers. Equally these saleable incentives can benefit non- profit organisations as much as those in the for-profit sector. The scheme could be linked to land provision where appropriate – although this would raise concerns about the potential for double subsidy.

Assessment

Employers may have rather more incentive than some others to be involved in affordable housing provision. They may also have land which they would be happy to develop. Finally they can be useful in operationalising potentially valuable fiscal incentive schemes, since they can be lead partners and would be in a position to implement savings and mortgage schemes and to benefit from tax credits. There are, however, few fundamental differences between employer-based schemes and the more general schemes discussed under Policies 1, 2 and 3. The examples and assessments above therefore apply.

Policy 5: Encouraging mixed-use and housing-only developments on sites previously designated for non-residential development

Definition of instrument

Extension of S106 to non-residential sites or, following the Green Paper, setting a tariff for affordable housing on these sites. Fiscal incentives to increase the profitability of affordable housing and so transfer land from employment uses to housing uses.

How would it work

The allocation of land for residential purposes is fundamentally a land use planning rather than a fiscal issue. The decision whether or not to designate land for housing or for mixed use is not in principle subject to fiscal incentives.

At the present time s106 for affordable housing applies only to residential developments. The rural exception policy allows the additional designation of land which would otherwise not obtain planning permission where local need at the parish level can be proven. Hammersmith and Fulham have extended this exceptions policy to urban non-residential sites arguing that, in principle, affordable housing should be provided on all sites where any type of development is to be permitted. This has some consistency with the traditional planning approach to planning gain negotiations, which required obligations to be related to the permission, since other types of development often increase the local requirement for affordable housing.

Evidence with respect to the GLA policy suggests that some affordable housing possibilities are now being forgone because of the complexity of the negotiations process and perhaps because of the large number of other planning obligations. The GLA Assembly Building is thought to be a good example – affordable housing was discussed here but not pursued.

The DTLR Green Paper (DTLR 2001) on planning, which is currently out for consultation, suggests the use of a tariff approach which would extend the obligation to provide to affordable housing to residential sites below the current threshold and on non-residential sites.

Providing mixed-use sites is consistent with the government's sustainability policy. However there are clear problems with respect, in particular, to the payment of service charges – which can mean that although rents or mortgage payments are affordable, the overall costs to households are not. There are additional costs of management if there is pepper-potting and there may be price and therefore profit reductions on market housing.

Transferring land from employment to housing use will only occur if both the owner wants to bring the land forward for development and the planning authorities agrees. This will only occur if incentives are provided, constraints reduced, or other opportunities are further curtailed.

International experience

The UK land use planning system is very specific to the United Kingdom – although the initial idea of negotiating a proportion of affordable housing owes much to schemes that have operated in the United States. There is evidence of successful mixed-use projects in the US and Japan but any fiscal instruments involved are fundamentally those that have already been discussed. In the US much of the benefit in redevelopment and renewal projects comes from generating the scale necessary to access cheaper wholesale funding. In the main, including affordable housing increases complexity, reduces the financial scale of the project and adversely affects viability. Fiscal incentives such as those discussed under Policy 1 are therefore required.

Suitability for the UK

Redesignating land from industrial and other employment uses to housing is wholly a land use planning issue. There is some concern that this process has already gone too far in London with respect to large employment sites necessary for particular types of industry. In many other parts of the country there is clearly more land designated for industrial and employment use than is likely to be used – and there is planning advice to transfer where appropriate. However many sites are unsuitable because of transport and other sustainability problems as well as concerns about contamination. Fiscal instruments to address contamination issues have been discussed in the context of the Urban White Paper.

In the context of planning obligations the addition of an affordable housing requirement simply increased the 'betterment tax' element. It may make some sites unviable or simply substitute for some other infrastructure provision. It may also increase negotiation time and increase delays.

On the other hand it provides more of a flat playing field between designations and could mean that housing becomes an option for some sites which would have been more profitable without under the existing regime.

One area where it is felt that there might be benefits is in relation to large scale renewal projects. Here a major concern is to bring in funding from global institutions. This is proving difficult for two main reasons – the very large up-front costs associated with the private provision of infrastructure and planning obligations, and the relatively small size of projects in US terms. Providing fiscal incentives – of the type suggested in Policy 1 - would help make affordable housing more profitable, would assist the market to fund the capital through the capitalisation of the tax incentives, and would increase the potential size of projects, which can, at least in principle, reduce the overall costs of funding.

None of these benefits has been analysed in any detail, so it is impossible to estimate likely take-up. However, if the government were to decide to look further at tax incentives for construction, the potential for increasing land supply for affordable housing through these mechanisms should be taken into account.

Policy 6: VAT reduction for renovation of affordable housing

Definition of instrument

Reduction of VAT on the renovation of affordable housing. This could be a general policy addressed to all renovation or it could be restricted specifically to social landlords or by some other criterion.

How it works

Construction of buildings for residential or charitable use is currently zero-rated for VAT in the UK. Renovation work, however, attracts VAT at the full rate of 17.5%, except for certain conversion work involving changing the number of units in a building, where VAT has been applied at a reduced rate of 5% (the lowest rate permitted under EU regulations) since April 2001.

The suggested policy would reduce VAT on renovation of existing buildings for affordable housing. The broadest version of the policy would be to treat all renovation in an equivalent manner to new construction. The fact that new build is zero rated reflects the traditional view that such investment is socially valuable. However, it is an anomaly in European taxation which can continue only because it is already in place. Bringing renovation into line would be virtually impossible in the European context. It would, however, be permissible to reduce VAT on renovation to 5%, the minimum allowed. This would be consistent with policies to increase the proportion of brownfield sites. The net benefits of such a reduction in terms of affordable housing, which is provided through both new output and renovation, would however be negligible.

The reduced rate of 5% on conversions is already in place, although it is too early to assess its impact. It has the benefit of being reasonably easily monitored (even though statistics on conversions are notoriously inadequate). It introduces a distortion between conversion and renovation without changing the number of units. Applying the reduced rate across all renovations would be more coherent.

The distinction between conversion and renovation and other expenditure is fairly readily determined. The distinction between renovation and repair is very much less clearly defined, but extending VAT reductions to repairs would make the policy far more expensive and far less effectively targeted either at socially desirable investment or specifically at affordable housing.

The most direct and easily monitored approach would be to limit reduced-rate VAT to RSLs only, although it might be appropriate to include properties leased from the private sector for a minimum period – e.g., five years. Many RSL renovations of existing buildings would anyway involve changing the number of units, and therefore would already attract reduced VAT under the conversion scheme. However, this scheme certainly does not cover all RSL renovation. The case for limiting reduced-rate VAT to RSLs lies in (i) ease of monitoring and enforcement; (ii) targeting assistance directly at affordable housing; (iii) stretching the ADP; and possibly (iv) providing an incentive for private owners to lease to social landlords.

Elasticities

The goal of the VAT reduction would be to increase the supply of affordable housing through lowering the cost to the suppliers of renovation and bringing dwellings back into use. The magnitude of the effect would depend on the elasticity of supply with respect to cost. The cost reduction would be a fairly small one (a maximum of 12%, compared to the current headline rate of Social Housing Grant of 68%), so any supply response would likely be small as well. There would also be some losses from increased prices.

International experience

France, Belgium, Italy and Spain have preferential rates of VAT (not zero) for construction of "social" housing. Ireland and Luxembourg have a preferential rate for all house building.

In France since 1996 HLM organisations (like RSLs) have paid a reduced VAT rate on construction and major repairs. This is now 5.5% (compared to the standard rate of 20.6%). This lower rate of VAT replaced a 12.7% grant for new HLM buildings; the reduction in VAT has roughly the same effect on HLM costs as the grant did.

In Belgium the normal rate of VAT is 21%. For new dwellings for social landlords, as well as new dwellings for private owners below a maximum size limit (190 m^2 floor area for houses; 100 m^2 for flats), the rate is 12%. For renovation of dwellings over 20 years old the rate is 6%. In Italy the general rate of VAT is 20%, but for subsidised new building the rate is 4%, according to Donner. The scope of "subsidised" new building is not clearly stated. In Spain the general VAT rate is 17%. There is a 7% rate for new housing generally, and 4% for "social" dwellings.

It is not clear how up to date this information is. The 4% rates given for Italy and Spain are below the 5.5% rate that is often quoted as the minimum reduced rate permitted by EU rules, but almost certainly predate European harmonisation.

We have not uncovered any research into the effects of these policies, which seem to be based more on principle and tradition than on cost effectiveness.

Suitability for UK

Bringing VAT for renovation into line with VAT for new building makes sense as a general policy in terms of appropriate incentives. Given the European context, it is unlikely that any such harmonisation can occur below a minimum of 5%. This makes it less attractive from the point of view of maximising affordable housing investment.

Reducing VAT on renovations to 5% without imposing a positive VAT rate on new building would be more cost effective from the point of view of affordable housing providers.

IV SCOPING ASSESSMENT OF POLICIES

Introduction

The assessment is based on the set of tables that follows. They draw together the main attributes of the schemes and allow some comparisons and early overall evaluation. It should be noted that in our assessment we are assuming that these policies would be introduced in addition to SHG and S106 and would mainly be aimed at the intermediate market (both rental and different forms of owner-occupation), where households require some subsidy but not at the levels that obtain in the traditional social rented sector.

Policy 1: Tax incentives for construction of affordable housing

	In principle	**Evidence**
Coverage/can it be targeted?	Selected newly constructed or substantially renovated affordable housing. Can be targeted by area, dwelling type or occupant group.	US: Each state receives annual amount of tax relief in proportion to population, to allocate according to state priorities
Formal incidence	Developer, employer or other actor	Actually will partly go to intermediaries and transactions costs – plus problems of cost control particularly with respect to land. Works best if additional land can be identified?
Depth of subsidy	Depends on structure of tax relief	In US: 10% of eligible costs p.a. for 10 years—net present value 70% (at government's discount rate) or 58% (at investors')
Likely market response	Increased construction of affordable dwellings; possible higher land price	In US: Responsible for 600,000 to 900,000 units of new affordable housing in first 10 years—high % of total. In UK, 1982-4 capital allowances for assured tenancies were responsible for large % of (negligible) total output
Percent of initial subsidy directed at affordable housing	Present value of stream of tax benefits, less administration costs and syndicators' fees	Originally as low as 50%; today about 75-80%. Steady improvements in efficiency.
Comparison with Social Housing Grant	Can achieve as deep a subsidy—but significantly higher transactions costs	If limited to tax relief, maximum help would be marginal tax rate; for credits could be higher. Trans-actions costs likely to be between 15% and 25%, on evidence of BES and USA.
Appropriateness for particular groups	Could help increase supply for particular groups such as cluster accommodation for trainees or relevant properties	Could provide an instrument to address "intermediate market" gap and help RSLs widen their range
Practical issues	Tax relief given on loans or equity, or both? How is eligibility determined? Who qualifies to live in	In US: On equity only Through competition for limited funds Household income limit

	housing so constructed? How are funds administered?	applies By state housing authority
Overall evaluation	Worth following up especially as consistent with the Treasury's current position.. Addresses the major gap in affordable housing policy—helping the low waged employees, while helping to meet their aspirations.	It has worked effectively though not efficiently in a very different environment The transactions costs and deadweight losses must be weighed against the development of markets and choice.

Policy 2: Government help with purchases in high-priced areas

	In principle	**Evidence**
Coverage/can it be targeted?	Yes. Selected purchasers in high-house-price areas and/or in certain occupations.	Internationally these programmes are generally not limited by location or job; eligibility determined by income levels, age, family size. Normally entitlement. However this is mainly because aimed at increasing supply through expanding demand.
Formal incidence	Households	Some loss through higher prices and costs of operation
Depth of subsidy	Depends on structure – must be adequate to generate affordability for relevant groups. Others low interest or interest free. The evidence of Homebuy suggests 25% zero interest with equity share inadequate.	Some (Australia) flat figure; some (Hungary) up to 45% of dwelling construction cost
Likely market response	Increase demand for/price of homes in certain areas and price bands	No evaluation found
Percent of initial subsidy directed at affordable housing	All, but significant number may have been prepared to purchase anyway – given different attitudes to risk and commitment as well as repayment profile.	Evidence on shared ownership is that it brought in a different, more risk-averse group rather than increasing preparedness to pay. Evidence of earlier schemes involving equity - based loans is that they are not seen as particularly desirable unless
Comparison with Social Housing Grant	Aimed at a different group-- those who aspire to home ownership but can't afford it, and where there is social value in meeting their expectations in given locations	
Appropriateness for particular groups	Can be highly targeted by area and group	
Practical issues	Criteria for eligibility? Income related? Employer nomination? Amount of assistance—flat	Usually related to income or family size Examples of flat figure and

	figure, % of purchase price, or set by price band? Recapture of funds if household circumstances change? Who administers?	% are found. Amount of assistance often related to household income Spain: on sale of dwelling within 5 years Normally central or state government
Overall evaluation	Worthwhile in part because it synthesises existing schemes and makes them more consistent. Help directed at relevant areas – but concern about impact on prices. Should it simply synthesise and expand Homebuy and the SHI, or embrace shared ownership and DIYSO as well?	To be effective will impact on prices in pressure areas. Limited evidence from Cambridge and elsewhere that SHI has helped attitudes to recruitment and retention—even though not yet in operation. The more targets and means of achieving them that the government tries to include, the more complex the scheme. If a tax credit were introduced it would be important not to double subsidise.

Policy 3: Savings schemes for first-time buyers

	In principle	**Evidence**
Coverage/can it be targeted?	Yes. Savers who have never/not recently been homeowners.	Internationally, not always limited to non-homeowners
Formal incidence	The saver or saving employee	Will be some losses in terms of substitution
Depth of subsidy	Depends on structure, but probably limited to marginal tax rate.	Interest usually tax-free; some countries pay additional subsidy to low-income savers.
Likely market response	Demand-side stimulus; effective probable result higher house prices	No evaluation found
Percent of initial subsidy directed at affordable housing	Difficult to target effectively using traditional approaches. Might be easier via pension style of approach	
Comparison with Social Housing Grant	Would be a far lower level of subsidy directed at those higher up income scale.	Used to overcome deposit constraint. Possibility of linking to mortgage-interest subsidies—see Policy 2.
Appropriateness for particular groups	Can be targeted especially vis-à-vis employers	
Practical issues	How to limit use to house purchase? How to limit to first-time buyers? Minimum/maximum savings period? Is the scheme contractual?	All such schemes are so limited; no details of exact mechanisms Only Canada in 1970s had such a limit; others open to all France: minimum 4 years Germany: yes
Overall evaluation	Worth thinking about again – but does depend on Treasury's attitude to simplification of tax system and income in kind. Could work well with employer involvement. Large deadweight loss if scheme is universal.	Level of assistance relatively small. Perhaps better to concentrate on versions of Policy 2.

Policy 4: Fiscal instruments to increase employer involvement in housing provision

	In principle	**Evidence**
Coverage/can it be targeted?	As Policies 1, 2 and 3. Can target certain classes of employers—e.g. public sector	Very little on employer fiscal incentives of any type
Formal incidence	As Policies1, 2 and 3	As Policies 1, 2, 3
Depth of subsidy	Depends on detail but addressed to intermediate, low-income employed market	
Likely market response	Employers likely to be prepared to take up instrument where they have additional reasons for providing remuneration through housing rather than wages. Likely to be particularly appropriate for those with land for which residential planning permission can be obtained.	Employees only want such housing if they obtain clear benefits and are not restricted from entering 'normal' owner occupation. Consumers generally find shared equity arrangements, as currently operating, unattractive.
Percent of initial subsidy directed at affordable housing	Depends on capacity to target. Savings, interest rate and relocation packages likely to be relatively poorly targeted unless limited to defined groups.	Targeting not likely to be very tight because employment requirements not necessarily congruent with affordable housing requirements.
Comparison with Social Housing Grant	Addressing a different group	
Appropriateness for particular groups	Yes—notably key workers, employees with shorter-term housing needs—trainees, etc.	
Practical issues	Many – but employers are a good conduit for operating the schemes above. Unlikely to want to tie up assets over long periods or be involved in management—so need market into which assets can be sold.	Make best consideration transparent. Address practical issues relating to shared-equity schemes. (Necessary also for Policy 1). Concerns about managing vacancy and access. Need for flexibility in relation to changes in economic environment.
Overall evaluation	Should be included in the more detailed assessment in all cases. Issue of taxation of non pecuniary benefits needs	

	specific examination.	

Policy 5: Encouraging mixed-use and housing-only developments on sites previously designated for nonresidential development

	In principle	**Evidence**
Coverage/can it be targeted?	Nonresidential sites. Could be targeted to certain areas	Hammersmith and Fulham and rural exceptions policies.
Formal incidence	On landowners and developers.	Some transfers to lower output and higher costs and prices.
Depth of subsidy	Depends on negotiation or tariff	
Likely market response	There will be some benefits from generating a flatter playing field between residential and non-residential sites.	Mixed use and additional taxation will be unpopular and could slow the development process. The costs of additional regulation could be offset by fiscal incentives.
Percent of initial subsidy directed at affordable housing	Depends on 'tariff' and negotiations	
Comparison with Social Housing Grant	Paid by the market rather than government—generates different outcomes.	Evidence on S106 suggests that amount of additional housing achieved is limited.
Appropriateness for particular groups	Can be targeted—e.g. by employer involvement.	
Practical issues	Loss of employment land. Fundamental link between landowners, planning system and fiscal instrument.	Keeping transactions and negotiatons costs down to a reasonable level. Management costs of mixed use. Attitudes of financial institutions could be a problem. Costs of housing in mixed use—especially service charges.
Overall evaluation	Worth it, especially in metropolitan areas if some of the emphasis can be on enabling. Makes sense in terms of flat playing field between different types of development and generated need for affordable housing.	Benefits of large-scale funding unlikely to be realised. Congruent with Green Paper proposals.

Policy 6: VAT reduction for renovation of affordable housing

	In principle	**Evidence**
Coverage/can it be targeted?	If limited to major renovation by RSLs, targetted at affordable housing.	France: HLMs Spain, Italy, Belgium etc. all target affordable housing.
Formal incidence	Goes to builder/developer	Likely to be split between client and developer—depends on state of market and negotiation skills.
Depth of subsidy	12.5% on renovation costs	France: Approximately 12.7%
Likely market response	Limited	Too early to look at conversion experience in UK; no evidence of evaluation elsewhere.
Percent of initial subsidy directed at affordable housing	There would be large-scale deadweight losses in the case of renovation which would anyway be undertaken.	Difficulties in delineating renovation from major repair.
Comparison with Social Housing Grant	If limited to RSLs makes SHG more cost-effective.	
Appropriateness for particular groups	Additional benefit to social landlords; some potential for helping to bring private empty homes back into use leased through RSLs.	
Practical issues	Relatively easy to implement except for concern about major-repair leakage and private leasing.	
Overall evaluation	All renovation would be treated as conversions are now. Cost reduction and supply response likely to be small.	

Conclusions

A version of Policy 1 has just been introduced in the form of the Community Investment Tax Credit. This makes it easier to develop a broader scheme concentrating on particular areas, dwelling types and occupant groups. It will work effectively only if the credits can be traded and land supply can be increased.

Under Policy 2, extending Homebuy and the Starter Homes Initiative into a more coherent but carefully targeted scheme appears appropriate, as it can help fulfil reasonable aspirations of lower-income employed households.

Savings schemes, as set out in Policy 3, can only provide very limited help. Extending income-tax relief to employer contributions to mortgage payments would have more impact, but goes against general tax principles.

Employers clearly have a potential role as partners in Policy 4, in providing land, developing shared-equity schemes and facilitating the implementation of other fiscal instruments. Whether employers become involved depends partly on whether they perceive particular relative advantages to providing housing assistance rather than increased pay.

Policy 5 envisions a flatter playing field between residential and non-residential sites in terms of the requirement to provide affordable housing, as set out in the Green Paper. This could increase the number of sites coming forward for residential and particularly affordable-housing use. However, the policy would have to be combined with fiscal incentives such as Policy 1 to generate large-scale changes.

Reducing the rate of VAT on renovation, under Policy 6, would be sensible in terms of incentives. Restricting the tax reduction to RSLs would concentrate the policy on affordable housing and make it easier to monitor.

There are a number of non-fiscal modifications which could make the system work very much better. They include in particular (I) clarifying the definition of best consideration so it includes allocating land for affordable housing at sub-market prices and (ii) developing standard contracts and transparent frameworks for shared-equity arrangements so that both employers and employees can better evaluate the schemes. There could be large benefits from increasing scale to provide incentives for institutional finance but these are a long way off.

Overall there is a strong case for experimenting with Policy 1 and for developing a more coherent approach to demand assistance as defined in Policy 2. The other policies can act in support of these two more fundamental changes.

None of these policies will effectively address the same needs as Social Housing Grant, which is concentrated on lower-income households with longer-term needs, and provides higher subsidies and greater targeting. Instead they can supplement that provision by bringing in different players, greater choice and a market-oriented approach. They will work best if their use can be directly combined with expansion of land supply.

ANNEX 1: POLICIES IN OTHER COUNTRIES

Category 1: International demand-side tax measures

1.1 Mortgage interest tax deductible

Many countries allow this. In some countries, such as the Netherlands, mortgage interest is deductible, but owner-occupiers are taxed on the imputed rental value of their homes. In others, such as the USA, mortgage interest is deductible at marginal rate for all but the very largest loans, but there is no corresponding tax on imputed rental value. In Belgium the amount deductible is related to the size of the family, and is higher for new buildings; it declines over time. In France 25% of interest could be deducted up to a ceiling that depended on the number of children in the family and whether the building was new or old. The deduction is no longer allowed for purchases agreed after the 1st of January '98. Imputed rent is not taxed.

Ireland allowed deduction of 80% of mortgage interest at the marginal rate; this was due to change (in 1996) to standard rate. However, 100% of mortgage interest is tax deductible for first-time buyers up to £5000 (married) and £2500 (single) for the first five years after purchase.

Italy allows a percentage of interest on loans for repair to be deducted.

1.2 Owner-occupiers can claim depreciation

In Germany owner-occupiers could deduct 5% of construction costs annually for the first eight years. This was replaced in 1996 by a concession limited to households under a certain income threshold. Such households could deduct 5% of the building cost of a new house up to DM5000 annually, or 2.5% of the value of a second-hand house up to DM 2500 annually. Families with children got extra amounts. If this results in negative income tax, the credit could be held over to use in other years. In 2000 this tax relief was replaced by a cash allowance.

1.3 Preferential tax treatment of home-savings plans

In Canada during the 1970s any resident non-homeowner could contribute $1000 per year, up to a total of $10,000, in a registered home-ownership savings plan. Contributions were tax-deductible and the income was not taxed while in the plan. No tax was payable if the capital and interest were used to buy an owner-occupied house.

In 1965 France introduced Housing Savings Schemes, under which households could save up to FF 100,000 for construction or repair of a house. Interest was paid tax-free. There was no requirement for regular deposits, and after 18 months the saver had the right to a loan related to the size of his savings. In 1969 Housing Savings Plans were introduced. The new regulations required regular annual deposits, and the account had to be maintained for a minimum of four years.

In Germany, holders of Bausparkassen accounts whose income is above the threshold for government grants (see below) can receive interest on these accounts tax-free.

1.4 Rent payments tax deductible
In Ireland the over-55s can treat rent to private landlords as a tax allowance. Italy allows low-income renters to deduct housing expenditure. In Greece tenants may deduct 30% of their rent, up to 15% of taxable net income.

1.5 Tax credits for low-income tenants
The state of California has a small fixed renters' tax credit (maximum $120/year); the legislature has proposed a special renters' tax credit of $500 for entry-level teachers and police and fire officers living in high-rent areas.

1.6 Exemption from transfer tax for first-time buyers
Greece allows this; the size of the exemption is related to family size.

1.7 Tax relief for employee on employer-run house savings schemes, to equate with treatment of pension contributions
In Hungary employers provide preferential loans to employees; a significant share of firms' profits are spent on supporting dwelling purchases by their employees. From 1995 in Switzerland, people covered by an occupational pension scheme were allowed to use part of their accumulated equity to acquire an owner-occupied dwelling, pay down existing mortgage debt, or buy shares in a housing co-operative. If they were under 50 years old they could use all their equity; if over 50 they could use equity to the value of what they had at 50, or one-half.

1.8 Property-tax relief for low-income households
In the Netherlands low-income households are exempt from paying the 40% of property tax collected from the user of the dwelling (the other 60% is paid by the owner).

1.9 Exemption from transfer tax for new homes
Ireland exempts new homes from stamp duty.

Category 2: International demand-side subsidies

2.1 Housing allowance
Almost all countries have some housing allowance scheme.

2.2 Subsidies to savings for house purchase (interest subsidies or one-off grants on house purchase)
The German Bausparen, or contract savings and loans system, offers loans on the basis of specific house-savings contracts, under which borrowers have to make regular deposits in advance until a certain savings target is reached, when the they become eligible for a mortgage. The government pays 10% of the annual savings amount as a subsidy to low-income households. Spain

gives grants to buyers with housing-savings accounts at the time of house purchase. France pays an interest premium to savings for homeownership.

Under a 1980 law, the Finnish government pays an interest subsidy of 70% of the interest rate over 4.5% for loans taken out under the ASP programmes. This is designed to help first-time buyers between 18 and 30 years old. Borrowers must have saved a down payment of 15% over at least two years. The interest on savings if 1% + 2-4% (negotiated with the bank) and is tax free. There are upper limits on the loan sum, depending on where the dwelling is in Finland. The maximum was needed in 1992 when 5% of all new housing loans were ASP. Interest has risen again since upper limits were raised.

2.3 Subsidised mortgages for low-income households

Spain subsidises mortgages for low-income purchasers of new units of "regulated housing", which must met certain criteria and be registered with the government. The amount qualifying for a subsidy depends on the buyer's income and the size of the dwelling. If the buyer sells in less than five years he must return the subsidy with interest; if not, after five years he is re-assessed for continuing subsidy. There is a similar programme for used dwellings.

In Austria the state offers loans for new construction, the amount depending on family size. For low-income households these loans are interest-free. France's PAP programme offered subsidised loans for owner-occupation. These were only for principal homes for low-income borrowers; the dwelling had to meet certain size and cost requirements, and be new or professionally refurbished. France introduced 0% mortgages for home ownership in the subsidised sector in 1995. In 1993 France introduced a new loan programme for low-income owner-occupiers who wanted to renovate their homes themselves.

In the Netherlands the government offers three types of subsidy, depending on house values. For the cheapest houses, the government pays the principal and interest on a part (up to 48,000 florins, depending on the buyer's income) of the mortgage. The subsidy is treated as taxable income. For somewhat more expensive houses there is a fixed contribution from the government for five years (also taxable, income cap applies). For the third band of houses there is a price cap but no income cap; these attract a one-off contribution from the government.

In New Zealand before 1993 the government subsidised loans for low-income wage earners. The Australian government offers short-term help for low-income home buyers in difficulty with mortgage repayments.

In Canada in the mid-1970s the Assisted Home Ownership Programme was designed to enable low-income families to buy homes using less than 25% of their income to repay principal and interest. A government corporation provided interest-free loans to buyers for five years.

In Argentina households are lent 5% of the purchase price at the beginning of construction and up to 33% of the mortgage payments for a ten year load

which they repay at 4% interest over the following ten years. This is paid for by the National Housing Fund (FONAVI) originally financed from an employment surcharge; now from a petrol tax (Slemenson, 2000).

2.4 Grants to first-time buyers, Homebuy, shared ownership
The Spanish region of Catalonia offers grants to buyers under 30. Australia gives AUS $7000 to first-time buyers, with an additional $7000 for those who buy new homes (reduced to $10,000 total for 2002). There are no income or dwelling-cost restrictions. Germany offers subsidies to first-time buyers, related to their income level and the number of children they have.

In New Zealand from 1986 to 1993 the Homestart programme offered grants to bridge the gap between the savings of low-income households and the required deposit.

Ireland has a programme of shared ownership, where the house is part-owned by the occupier, part by the state. The occupier pays rent on the part owned by the state, and mortgage repayments or interest on the rest. The occupier can buy part or all of the remaining equity when his income allows.

2.5 Grants for low-income buyers (not tied to house savings)
Under the US 1968 Housing Act, private buyers bought homes from developers and paid a percentage of their income; the federal government made up the difference. In Hungary, the state gives a grant to assist with down payments or construction costs for families. This can cover up to 45% of construction costs, depending on the number of children in the family.

Category 3: International demand-side regulations

3.1 Government assigns housing to low-income households
Common for social housing in many countries.

Category 4: International supply-side tax relief

Income tax

4.1 Providers of social housing exempt from income tax
The Netherlands and Denmark exempt providers of social housing from income tax. In Germany they were exempt until 1990.

4.2 Tax credits for construction of affordable housing
The USA allows developers of low-income housing to take a tax credit (set directly against the tax bill) of 9% of reckonable construction costs annually for ten years. A certain proportion of the units in the development must be for low-income households. The tax credits are allocated to specific low-income housing projects by state housing authorities; developers raise equity by selling the credits (selling prices are typically about 60 cents on the dollar). To qualify for the credit, the developer must undertake substantial expenditure

for construction or rehabilitation. The credit is earned over 15 years, but is taken over ten. It is subject to recapture with interest if the project (or more than a one-third interest in it) is sold before the end of the 15-year compliance period, or if the project is not occupied by low-income households.

German allows tax relief for construction of dwellings to be let at below market rents; a percentage of the capital invested may be set against other income from all sources.

4.3 Depreciation for rental units
Landlords were permitted to depreciate their units over 15 years in the USA for a period during the 1980s; this has now changed to 27.5 years. In 1990 Germany increased the allowed rate of depreciation to try to boost the supply of rental housing.

Australia allows investors in newly constructed private rental housing to depreciate their investment at a rate of 2.5% per yea. Canada allows 4%.

4.4 Landlords can deduct interest on loans and operating expenses
Germany, the USA and Canada allow landlords to deduct interest on loans and operating expenses from taxable income..

4.5 Landlords can set rental losses against other income
Germany and the US allow this. In the 1960s Finland exempted investors in rental housing from income and property tax; these provisions were changed by 1972. Canada allows private landlords to offset losses on rental properties against other taxable income.

4.6 Lower tax rate for landlords' capital gains
The USA taxed landlords' capital gains at a special lower rate until 1986.

4.7 Tax relief for interest from mortgage-backed securities used to fund low-interest mortgages or low-income housing
Such securities are issued by US states or municipalities to fund affordable housing.

4.8 Allow capital outlays on construction/conversion of rental property to be offset against rental income
Ireland allows this. These outlays can be deducted from rental income from the property in question or from other property owned by the landlord. Italy allows a percentage of the cost of renovation (of rental or owner-occupied property) to be set directly against the income tax bill.

4.9 Preferential tax treatment for housing finance institutions
German Bausparen operate under a special tax regime.

Land/property tax

4.13 Discount for new/renovated houses, or abatement for specified period

In Sweden new and renovated houses benefit from a ten-year discount on property tax. In France new homes are exempted from land taxes; construction for the private rented sector is exempt from land tax for two years. All new dwellings are exempted from property tax for two years

VAT

4.14 Reduced rate on conversions, new build
Spain gives a discount of 6% on VAT for new homes.

4.15 RSLs pay lower VAT
In France HLM organisations (like RSLs) pay a lower rate of VAT.

Category 5: Supply-side subsidies

5.1 Grants for construction or renovation of affordable housing
Spain provides grants of 10 to 25% for the cost of building affordable housing. Sweden provides grants for developers (private or public) building affordable rental housing. There is a cost ceiling, and the developer must make a commitment to rent to low-income households. The grant covers approximately 15% of building costs.

Germany provides subsidies at a level designed to cover all costs exceeding the predetermined social (below-market) rent. The dwellings must meet certain standards, and tenancies are open to certain groups only. Social rents are essentially fixed; only some cost-based rent increases are allowed.

Switzerland offers a six-year subsidy to encourage renovation of existing housing (not necessarily affordable). It covers 2% of the total cost of upgrading the housing unit.

France offered a grant of 12.7% of the cost of schemes to construct new social housing, or to renovate existing stock. This is associated with a subsidised loan (PLA). Private developers are also eligible, if their developments meet certain physical standards and they observe rent limits. A higher level of grant—20%--is available for developments aimed at very low-income households; permitted rents are correspondingly lower. Another scheme (ANAH) was created to improve existing rented stock owned by private landlords. It covers 25% of improvement costs up to a standard limit; buildings must be over 15 years old. There are no constraints on rents for housing improved using an ANAH grant, but the renter is eligible for a higher housing allowance if the landlord accepts rent regulation. Homeowners under a certain income ceiling are eligible for another grant (PAH). The ANAH and PAH grants cover 20 to 35% of repair costs up to a standard cost limit.

5.2 Subsidised loans for developers of affordable housing
Spain provides subsidised loans, as well as grants. The USA provides them subject to rents remaining below a specified level for 20 years. Germany

provides preferential loans to public or private-sector providers of affordable housing; the dwellings must be operated as social housing for a period of 30 years (originally 60). Lettings are restricted to certain income groups, and rents are held below market level. Sweden subsidises interest for new construction or renovation; the subsidy decreases year by year, and is calculated on the basis of a standardised investment cost rather than actual cost. The subsidy is available to developers of both private and social housing, and is not targeted to low-income groups. Interest subsidies are now being phased out.

In Finland after 1949 the state granted low-interest loans for construction of rental units (covering 60% of costs) or single-family homes (40%); there was no income restriction at first. The government still grants low-cost construction loans, but now eligibility is limited by household income and family size. Equally 80% of the government subsidised production is to be concentrated in the six growing regions with 50% in Helsinki alone.

Canada's Assisted Rental Program, which ran only from 1975 to 1978, offered concessionary loans over ten years to facilitate the construction of affordable private rented housing.

France's grant programme for social housing (described above) includes an element of subsidised loan.

5.3 Provision of land for affordable housing at below market value or free
Spain does this. In Italy, local authorities are empowered to acquire, by compulsory purchase, land for housing programmes.

5.5 Government guarantees for housing association loans
In Denmark local and central government guarantee housing-association borrowing.

5.6 Government guarantees of rent or mortgage payments from low-income households
The French government guarantees rent payments. The US government, through the Federal Housing Administration, Ginnie Mae and Fannie Mac, guarantees the mortgage payments of low-income borrowers. In eastern German states the federal government has introduced public guarantees for private mortgages, to overcome the requirement for high down payments.

Category 6: International supply-side regulations

6.1 Require developers to include certain % of affordable housing
In Ireland, under the Planning and Development Act 2000, local authorities can acquire up to 20% of the area of development sites purchased by private developers for affordable housing, paying either existing use or agricultural value.

Sweden is changing it cadastral system to make mixed used development and especially low cost housing in areas not zoned or intended for residential use.

6.2 Rent control

Denmark has traditional rent regulation for private rental housing, with low legal maximum rents. Many countries—for example Switzerland and Germany—control rents for dwellings built with government subsidies. Landlords are permitted to set rents at a level that will cover costs only.

In Austria, rent levels of almost all rented flats in multi-storey buildings are restricted by government legislation. There are rent limits for both new and existing tenancy contracts. Rent increases for existing tenants are allowed only for inflation or to cover urgent maintenance.

6.3 Require employers to provide housing

This was common practice in transition economies.

6.4 Prohibit move of rental flats to owner occupation

In Germany, local regulations inhibit the movement of rental flats into homeownership.

Category 7: International other measures

7 Advice to low-income households on homeownership

In the US, the government provides advice on passing credit tests and managing mortgage commitments. It is often organised through Community Development Corporations (CDCs) and targeted at ethnic minority groups, whose levels of owner occupation are lower.

ANNEX 2a: AN ECONOMIC ANALYSIS OF TAX CREDITS

Why is it that low-income housing tax credits have worked well in the US? Part of the answer is because people respond to incentives. To illustrate, assume that the residential market is consists of n identical properties with an age distribution of f(a) and ages (a_0, a_1, a_2, ..., a_n) in period t = 0. Owners at any period t > 0 must decide whether or not to rehabilitate their structures and the extent of rehabilitation. The decision to rehabilitate occurs when the marginal revenue, MR, from rehabilitation is expected to be greater than the marginal cost, MC. Here, marginal revenue consists of the expected increase in rental revenues plus the increased sales price at reversion, discounted at the appropriate discount rate. Marginal costs include the costs of rehabilitation incurred in period t, less any reduction in operating costs over time, plus any increment (or less any decrement) in costs associated with sale at reversion, again discounted at the appropriate discount rate.

Further, we assume that a tax credit at rate α is allowed on rehabilitation expenditures. For convenience, we also assume the marginal cost of rehabilitation is invariant with respect to the degree of rehabilitation for structures of all vintages over the range of analysis. The baseline marginal cost in the absence of a tax credit is given by MC_0. MC_1 and MC_2 then represent the marginal cost of rehabilitation when successively more generous rehabilitation tax credits are allowed. More specifically, MC_1 is defined by $MC_1 = (1 - \alpha_1)MC_0$ and MC_1 is defined by $MC_2 = (1 - \alpha_2)MC_1$, where $\alpha_2 > \alpha_1$.

Now consider the marginal revenue from rehabilitation. Marginal revenue should vary significantly for structures of different vintages. This is depicted in Figure 1 for three different structures: new, middle-aged, and older structures, where the vertical axis represents the marginal cost of revenue from rehabilitation and the horizontal axis represents the degree of rehabilitation in units of physical stock. In Figure 1, any age a_i greater than a_0 gives a higher MR_i. Notice that, because the marginal revenue curve MR_0 for newly built structures is below the marginal cost curve except for the extreme case of MC_2, owners will not rehabilitate new structures under any but the most extreme tax credit scenarios. It is also important to note that, even in the case of an extremely high tax credit, the equilibrium level of rehabilitation for a new structure, q_{02}^*, is quite low.

For mid-life structures, the marginal revenue curve is given by MR_1. Here again, the value of MR_1 is such that no mid-life structure would be rehabilitated under a tax scenario of zero tax credit. However, under a moderate tax-credit regime represented by the marginal cost curve MC_1, rehabilitation would take place up to the point q_{11}^*. It can also be seen that a deeper tax credit results in rehabilitation at a higher equilibrium level of rehabilitation, i.e., at q_{12}^* rather than q_{11}^*.

With regard to older structures, the curve in Figure 1 labeled MR_2 shows that, in the absence of a tax credit, it is profitable to rehabilitate older structures up to the level q_{20}^*. Note that the result of increasing the tax credit in this case is simply to raise the level of rehabilitation expenditures. With a moderate tax credit, for example, rehabilitation will occur up to the point q_{21}^*. Meanwhile, the presence of an extreme tax credit serves to increase the equilibrium level of rehabilitation to q_{22}^*.

The second reason why low-income housing tax credits work well has to do with size. The private rental housing market in the US is large in comparison with that of most European countries. The contrast with the UK is especially noteworthy. The size of the market makes possible investment by large US institutional investors (including publicly traded property companies) looking to underwrite large-scale projects. The same cannot be said for most European countries (including the UK). Consequently, the risks associated with private rental housing development and redevelopment in most European countries and in the UK tend to be narrowly shared. But it is only as the risks become more widely shared will the average return on redevelopment begin to fall. In terms of the above analysis, this generally means that most European countries (including the UK) face a larger marginal cost curve MC_0, holding all else constant.

A concern with the use of low-income housing tax credits (in the US and elsewhere) is the issue of slippage. To illustrate, in the simple case where there are just the three structures shown in Figure 1, and where there is a moderate tax credit on all rehabilitation expenditures, the proportion of the tax-credit investment spending (in physical units) that is spending that would have been invested otherwise (slippage, or deadweight loss) is $q_{20}^*/(q_{21}^* + q_{11}^*)$. In the high tax credit case, the degree of slippage is $q_{20}^*/(q_{22}^* + q_{12}^* + q_{02}^*)$. Since $q_{20}^*/(q_{22}^* + q_{12}^* + q_{02}^*) < q_{20}^*/(q_{21}^* + q_{11}^*)$, or equivalently, it is suggested that tax-credit-induced investment spending increases as the tax credit increases, all else held constant.

The above analysis can easily be extended to the case of new development. The decision to build new occurs when the marginal revenue, MR, from new development is expected to be greater than the marginal cost, MC. Here, marginal revenue consists of the expected rental revenues (not the incremental rental revenues) plus the sales price (not the incremental price) at reversion, discounted at the appropriate discount rate. Marginal costs include the costs of development (including both hard and soft costs), again discounted at the appropriate discount rate. Further, assume that a moderate tax credit at rate α_1 is allowed on development costs. As in Figure 1, this would have the effect of lowering the marginal cost curve from MC_0 to MC_1. As a result, construction spending (in physical units) would increase from q_{20}^* to q_{21}^*. In this case, the proportion of construction spending that would have been invested otherwise is q_{20}^*/q_{21}^*. This amount will obviously vary from metropolitan area to metropolitan area (and from country to country) depending on the positions of the marginal revenue, MR, and marginal cost, MC_0, curves.

ANNEX 2b: TAX RELIEF FOR CONSTRUCTION OF AFFORDABLE HOUSING: SOME PRACTICAL ISSUES

The purpose of the tax relief would be to enable housing to be supplied at sub-market rents or house prices to households that could not afford full market prices, but could nevertheless afford more than the rents charged by housing associations. One way of confining access to dwellings provided by the tax credit would be a maximum income limit. Income limits for access to local authority of housing association dwellings have never been formally used in Britain, though they have been used in the USA and Germany. An income limit would in principle be straightforward to administer, but would have to be varied geographically. Incomes sufficient for paying market prices or rents in a low-price area would be too low in a high price area. The geography of house prices is complex, with pockets of high prices in low-income areas. A balance would have to be struck between avoiding undue complexity and recognising the way in which ability to pay market prices and rents varies from area to area. Mortgage outgoings in relation to house prices depend on interest rates, so the income limit would have to set with an eye to a likely range of interest rates. Precision would be unattainable.

The income limits would apply in the first instance when the dwelling was sold, or let for the first time. With sales, any future changes in purchasers' income would be of no relevance to the original investors. With lettings there would be a question about what to do if individual tenants' incomes rose above the maximum. This issue has not thus far arisen in Britain, because neither local-authority nor housing-association tenancies have been subject to maximum income limits. But in Germany tenants of subsidised rented dwellings whose incomes rise above the maximum limits are subject to a surcharge on their rent. In the USA, either the resident pays 'excess rent' or, in cases of very high rises in income, the tenancy can be terminated. Neither would seem attractive in British circumstances.

Upper income limits are a familiar feature of subsidy and tax relief schemes in other countries. But the structure of housing benefit in Britain, with the benefit meeting 100% of the rent at the margin, raises the question of a minimum income or other restriction to prevent the dwellings from being rented by households with low incomes with most of the rent paid by housing benefit. That would not be the purpose of rented dwellings provided using tax credits, which would be for households that could afford more than housing-association rents but not full market rents. To restrict the dwellings to the category of households for which they were intended, one method might be a minimum income limit or procedures to make the rents of these dwellings ineligible for housing benefit. Making the rents ineligible for housing benefit could however result in hardship for tenants who lost their jobs, or whose marriages or partnerships broke down, or who for other reasons ceased to have an income sufficient to pay the rent. Probably preferable would be for prospective new tenants to be required to show that they could afford the rent from their own funds. That is very commonly the practice of private landlords and their managing agents.

With maximum income limits there is the further question of what to do if too few households with incomes below the maximum limit apply for tenancies. The answer

would have to be to let to households above the limit rather than leave the dwellings standing empty. Safeguards would be needed, because to let to households that could afford market rents would obviously be to the advantage of the developer. There might be a requirement to advertise the tenancies; or a more formal alternative might be something on the lines of practice in Germany where the landlord of subsidised rented dwellings who claims that he cannot find enough tenants with incomes within the income limit must notify the local authority housing office, which must then produce potential tenants from its housing list. If it cannot, then the landlord can let to any tenant he wishes, irrespective of maximum income limits.

These issues do not arise with dwellings built for sale and sold, because once the dwelling is sold, the housing company's interest is limited to using the sale proceeds to produce a cash flow out of which to pay the interest due to investors; it has no further interest in the dwelling itself. Important for value for money, however, is to ensure that the buyers cannot quickly resell on the open market and pocket the difference between the market value and the much lower price paid when the dwelling was bought. A way to do this would be to impose a legal charge on the dwelling (in the Land Registry's Charges Register) that on sale within a specified term of years a sum would be payable equal to the difference between the market value of the dwelling at the time of first sale and the submarket price for which it was actually sold, or a proportion of it. The amount payable would presumably be indexed, either to the RPI or house prices. The payment would be made to the Exchequer, as a form of "clawback" or recapture of the tax relief. The amount of repayment could be tapered, for instance the full amount if the dwelling were resold less than five years after purchase, and then 90, 80, 60, 40 or 20%, and then nil after ten years. Needless to say, these figures are only examples. If there were any uncertainties about whether such charges could be imposed under the present law of charges on land, they could be dealt with in the primary legislation setting up the scheme. Special provisions (too technical to discuss here) would be needed about liabilities of mortgagees in possession so as to make dwellings subject to the proposed charge acceptable to mortgage lenders as security for loans.

A form of leasehold could be applied to ensure that dwellings sold originally at sub-market prices to households within the income limits continued to be occupied by households within those limits after successive resales. The original developer (or its successor in title) would be the ground landlord, and its consent would be required to assigning the lease. Consent could be withheld if the purchaser's income was above the income limit. Whether such a system would be acceptable to prospective house purchasers (and mortgage lenders) is uncertain. So, perhaps, is whether the law of leasehold enfranchisement would allow home owners to "escape".

Recapture of tax relief given in respect of dwellings for letting at sub-market rents would require a different procedure. It would apply where a new letting was made within a specified period of time to a household whose income was above the limit. The length of this period is for consideration. Under the Low Income Household Tax Credit (LIHTC) scheme in the USA, the period within which there is a liability to recapture of the tax credit is 15 years. Letting within the clawback period to a tenant with income over the limit would result in an obligation to repay all or part of the tax relief. One way of determining the amount to be clawed back would be pro-rata to the number of years remaining of the clawback period. If, for example, this period were

15 years and the dwelling was re-let to a tenant with income above the limit after five years, 10/15 (i.e., 2/3) of the amount of tax relief would be payable to the Exchequer. The amount would probably be indexed, as with the sum payable for early resale. A possible refinement would be to allow part of the tax relief recaptured to be reclaimed if the dwelling were again let to households within the income limit. If, for instance, the dwelling were re-let after five years to a tenant with income above the limit and clawback of tax relief incurred, but then five years later re-let to a new tenant with income below the limit, a pro-rata part of the amount clawed back could be reclaimed.

With renting there is nothing analogous to registering a legal charge with the Land Registry to initiate a clawback of all or part of difference between market value at the time of the original sale and the price paid. A different procedure would therefore be required for initiating a clawback if a dwelling were re-let to a tenant with an income above the limit. The original developer or its successors in title could be obliged to notify the Inland Revenue (because tax relief is involved) of all re-lettings to new tenants. To avoid initiating the clawback procedure the company would have to provide a certificate stating that the new tenant's income was within the limit. What procedures the company would have to follow to assess the tenant's income would be part of the subordinate legislation setting up the scheme.

Tension between value for money and protecting public funds

In a scheme such as that outlined in this paper there is an inherent tension between offering sufficient incentives to private enterprise to operate the scheme and provide the houses, and ensuring value for money by ensuring that the houses are sold or rented to the households for whom they are intended ("targeting") and that the selling prices or rents are reasonable in relation to costs and the amount of the tax relief. What from one standpoint might appear bureaucratic and off-putting to developers could well appear from another point of view essential procedures for ensuring value for money from public funds.

Four key aspects can be distinguished:

(a) The maximum income limits for tenants and purchasers;
(b) Procedures to ensure that lettings and sales are made only to households that qualify within those limits;
(c) The amount of tax relief; and
(d) Formulas for determining rents or selling prices as a function of costs and the amount of tax relief.

Of these (a) and (c) are policy matters; but they interlock in that the upper limit for income must be high enough for there to be households within it that can afford the rents and prices, even if they are at sub-market levels. Regarding issue (b), procedures to ensure that the tenants or purchasers have incomes within the maximum limits, and that new tenants have sufficient means to afford the rents without calling on housing benefit, do not raise issues of principle: the question is one of how thorough the developer would be required to be. Mortgage lenders assess the incomes of would-be borrowers as a matter of ordinary business, so a procedure on the lines of that followed by mortgage lenders would not seem oppressive or overly bureaucratic.

The question is what else, if anything, would be required, and what external checks would be made on the accuracy of income testing. Mortgage lenders have a financial interest in assessing potential borrowers' incomes accurately—but their interest is in ensuring that income is *high*, not low. And the developer would not be at financial risk from selling or letting to households with incomes above the limit, so for targeting and the protection of public funds some checking would be inevitable. The question would be how much. In the US, state authorities administering the LIHTC have developed a detailed income-verification process that is used to determine household eligibility for the dwellings.

More important, however, would be how to determine rents or selling prices in relation to costs and the amount of tax relief. Since the dwellings would be sold or let at sub-market prices or rents, market forces could not provide the answers; administrative methods would be required. What rate of return would have to be available to attract developers (or others) is hard to assess. So too is the rate of interest that would have to be offered to investors when their return comes partly from tax relief and partly from net interest paid by the housing company. For building for sale at sub-market rents the risk would seem to be the usual developers' risk of cost over-runs and changes in market conditions making the dwellings harder to sell. But once the dwellings are sold their risks are at an end (apart, possibly, from claims about dwelling defects).

With renting, in contrast, the relationship is for the long term, with risks of voids and bad debts, unforeseen needs for major repairs, and changes in running costs (maintenance and management). A rent set at the first letting to cover these costs would have to be reviewed in future years to take account of changes in costs. A 'cost plus' provision for increases in management and maintenance costs would probably not be acceptable to tenants: there would be scope for most of the disputes that are well known in connection with service charges in leasehold flats. Increases in running costs, or substantial costs for major repairs, could be an important risk that would have to be provided for if developers or others were to be persuaded to invest. With an unfamiliar system the return required to attract investment might appear too high with hindsight; but that is an aspect of the tension between getting results and protection of public funds.

Prior approval of individual projects would be necessary to enable capital to be raised from investors on terms of which tax credits are an essential element. Part of the process of prior approval would be a business plan to specify expected costs and proposed selling prices and rents; this is typical in the US. In setting out the volume of supporting evidence required, the rigour with which the plan would be examined and clarifications sought, a balance would need to be struck between making the scheme attractive to investors and protecting public funds. A thorough examination of the business plan would take time and could lead to complaint about "bureaucratic delays". On the other hand, a National Audit Office investigation that concluded that inadequate controls had allowed housing companies to make profits that were disproportionate to the housing provided would bring this method of providing affordable housing into disrepute. There is an analogy with the US "Section 235" scheme, which provided supply-side subsidies for owner-occupied housing for low income households. These households made means-tested payments towards mortgage costs, the balance of which was recovered from the US government

(Department of Housing and Urban Development – HUD) as subsidy. The amount paid by the purchaser was a function of income only, unaffected by costs; so at the margin mortgage costs (a function of capital costs) were paid by HUD. Over-stating capital costs thus increased the amount that could be claimed as subsidy. Instances of this came to light in the course of audits, and the scheme was brought into disrepute. It was effectively discontinued in 1973, only five years after passage of the legislation that set it up (Housing Act 1968).

The affordable housing scheme outlined in this paper is very different from the US "Section 235" scheme and would not be at risk in the same way. It illustrates, though, the inherent tension between, on the one hand, getting affordable dwellings built in sufficient numbers, and on the other strict procedures to ensure effective targeting and value for public money. A key policy question would be how relaxed to be about targeting and, at the margin, value for money, in order to get enough affordable houses built. Market-specific financial modeling could provide insights into how to define the programme boundaries that would need to be specified in statue.

ANNEX 2c: FURTHER DETAIL OF THE US LOW-INCOME HOUSING TAX CREDIT

The following description is taken from McClure (2000):

> "Annual credits are granted against the costs of the buildings, site improvements, and equipment, which comprise most development expenses other than land cost. Credits are in the amount of about 9 percent of the depreciable costs of the new construction or substantial rehabilitation performed and about 4 percent of the acquisition cost. These amounts are approximate and are adjusted monthly by the government to maintain the present value of the 10 years of credits at 70 percent of the cost of new construction or substantial rehabilitation and 30 percent of the acquisition cost. The present value is calculated using a discount rate determined by the U.S. Department of the Treasury.
> (…)
>
> Rents on the units against which credits are claimed must be determined according to affordability standard set for the metropolitan area. These rents are based on what a family could afford if it paid 30 percent of its income for housing, including contract rent plus tenant-paid utility expenses. These rents vary with the number of bedrooms in the unit. What is important to note is that the allowed rents are based on metropolitan household income and expense criteria, not the income r utility expenses of the actual tenant residing in the unit. As a result, the program does not guarantee that an individual tenant household will not have to pay more than 30 percent of its income for rent, only that the rent will be held down to a level considered affordable by standards within the metropolitan area.
> (…)
>
> While the LIHTC program has many intricacies, its implementation tends to follow a relatively standard pattern. Within each state, the administrative agency announces a round of funding. Various developers, both for-profit and nonprofit entities, prepare proposals requesting tax credits for some or all of the units. The state administrative agency selects the most meritorious developments on the basis of published criteria and awards them credits.
>
> If a development receives an award, the developer works to arrange the necessary financing to cover construction costs and to arrange the permanent financing to pay off construction loans when the project is completed. Debt financing is placed with one or more lenders (private sector lenders, public sector lenders, or both). At the same time, the developer seeks equity financing for the project. Usually, this is secured by bringing investors into a limited partnership that will own the property. Investors will make periodic cash contributions through the construction period and, frequently, through the early years of project operation as well. Contributions are given in exchange for the tax credits received over the first 10 years of operation. In addition, the investors must pay for any or all of the other benefits of ownership, including any cash flow that may be experienced, any surplus depreciation generated by the development, and any residual value the property may have when it is sold." (McClure, pp. 92 – 94)

There are approximately 20 large syndicators that specialise in packaging LIHTC investments and marketing them to investors, who are mostly corporate. "Most developers sell a substantial portion, typically 99%, of the equity ownership of credit developments to equity investors—to syndicators or big corporations, or occasionally to groups of local investors." (Hobart & Schwarz, p. 12) The market was originally dominated by private investors investing in retail funds, but is now almost entirely made up of corporate investors.

Developers normally do not rely on the LIHTC alone to provide affordable housing, but layer it with other subsidies. This occurs because competition for the credits is so strong that states can insist on affordability levels much lower than the legal minima. "Where rents in LIHTC units are low and where construction and development costs are high (a combination found in most inner-city markets), the 9 percent credit rate is not enough to make a project financially feasible." (McClure p. 112) Most LIHTC-funded projects required additional federal or state funding; some had five or more separate funding sources—on average, 46% of total development cost was covered by LIHTC equity, 38% by a first mortgage, and 16% by gap financing. (Cummings & DiPasquale p. 258). Even so, the program is used in approximately 35% of newly constructed rental units nationally (Hobart & Schwarz, p. 5); the percentage of newly constructed *affordable* rental units is not given, but is clearly much higher.

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Contributions from associates

We gratefully acknowledge the assistance of :

Jens Lunde, Denmark
Martti Kojanen and Timo Tahtinen, Finland
Hugo Priemus, Netherlands
Jim Shilling, Cambridge University (re USA)
Mark Stephens, University of Glasgow
Horst Tomann, Germany
Bengt Turner, Sweden
Judy Yates, Australia

We also thank all the participants in the U.S./U.K. Tax Credit Seminar, held 11-13 February 2002 in Liverpool, and particularly

Andrea Titterington
George Bull
David Smith