

PO-CH/NL/0162 PTA

Part A

SECRET

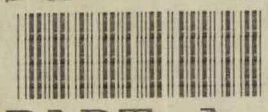
(Circulate under cover and
notify REGISTRY of movement)

Begins: 7/4/88

Ends: 19/10/88



PO -CH /NL/0162



PART A

Chancellor's (Lawson) Papers:

HOUSE PRICES AND THE
POSSIBLE TAXATION OF
HOUSING

Disposal Directions: 25 years

Phillips

4/9/895

NL/0162

PO -CH

PART A



Sir TB

Mudbauer still in there
@ the time of Chamber,
effectively argued the case
for no re-introduction of
Schedule A. I put it
to one side, since I had
no intention of doing that!
But I do now have a
reply, & wd be grateful
for your evaluation of the
case, which I wd then make
use of in my reply.

M.

UNCLASSIFIED



FROM: J M G TAYLOR

DATE: 7 April 1988

*BF/24/4 → TL
CHASE AGAIN*

bf. 20/4

bf 29/4

SIR T BURNS

*BTF
984
✓ J M G T*

*Pse ask S King
When we might get
a reply.*

*Pse chase
Mr King again*

*C. Riley for
Comments*

NATIONAL TAX ON IMPUTED RENTS: PAPER BY JOHN MUELLBAUER

... Muellbauer sent the enclosed paper to the Chancellor at the time of Chevening. The paper, effectively, argues the case for the reintroduction of Schedule A.

2. The Chancellor put this paper to one side, since he had no intention of doing this! But he feels that he does owe Muellbauer a reply. He would be grateful for your evaluation of Muellbauer's case, which he could then make use of in his reply.

JG

J M G TAYLOR

John Muellbauer,*

January 1988

PART 1

The Government now has a golden opportunity to broaden the Inland Revenue's tax base. The opportunity stems from its own proposals to abolish domestic rates, the general desire for tax reform and the buoyancy of tax revenues. The Inland Revenue's income tax base should be widened by including the imputed rent from privately owned dwellings in the definition of taxable income. This would make it possible to achieve substantial but non-inflationary reductions in the rates of income tax. Imputed rents should be based on capital values updated annually using information which the Inland Revenue already collects from close to a million housing transactions a year as a by-product of the administration of stamp duty. The economic case for such a reform in terms of improvements in economic efficiency, avoiding inflation and achieving some fairness is overwhelming. Moreover, as a way of taxing property it is unlike existing domestic rates in not bearing too harshly on owner occupiers with low or moderate incomes.

Because of the arguments against the Government's proposed community charge or poll tax, I shall consider how the main elements of a national tax on imputed rents could be achieved if the poll tax were replaced by a local income tax and also how the existing system of domestic rates would need

to be reformed were it to be retained. There are six main strands to the economic case in favour of a national tax on imputed rents which I shall now outline.

The first is the classic argument that taxes should be related to real spending power. Someone who owns a dwelling has a greater real spending power than a renter with the same employment and investment income because the owner occupier does not pay rent. Similarly, an owner occupier situated next to a central city park has a greater real spending power than an otherwise similar one living next to a suburban factory: the former has lower travel costs and greater amenity benefits. Imputed rents based on the market value of property reflect this source of real spending power and should be taxed along with employment and investment income.

The second argument is that a large element of property values derives ultimately from public expenditure, whether it is the building of the M25 or the provision of good schools, or from public legislation. Taxing imputed rents is an important way of recouping these expenditures and of assuring a certain amount of fairness in the impact of legislation. The most important example of the latter is our system of planning controls. As well as providing general public goods of environmental and aesthetic quality and one means of avoiding some of the harmful effects of congestion, it enormously enhances the property values of those, who by fortune of position, already obtain disproportionate direct benefits from such legislation.

The third argument is related to the second. A national tax on imputed rents is a kind of congestion tax because it

*The author is Official Fellow in Applied Economics at Nuffield College, Oxford.

bears particularly heavily in locations where the pressures generated by high business activity are greatest. As a general rule, it is unwise to rely on often cumbersome physical planning controls alone to prevent congestion. The property market is an informative and sensitive indicator of economic pressure and offers an efficient means, through taxes, of generating the right incentives. The proposed tax would do much to compensate for current regional imbalances - the North - South divide - and reduce the need for specific subsidies and other interventions in the deprived areas. The Government has implicitly recognised the importance of this argument by going for a uniform national business rate.

One of the unfortunate by-products, akin to congestion, of the regionally imbalanced economic pressures in the U.K. is inflation. This yields part of the fourth argument : a tax on annually updated imputed rents is a kind of inflation tax. It is a basic fact of labour markets that an increase in labour demand generates more upward wage pressure than the downward pressure from a decrease of the same size. Labour demand in the South East has undoubtedly increased relative to that in the rest of the economy in the 1980's. The result has been national wage inflation greater than would have been experienced if labour demand had been less regionally biased. One way of reducing this source of inflationary pressure would be to tax employment where it has been growing most rapidly and subsidise it where it has been falling most. But a national tax on annually updated imputed rents of dwellings achieves much the same effect more simply since property market values are fuelled by employment growth.

There is another set of reasons why a national tax on annually updated imputed rents is a kind of inflation tax. Owner occupied housing has been the inflation hedge par excellence in the post-War U.K. Whether the source of house price increases is increases in earnings or in financial liquidity, taxing annually updated imputed rents has two effects. First, it raises taxes and so reduces household demands and liquidity at the very time these are contributing to inflationary pressure. It also has a automatic stabilising effect on the economy in the opposite direction at times of recession. Second, it reduces the incentives on decision takers, whether trade unionists, businessmen, civil servants or politicians to take inflationary risks because it reduces the degree to which they personally stand to gain from or at least insure themselves against inflation. Some of the same arguments are used in Latin America or Israel to explain why partial de-indexing of incomes is necessary to bring hyperinflations under control.

A fifth reason for taxing imputed rents is to avoid distorting the investment decisions of entrepreneurs. With the tax they are more likely to re-invest profits in their enterprise rather than to divert them into owner-occupied housing.

PART 2

So far, the arguments have been quite general, applicable to any economy. Let me turn now to some specific features of U.K. housing markets and their interaction with labour markets. The drastic decline over the last 30 years in the private rented market (and the rules by which council tenancies are allocated) are widely believed to be a major limitation on the mobility of the U.K. workforce. Low mobility is an important aspect of labour market inflexibility resulting in mismatch of jobs and people to fill them, inflationary pressure and restrictions on the ability of companies to meet demand. Though the Government is pledged to revitalize the market in rented accommodation, the ratio of house prices to earnings in 1988 which, in London and the rest of the South East is at the highest level since records began, makes this difficult. Market rents would therefore greatly exceed 'fair' or controlled rents. A national imputed rent tax would create an incentive for households, especially in the pressure areas where house prices are highest, to switch expenditure out of housing into other things. This would release accommodation for the rented sector and bring down house prices and so market rents relative to earnings, especially in the areas of pressure. The market in rented housing would then have a much better chance of flourishing.

Let me turn now to issues thrown up by my own research on the interaction of housing and labour markets. I find that, evidence spanning the last 30 years, regional house price differences relative to earnings have a major influence with

an average delay of about 2 years on average wages in the U.K. There is a similar effect on the level of unfilled vacancies relative to unemployment which is a measure of mismatch between jobs and people. There is also a smaller positive effect of average house prices on wages with a similar delay while, as the proportion of owner-occupier has increased so, other things being equal, wage pressure has eased. The latter finding is consistent with survey evidence indicating that inter-regional mobility is greater for owner-occupiers than for those in council housing or in controlled private rented accommodation. My finding about the effect of regional house price differences, now at an all time high, and implying intensifying wage pressure into 1988-9, has generated controversy among economists. Some regard the house price differences as purely a symptom of differences in regional labour demand pressures which they see as the underlying cause of aggregate wage pressure. These economists should accept my fourth argument above for a national tax on imputed rents.

However, there is evidence that the mechanism by which regional house price differences are related to wage pressure is more complicated. One element is probably the regional divergence in increases in the cost of living. In other words, if U.K. housing costs increase by a given percentage, this increase is more inflationary in aggregate if it falls disproportionately in areas where labour markets are tight and employees have more influence over the outcome of wage bargains. The other element I believe to be the direct effect on labour ^{and job} mobility of differences in house prices relative to

earnings. I believe that there is an important extrapolative element in people's expectations of house prices. Thus, in the South East, the evidence of 6 years of more rapid increases than elsewhere fuels the expectation that this trend will continue. This makes job creation outside the South East harder because managers and other employers in the South East are reluctant to give up the higher prospective capital gains in the South East by moving out. In turn, this fuels the further divergence of house prices in the South East.

Ultimately, the bubble must burst and regional job creation then becomes more balanced but not before both house prices and regional economic imbalances have overshot with serious consequences of inflation and economic dislocation. I believe that a national tax on regularly updated imputed rents would cause a major reduction in such overshoots.

There is, of course, another aspect to labour mobility. It seems obvious that an increase in house prices relative to earnings in the South East compared with elsewhere makes it harder for an owner-occupier outside the South East to move into the South East even if his or her mortgage offer were linked to prospective rather than past earnings. But there is a difficulty about cause and effect. Is the increased house price difference merely the effect of higher labour demand in the South East on a fixed housing stock or is there more to it? The first point to make is that the effective housing stock in the South East is not fixed. As argued above, an imputed rent tax would reduce demand by existing owner-occupiers for space and release it to potential newcomers. It is likely that, during house price booms, speculative

hoarders withdraw housing from the market in anticipation of further house price increases, thus temporarily restricting supply and fuelling price increases. An annually updated imputed rent tax would make hoarding more expensive and so improve the supply of housing at times of peak demand. Second, my empirical evidence suggests that national macroeconomic factors such as increased financial liquidity have fuelled the widening regional house price differences of the last 6 years and thus play an independent role in reducing inter-regional mobility below and increasing wage inflation above what it otherwise would have been. A national imputed rent tax would have scaled down the widening house price differences from this source and would thus have enhanced mobility and reduced wage inflation.

There are some who will deny the possibility of extrapolative expectations, of overshooting and of speculative hoarding and who will therefore discount these last points. But even for them, the earlier case I have made for a national tax on imputed rents should be overwhelming.

As far as current reform proposals of local authority finance go, there seem three possibilities. First, the Government's proposals will go ahead: the Poll Tax or a banded earnings related replacement will be introduced and domestic rates abandoned. These would be the ideal circumstances for expanding the national income tax base to include imputed rents. A second possibility is that the Poll Tax is abandoned and replaced by a local income tax. The base for the latter should include imputed rents and it would be desirable to legislate upper and limits on the tax

rates local authorities would be allowed to charge on top of the Inland Revenue's own rate. A third possibility is that a domestic rating system is retained. If so, it would be highly desirable to have annual revaluations of property which could use the same Inland Revenue data source mentioned above. It would also be important to legislate upper and lower limits on rates poundages to prevent the vicious circles of high rates and economic decay which are now possible. One defect this system would still have is lack of integration with income tax so that some owner occupiers with low incomes would pay rather high domestic rates. A possible way of meeting this problem is to extend rates rebates to certain classes of households with incomes below or near tax thresholds. The Government's worries about local accountability can be met by limiting rate rebates, like poll tax rebates, to 80% of the regular rate demand.

There is now a greater opportunity and a greater need for these ideas on tax reform to be implemented than at any time in recent memory. If Mrs Thatcher is unbendingly insistent both on tax reductions and on giving absolute priority to the superficial and short term self interest of house owners in the South East, her credibility as an inflation fighter and a cautious economic manager will soon be in serious jeopardy. If, however, she were to approve of the reform I have outlined it would become reasonable not only to reduce tax rates but, with the new tax in place, to give way to her apparent desire to raise the ceiling on mortgage interest tax relief from the present £30,000.

990 97

FROM: C J RILEY
DATE: 3 MAY 1988

RILEY
NATIONAL
TAX ON
IMPUTED
RENTS
3/5

- 1. SIR T BURNS
- 2. CHANCELLOR

J

- cc Chief Secretary
- Financial Secretary
- Economic Secretary
- Sir P Middleton
- Sir G Littler
- Mr Byatt
- Mr Scholar
- Mr Culpin
- Mr Odling-Smee
- Miss Sinclair
- Mr S J Davies
- Mr Meyrick
- Mrs Holmans
- Mr Ford

There are

Q. Terry would do structural change marked on draft letter (so I have added some softening) AA

NATIONAL TAX ON IMPUTED RENTS: PAPER BY JOHN MUELLBAUER

You asked for an evaluation of Muellbauer's case for a national tax on imputed rents (Mr Taylor's minute of 7 April to Sir T Burns). I attach a short note and a draft letter to Professor Muellbauer.

2. The conclusion of the note is essentially that the case made by Muellbauer for extending income tax to imputed rents on owner occupied housing is not altogether persuasive. There is an economic case to be made, in terms of broadening the tax base and lowering tax rates, but Muellbauer puts considerable stress on inflation and labour market arguments which seem at best overstated and at worst invalid. Certainly there would be very considerable practical and political difficulties involved in going down this road.

CJR

C J RILEY

MUELLBAUER ON TAXING IMPUTED RENTS

Muellbauer's Proposal

Muellbauer proposes a tax on imputed rent from privately owned dwellings. Imputed rent would be "based on capital values updated annually using information which the Inland Revenue already collects from close to a million housing transactions a year as a by-product of the administration of stamp duty." This would be added to the income tax base and taxed at income tax rates. The revenue raised from this broadening of the base could be used to lower income tax rates.

2. Muellbauer argues that this would have a large number of advantages:

- i) It would compress the regional dispersion of house prices and reduce barriers to labour mobility, thus improving the supply side of the economy;
- ii) It would act as an inflation tax. The annual updating of the tax base (ie house prices) would automatically smooth out inflationary pressures, raising taxes at times when rising labour demand and house prices were contributing to inflationary pressure and lowering them in times of recession. Overall inflationary pressures would be reduced by improvements in the efficiency of the labour market.
- iii) It would encourage more efficient utilisation of the housing stock and reduce the tax privilege enjoyed by owner occupied housing. The latter would benefit the private rented sector.
- iv) It would act as a "congestion tax" reducing the need to rely solely on planning controls to prevent congestion. It would also ensure that those who benefitted from planning controls (eg as a result of overlooking a green belt) paid tax on this benefit.
- v) Unlike domestic rates, it would not bear unduly harshly on low income owner occupiers.

Economic Arguments

3. Extending income tax to imputed rent would amount to a broadening of the tax base, permitting a reduction in tax rates. This would make for a less distortionary tax system and increased economic efficiency. Work incentives would tend to be improved. Distortions in the savings/investment market, and in particular the bias towards housing, would be reduced. But Muellbauer does not make much of this rather general argument, preferring to concentrate on more specific arguments on labour and housing markets.

4. Muellbauer is right to argue that, by comparison with the Community Charge, his proposal would reduce the privileged position enjoyed by owner occupied housing. Any additional tax on owner occupation would have this effect. In terms of its effects on the housing market in aggregate it would amount to reimposing a system of domestic rates, but at a different rate and more closely based on capital values than under the present system. The Government would have to consider whether this would be consistent with its commitment to encourage owner occupation. But as Muellbauer notes, it would be consistent with the Government's desire to encourage the private rented sector and improve the efficiency of the housing market.

5. ~~However~~ although such a tax would probably reduce the regional dispersion of house prices it is not clear that it would reduce the dispersion of total housing costs - including tax payments. For this to occur it would be necessary for the net increase in tax on owner-occupiers to be wholly offset by lower house prices. In practice we think this is rather unlikely; the dispersion of total housing costs could therefore be increased. There might ^{thus} be little if any gain in terms of labour mobility.

6. The claim that such a tax would damp down and smooth out inflationary pressure is also open to doubt. Inflation is ultimately determined by the stance of macro economic policy. And, as already noted, the labour market gains may be minimal, if they exist at all. There are factors which could lead to an amplification of inflationary cycles. Fluctuations in housing costs, and hence pressure on wages, could be exacerbated by the tax; and the existence of lags could make matters worse. House price

inflation in a particular year would not be reflected in the tax base until the following year, and there would be a further delay before the tax was payable. By the time the "stabilising" effect on disposable income came through, the inflationary pressure may have abated.

7. Thus the case for extending income tax to imputed rents on inflation and labour market grounds is not convincing. The real argument is a more general one to do with economic efficiency - broadening the tax base and reducing marginal rates.

Practical and political arguments

8. Extending income tax to imputed rents would be politically very difficult. Although it would make for a more neutral tax system, taxing imputed rent would be regarded, as Schedule A was, as an unfair imposition. Some would argue that imputed income does not confer taxable capacity in the form of increased cash flow; Muellbauer notes that the disposable income of owner-occupiers benefits from the fact that they do not have to pay rent, and they obtain tax relief on their mortgage interest payments. The economic arguments would do little to defuse the political difficulties.

9. It is relevant that a number of countries have ceased to tax owner-occupiers on imputed rental income. France abandoned this approach in 1970, and Germany in the 1987 tax reform. The Netherlands still has such a tax, but in a very diminished form, with the tax charged according to a formula which bears no relationship to actual rental values.

10. Although described as a tax on imputed rent, the proposal is in effect a tax on the capital value of owner-occupied houses. The work done on capital values in the context of reforming the rates suggests that such an approach would not be impossible. But the administration would have to be worked out. The method of valuation is left extremely vague in Muellbauer's proposal, but he suggests that one could index up from the original purchase price of a house using data based on the administration of stamp duty.

11. We have not consulted the Revenue to check whether Muellbauer's approach would be feasible. Clearly if stamp duty were to be abolished some other means would have to be found for determining capital values - perhaps one could use indices based on mortgage transactions. Whilst it is conceivable that a workable procedure could be devised, many difficulties would almost certainly remain. Given intra-regional variations, and variations in price increases for different types of houses and initial price levels, there may well be difficulty in establishing the chosen method as an acceptable and fair method of assessing tax liability.

12. Muellbauer leaves a number of other questions unanswered. He offers no indication of the likely yield of the tax, or what change in income tax rates it would permit. He makes no quantitative assessment of the differential effect on different regions, noting only that the tax "would do much to compensate for current regional imbalances". He does not consider the question of maintenance expenditure and how this should be treated for tax purposes; there is a case for making such expenditure tax deductible, as it was under Schedule A, but this would pose considerable administrative problems. Details of how the tax would be applied to rented property are skated over.

Conclusion

13. The Muellbauer proposal is subject to a number of difficulties. There is an economic case for a tax on housing, perhaps a tax on imputed rent, but Muellbauer does not make it very convincingly. The specific arguments he stresses - for example on labour mobility and inflation - are overstated and not very persuasive. The practical and political difficulties of implementing his proposal would be immense.

DRAFT LETTER

Please type for signature

DRAFT LETTER FROM CHANCELLOR TO PROFESSOR MUELLBAUER

(I think Nuffield College)
(Joseph)

I apologise for not replying sooner.
I read it carefully before the Budget in Feb.

Thank you for sending me a copy of your paper "Why we need a national tax on imputed rents". After reading it carefully I have to say that I ~~am~~ ^{was} not ~~entirely~~ persuaded by the case you are ~~making~~ ^{making}.

[2. I agree that there is an economic case to be made for extending income tax to imputed rent on owner occupied housing. I see the main argument in terms of broadening the tax base and lowering tax rates, so reducing the distortions arising from taxation and increasing economic efficiency. This has been an important objective of the Government's tax policy since 1979.

3. However I am less persuaded by the inflation and labour market arguments which you stress in order to justify your proposal. I am not convinced that there would be significant improvements in labour mobility and a dampening of inflationary pressures if income tax were to be extended in this way.]

4. Your proposal amounts in effect to the reintroduction of Schedule A, which was abolished in 1963. ^{25 years ago.} ~~Schedule A was very unpopular and there were many administrative difficulties; I believe that these difficulties remain equally valid in 1988.~~ ^{It is} no surprise that a number of ^{other} countries, including France and Germany, have ^{subsequently} moved away from this form of taxation.

While there is clearly a theoretical economic case for Sch. A it was an unpopular tax - one better left by

3. Moreover, [Take para 5 of paper]

N LAWSON

and soon these characteristics had small application

John Muellbauer,*

January 1988

PART 1

The Government now has a golden opportunity to broaden the Inland Revenue's tax base. The opportunity stems from its own proposals to abolish domestic rates, the general desire for tax reform and the buoyancy of tax revenues. The Inland Revenue's income tax base should be widened by including the imputed rent from privately owned dwellings in the definition of taxable income. This would make it possible to achieve substantial but non-inflationary reductions in the rates of income tax. Imputed rents should be based on capital values updated annually using information which the Inland Revenue already collects from close to a million housing transactions a year as a by-product of the administration of stamp duty. The economic case for such a reform in terms of improvements in economic efficiency, avoiding inflation and achieving some fairness is overwhelming. Moreover, as a way of taxing property it is unlike existing domestic rates in not bearing too harshly on owner occupiers with low or moderate incomes.

Because of the arguments against the Government's proposed community charge or poll tax, I shall consider how the main elements of a national tax on imputed rents could be achieved if the poll tax were replaced by a local income tax and also how the existing system of domestic rates would need

to be reformed were it to be retained. There are six main strands to the economic case in favour of a national tax on imputed rents which I shall now outline.

The first is the classic argument that taxes should be related to real spending power. Someone who owns a dwelling has a greater real spending power than a renter with the same employment and investment income because the owner occupier does not pay rent. Similarly, an owner occupier situated next to a central city park has a greater real spending power than an otherwise similar one living next to a suburban factory : the former has lower travel costs and greater amenity benefits. Imputed rents based on the market value of property reflect this source of real spending power and should be taxed along with employment and investment income.

The second argument is that a large element of property values derives ultimately from public expenditure, whether it is the building of the M25 or the provision of good schools, or from public legislation. Taxing imputed rents is an important way of recouping these expenditures and of assuring a certain amount of fairness in the impact of legislation. The most important example of the latter is our system of planning controls. As well as providing general public goods of environmental and aesthetic quality and one means of avoiding some of the harmful effects of congestion, it enormously enhances the property values of those, who by fortune of position, already obtain disproportionate direct benefits from such legislation.

The third argument is related to the second. A national tax on imputed rents is a kind of congestion tax because it

*The author is Official Fellow in Applied Economics at
Oxford College, Oxford.

bears particularly heavily in locations where the pressures generated by high business activity are greatest. As a general rule, it is unwise to rely on often cumbersome physical planning controls alone to prevent congestion. The property market is an informative and sensitive indicator of economic pressure and offers an efficient means, through taxes, of generating the right incentives. The proposed tax would do much to compensate for current regional imbalances - the North - South divide - and reduce the need for specific subsidies and other interventions in the deprived areas. The Government has implicitly recognised the importance of this argument by going for a uniform national business rate.

One of the unfortunate by-products, akin to congestion, of the regionally imbalanced economic pressures in the U.K. is inflation. This yields part of the fourth argument : a tax on annually updated imputed rents is a kind of inflation tax. It is a basic fact of labour markets that an increase in labour demand generates more upward wage pressure than the downward pressure from a decrease of the same size. Labour demand in the South East has undoubtedly increased relative to that in the rest of the economy in the 1980's. The result has been national wage inflation greater than would have been experienced if labour demand had been less regionally biased. One way of reducing this source of inflationary pressure would be to tax employment where it has been growing most rapidly and subsidise it where it has been falling most. But a national tax on annually updated imputed rents of dwellings achieves much the same effect more simply since property market values are fuelled by employment growth.

There is another set of reasons why a national tax on annually updated imputed rents is a kind of inflation tax. Owner occupied housing has been the inflation hedge par excellence in the post-War U.K. Whether the source of house price increases is increases in earnings or in financial liquidity, taxing annually updated imputed rents has two effects. First, it raises taxes and so reduces household demands and liquidity at the very time these are contributing to inflationary pressure. It also has a automatic stabilising effect on the economy in the opposite direction at times of recession. Second, it reduces the incentives on decision takers, whether trade unionists, businessmen, civil servants or politicians to take inflationary risks because it reduces the degree to which they personally stand to gain from or at least insure themselves against inflation. Some of the same arguments are used in Latin America or Israel to explain why partial de-indexing of incomes is necessary to bring hyperinflations under control.

A fifth reason for taxing imputed rents is to avoid distorting the investment decisions of entrepreneurs. With the tax they are more likely to re-invest profits in their enterprise rather than to divert them into owner-occupied housing.

PART 2

So far, the arguments have been quite general, applicable to any economy. Let me turn now to some specific features of U.K. housing markets and their interaction with labour markets. The drastic decline over the last 30 years in the private rented market (and the rules by which council tenancies are allocated) are widely believed to be a major limitation on the mobility of the U.K. workforce. Low mobility is an important aspect of labour market inflexibility resulting in mismatch of jobs and people to fill them, inflationary pressure and restrictions on the ability of companies to meet demand. Though the Government is pledged to revitalize the market in rented accommodation, the ratio of house prices to earnings in 1988 which, in London and the rest of the South East is at the highest level since records began, makes this difficult. Market rents would therefore greatly exceed 'fair' or controlled rents. A national imputed rent tax would create an incentive for households, especially in the pressure areas where house prices are highest, to switch expenditure out of housing into other things. This would release accommodation for the rented sector and bring down house prices and so market rents relative to earnings, especially in the areas of pressure. The market in rented housing would then have a much better chance of flourishing.

Let me turn now to issues thrown up by my own research on the interaction of housing and labour markets. I find that, on evidence spanning the last 30 years, regional house price differences relative to earnings have a major influence with

an average delay of about 2 years on average wages in the U.K. There is a similar effect on the level of unfilled vacancies relative to unemployment which is a measure of mismatch between jobs and people. There is also a smaller positive effect of average house prices on wages with a similar delay while, as the proportion of owner-occupier has increased so, other things being equal, wage pressure has eased. The latter finding is consistent with survey evidence indicating that inter-regional mobility is greater for owner-occupiers than for those in council housing or in controlled private rented accommodation. My finding about the effect of regional house price differences, now at an all time high, and implying intensifying wage pressure into 1988-9, has generated controversy among economists. Some regard the house price differences as purely a symptom of differences in regional labour demand pressures which they see as the underlying cause of aggregate wage pressure. These economists should accept my fourth argument above for a national tax on imputed rents.

However, there is evidence that the mechanism by which regional house price differences are related to wage pressure is more complicated. One element is probably the regional divergence in increases in the cost of living. In other words, if U.K. housing costs increase by a given percentage, this increase is more inflationary in aggregate if it falls disproportionately in areas where labour markets are tight and employees have more influence over the outcome of wage bargains. The other element I believe to be the direct effect on labour ^{and job} mobility of differences in house prices relative to

earnings. I believe that there is an important extrapolative element in people's expectations of house prices. Thus, in the South East, the evidence of 6 years of more rapid increases than elsewhere fuels the expectation that this trend will continue. This makes job creation outside the South East harder because managers and other employers in the South East are reluctant to give up the higher prospective capital gains in the South East by moving out. In turn, this fuels the further divergence of house prices in the South East. Ultimately, the bubble must burst and regional job creation then becomes more balanced but not before both house prices and regional economic imbalances have overshot with serious consequences of inflation and economic dislocation. I believe that a national tax on regularly updated imputed rents would cause a major reduction in such overshoots.

There is, of course, another aspect to labour mobility. It seems obvious that an increase in house prices relative to earnings in the South East compared with elsewhere makes it harder for an owner-occupier outside the South East to move into the South East even if his or her mortgage offer were linked to prospective rather than past earnings. But there is a difficulty about cause and effect. Is the increased house price difference merely the effect of higher labour demand in the South East on a fixed housing stock or is there more to it? The first point to make is that the effective housing stock in the South East is not fixed. As argued above, an imputed rent tax would reduce demand by existing owner occupiers for space and release it to potential newcomers. It is likely that, during house price booms, speculative

hoarders withdraw housing from the market in anticipation of further house price increases, thus temporarily restricting supply and fuelling price increases. An annually updated imputed rent tax would make hoarding more expensive and so improve the supply of housing at times of peak demand. Second, my empirical evidence suggests that national macroeconomic factors such as increased financial liquidity have fuelled the widening regional house price differences of the last 6 years and thus play an independent role in reducing inter-regional mobility below and increasing wage inflation above what it otherwise would have been. A national imputed rent tax would have scaled down the widening house price differences from this source and would thus have enhanced mobility and reduced wage inflation.

There are some who will deny the possibility of extrapolative expectations, of overshooting and of speculative hoarding and who will therefore discount these last points. But even for them, the earlier case I have made for a national tax on imputed rents should be overwhelming.

As far as current reform proposals of local authority finance go, there seem three possibilities. First, the Government's proposals will go ahead: the Poll Tax or a banded earnings related replacement will be introduced and domestic rates abandoned. These would be the ideal circumstances for expanding the national income tax base to include imputed rents. A second possibility is that the Poll Tax is abandoned and replaced by a local income tax. The base for the latter should include imputed rents and it would be desirable to legislate upper and limits on the tax

rates local authorities would be allowed to charge on top of the Inland Revenue's own rate. A third possibility is that a domestic rating system is retained. If so, it would be highly desirable to have annual revaluations of property which could use the same Inland Revenue data source mentioned above. It would also be important to legislate upper and lower limits on rates poundages to prevent the vicious circles of high rates and economic decay which are now possible. One defect this system would still have is lack of integration with income tax so that some owner occupiers with low incomes would pay rather high domestic rates. A possible way of meeting this problem is to extend rates rebates to certain classes of households with incomes below or near tax thresholds. The Government's worries about local accountability can be met by limiting rate rebates, like poll tax rebates, to 80% of the regular rate demand.

There is now a greater opportunity and a greater need for these ideas on tax reform to be implemented than at any time in recent memory. If Mrs Thatcher is unbendingly insistent both on tax reductions and on giving absolute priority to the superficial and short term self interest of house owners in the South East, her credibility as an inflation fighter and a cautious economic manager will soon be in serious jeopardy. If, however, she were to approve of the reform I have outlined it would become reasonable not only to reduce tax rates but, with the new tax in place, to give way to her apparent desire to raise the ceiling on mortgage interest tax relief from the present £30,000.



CH/6X
 → PROF.
 MUELLBAUER
 4/5

BF for dinner
 order for
 Friday

Treasury Chambers, Parliament Street, SW1P 3AG
 01-270 3000

4 May 1988

Professor J N J Muellbauer
 Nuffield College
 OXFORD

cc Chief Secretary
 Financial Secretary
 Economic Secretary
 Sir P Middleton
 Sir G Littler
 Mr Byatt Mr Odling-Smee
 Mr Scholar Miss Sinclair
 Mr Culpin Mr S J Davies
 Mr Meyrick
 Mrs Holmans
 Mr Ford

John Nuffield Muellbauer

Thank you for sending me a copy of your paper "Why we need a national tax on imputed rents". I apologise for not replying sooner. I read it carefully before the Budget but I have to say that I was not persuaded by the case you made.

Your proposal amounts in effect to the reintroduction of Schedule A, which was abolished 25 years ago. While there is clearly a theoretical economic case for Schedule A, it was an unpopular tax and one bedevilled by administrative difficulties; and both these characteristics would equally apply today. It is perhaps no surprise that a number of other countries, including France and Germany, have subsequently moved away from this form of taxation.

Moreover, although such a tax would probably reduce the regional dispersion of house prices it is not clear that it would reduce the dispersion of total housing costs - including tax payments. For this to occur it would be necessary for the net increase in tax on owner-occupiers to be wholly offset by lower house prices. In practice we think this is rather unlikely; the dispersion of total housing costs could therefore be increased. There might thus be little if any gain in terms of labour mobility.

Nigel Lawson

NIGEL LAWSON

NUFFIELD COLLEGE

OXFORD OX1 1NF

Telephone: OXFORD(0865)278500

Direct Line 2

11th May, 1988.

The Rt Hon Nigel Lawson MP,
Chancellor of the Exchequer
Treasury Chambers,
Parliament Street,
London SW1P 3AG.

*Prs ack ✓
copy to Sir TB.*

Dear Mr Lawson,

It was a pleasure to meet you at dinner on Friday and it was also very kind of you to reply to my note "Why we need a national tax on imputed rents". Permit me to take up a couple of points.

You say that my proposal amounts to the reintroduction of Schedule A. I do not agree. Capital values of houses indexed annually would be a very different and much more satisfactory component of the personal tax base than were the 1936 imputed rent valuations of Schedule A.

Let me restate my 'mobility trap' argument to which your last paragraph is addressed. As I see it, the mobility trap has two features. In periods such as 1970-72, 1984-87 many of those outside the South East are prevented by credit constraints from moving to the South East given the difference in house prices. This is so despite the allure of greater capital gains in the South East than elsewhere. This very allure, however, prevents many of those in the South East from moving out despite the equity withdrawal they can achieve by so doing. However, once the market turns there is a substantial flight to cheaper areas with an accompanying relocation of business activity.

I share Patrick Minford's view that, in the long run, high land prices in the South East are 'the Liverpool unemployed's best friend'. If your argument is correct, long run regional balance would be well served by my tax.

However, I believe that my tax would very much reduce speculative booms in house prices and in regional differentials of the kind we have seen in 1970-73 and 1984-88.

In our research we find that the major factor in widening regional house price/earnings differentials is aggregate demand for housing. In retrospect this seems obvious: if supply elasticities for housing are lower in the South East than elsewhere, then even a homogeneous national increase in demand for housing will drive up house prices faster in the South East. Of course, the demand increase in the 1980's has been skewed towards the South East but most of this is already embodied in the earnings element of the house price/earnings ratio.

Yours sincerely,

John Muellbauer

John Muellbauer.

P. TAY



Prof

Treasury Chambers, Parliament Street, SW1P 3AG
01-270 3000

Professor J N J Muellbauer
Nuffield College
OXFORD OX1 1NF

*act was been
from Muellbauer
to Sir T. B...*

13 May 1988

Dear Professor Muellbauer

The Chancellor has asked me to thank you for your letter of 11 May,
which he has read with interest.

*Yours sincerely
J M G Taylor*

J M G TAYLOR
Private Secretary

NUFFIELD COLLEGE

OXFORD OX1 1NF

Telephone: OXFORD(0865)278500
Direct Line 2

22 June 1988

Sir Alan Walters
The World Bank
1818 H St NW
Washington DC 20433
USA

Dear Alan

It was most kind of you to write in response to the papers I sent you.

You are quite right to criticize me for underplaying the mobility of firms. In our full research paper, "Housing, Wages and UK Labour Markets", which is in production as a CEPR discussion paper, I had in fact covered this point in some detail.

I am certain, with you, that a good deal of beneficial job creation outside the South East is now going on. Looking back at history, I suspect that was true also in 1972-3 when the previous peak in the regional house price/earnings difference occurred. Did you know that the peak outward net migration from the South East since estimates begin (in 1961) was in 1973 when 69,000 more people left than moved in? However, there is strong evidence of rising wage pressure and an outward shift in the u/v curve then which suggests that some of these moves could not have been benign. Are you keeping a close watch on the situation in London now? One hears all kinds of horror stories about labour shortages there. Not only have London allowances rocketed in the last year, further increases are on their way and on Saturday the FT reported 30% wage settlements for new shopworker recruits there. The financial services sector seems the only one where pressures are easing.

On consumption and the trade deficit, which now looks more likely to be £10b than £4b, I do not think you have the story of 1971-75 quite right. The savings ratio increased sharply from 1971 to 1975 reaching its peak in 1975, two years after the house price/earnings or house price/RPI ratio peaked. Note the very sharp fall in these ratios from 1973 to 1975. I fear that the main explanation for the sharp increase in the savings ratio in 1971 to 1975 is the sharp rise in mortgage rates and in inflation. The former would have trapped people with mortgages into forced saving via the well-known front-end loading effect. The latter would have wiped out a substantial part of households' real liquid balances and so made them want to rebuild these by saving. Note, by the way, that 1980 saw the post war peak in the savings ratio with the same two factors of interest rates (the all time record mortgage rate) and inflation at work.

We did some very preliminary econometric work on annual data for the change in the savings ratio ΔSR for 1959-1987. This supports my claims about inflation $\Delta \ln(RPI)$ and interest rates represented by MLR. We also find what one would expect regarding short term income growth $\Delta \ln(RPCPDI)$, which refers to real per capita personal disposable income, and changes in consumer credit controls (ΔCC) using the Treasury's old measure. The remaining three terms in the equation are rather worrying. The stabilizing feedback of the change in the savings ratio to last year's level disappears after 1981. And the log ratio of UK house prices to per capita personal disposable income $\ln(HP/PCPDI)$ is very significant for the whole period with an apparent jump in its coefficient after 1981. The whole equation reads as follows:

$$\begin{aligned} \Delta SR = & 0.04 + 0.38 \Delta \ln(RPCPDI) - 0.15 SR_{-1}^* + 0.11 \Delta \ln RPI \\ & (3.3) \quad (8.6) \quad (3.0) \quad (2.9) \\ + & 0.19(MLR/100) - 0.014 \ln(HP/PCPDI) - 0.023 \ln(HP/PCPDI)^* + 0.0006 \Delta CC \\ & (2.6) \quad (3.3) \quad (1.9) \quad (3.7) \end{aligned}$$

standard error = 0.00523, $R^2 = 0.87$, Durbin-Watson = 2.52

Note that SR_{-1}^* = lagged savings ratio until 1981 and zero thereafter and $\ln(HP/PCPDI)^*$ = ($\ln(HP/PCPDI)$ minus its 1981 value) after 1981 and zero before 1981. If the latter variable is dropped, the coefficient on the house price/income ratio for the whole period becomes - 0.019 with a t - ratio of 6.2.

W Thus, high levels of the house price/income ratio strikingly reduce the savings ratio.

Two related worries immediately come to mind. The first is that the house price/income ratio is endogenous. However, replacing it by its lagged value still gives a t-ratio of 5.1 as against 6.2 for the current value when no post 1981 shift in this effect is allowed for. The other worry is that the house price/income ratio is just a proxy for other causes of low savings ratios. The obvious one seems liquidity or liquidity growth. We therefore included $\Delta \ln(RPSL)$ and $\ln(RPSL)_{-1}$, where RPSL is real PSL2, in the above equation. These terms are individually and jointly insignificant.

Now, I must emphasize that this is very preliminary (though we did perform a couple of parameter stability tests) and I would not be at all surprised if better models could be found. Nevertheless, given its strength, I would be very surprised if the house price/income effect or something like it dropped out of a better model. You might also say that the lack of a stable solution for the savings ratio after 1981 is not very surprising since a long drawn out adjustment of household portfolios to the effective relaxation of credit constraints after 1981 has been taking place. This might be a reassuring argument if the value of housing wealth were not a major element in consumer wealth. But given that it is, and that in 1988 the national house price/income ratio is approaching its all time previous high and has greatly exceeded it in the

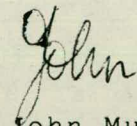
South East, the steady state consumption levels this implies are just not sustainable. At least, that is what I believe.

Let me turn now to your note of caution. I am proposing the rough maintenance of the status quo by raising the same revenue from owner occupiers in the new property tax as is currently collected from domestic rates paid by owner occupiers and phasing in this tax as rates are phased out. It seems hard to believe this could have the horrendous consequences you fear. It seems to me a much more sound way of gently deflating the absurd house and land price bubble than the alternative which is to repeat the interest rate experiences of 1972-1975 and 1978-1980 (though weaker unions and, hopefully, weaker commodity prices will prevent 1980 levels of interest rates returning). Under my proposal, interest rates could and would actually fall, easing the cash flow problems of recent first time buyers. Under the repeat of past interest rate performance these poor blighters receive a double blow. They are unlikely to be very grateful. And consider the radically different effects on the rest of the economy of these two ways of dealing with the problem.

I am relieved that you consider there is a possibility of introducing an imputed rent tax or a US style property tax. However, I am surprised that you see this a long, long way ahead. When you think about how important it is to minimize disturbance when undertaking tax reform, it seems incredibly obvious that a new property tax collected by the Inland Revenue should come in as domestic rates go out. If it does not, and people get used to a tax regime with no property tax, you are artificially creating mountainous obstacles to any subsequent reform, however ultimately desirable it is.

I enclose the non-technical summary for the CEPR paper which will be mailed directly to you from CEPR. I apologize in advance for the paper's length.

All the best



John Muellbauer

NUFFIELD COLLEGE

OXFORD OX1 1NF

Telephone: OXFORD(0865)278500
Direct Line 2

pup

*you also
of
to RPC
who man
Ludo
some
observed
man
M.S.*

22 June 1988

The Rt. Hon. Nigel Lawson
Chancellor of the Exchequer
Treasury Chambers
Parliament Street
London SW1

Ch
Advice from Sir TB?
[It seems to me as if too
much may have been made
of the - pretty unique - crisis
of 1973-75] *AA*

*But some
interesting
stuff*

Dear Mr Lawson

Following up on our discussion and brief correspondence I enclose a copy of "Housing, Wages and UK Labour Markets" which will be widely circulated as a discussion paper in about two weeks time. I do not expect that you will have time to read such a long paper but the non-technical summary, the charts and the conclusion you will find interesting. As far as this general conundrum of the role of housing markets in the UK economy is concerned, we have now studied wages, unemployment relative to unfilled vacancies, UK house prices, the SE vs UK house price/earnings difference and net migration for the SE. The next step is to see what insights we can get into consumer expenditure and examine if we can account for the recent break-down in econometric models of consumption. The very first indications favour my general position but we have to do much more work. I have had some correspondence with Alan Walters on some of these matters. I do not think it would be breaching his confidence if I showed you my side of it. It is enclosed and contains our preliminary evidence on the savings ratio.

My perception is that there is now a widespread view in the City that the Budget was not cautious enough. If you had been allowed to shift the tax treatment of housing to a more neutral stance, given the abolition of domestic rates, there would be no substance to these criticisms. I believe that the real locus of economic policy disagreement between you and the Prime Minister ought to be on this rather than on the balance between tightening via the exchange rate and tightening via interest rates. A judicious leak to the effect that studies were being undertaken in the Treasury and the Inland Revenue into alternative ways of bringing greater neutrality to the tax treatment of owner-occupied housing would now be a very healthy thing for housing markets and the economy.

Yours sincerely

John Muellbauer

John Muellbauer

full paper
1

!
o

UNCLASSIFIED



FROM: A C S ALLAN

DATE: 4 July 1988

Pay

SIR T BURNS

cc Mr Scholar
Mr Culpin
Mr Odling-Smee
Mr Sedgwick
Mr Hibberd
Mr C J Riley
Mr Cropper

PROFESSOR MUELLBAUER ON HOUSING, WAGES AND UK LABOUR MARKETS

... The Chancellor has received the attached letter, correspondance and paper from Professor Muellbauer (copies of the non-technical summary to all; copies of full paper only to you, Mr Hibberd and Mr Riley).

2. He would be grateful for your views, and for any comments others may have.

A handwritten signature in black ink, appearing to read 'ACSA' with a large, sweeping underline.

A C S ALLAN

NUFFIELD COLLEGE

OXFORD OX1 1NF

Telephone: OXFORD(0865)278500

Direct Line 2

22 June 1988

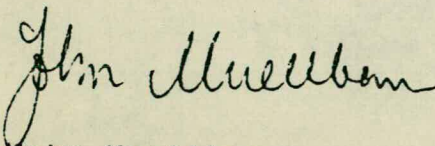
The Rt. Hon. Nigel Lawson
Chancellor of the Exchequer
Treasury Chambers
Parliament Street
London SW1

Dear Mr Lawson

Following up on our discussion and brief correspondence I enclose a copy of "Housing, Wages and UK Labour Markets" which will be widely circulated as a discussion paper in about two weeks time. I do not expect that you will have time to read such a long paper but the non-technical summary, the charts and the conclusion you will find interesting. As far as this general conundrum of the role of housing markets in the UK economy is concerned, we have now studied wages, unemployment relative to unfilled vacancies, UK house prices, the SE vs UK house price/earnings difference and net migration for the SE. The next step is to see what insights we can get into consumer expenditure and examine if we can account for the recent break-down in econometric models of consumption. The very first indications favour my general position but we have to do much more work. I have had some correspondence with Alan Walters on some of these matters. I do not think it would be breaching his confidence if I showed you my side of it. It is enclosed and contains our preliminary evidence on the savings ratio.

My perception is that there is now a widespread view in the City that the Budget was not cautious enough. If you had been allowed to shift the tax treatment of housing to a more neutral stance, given the abolition of domestic rates, there would be no substance to these criticisms. I believe that the real locus of economic policy disagreement between you and the Prime Minister ought to be on this rather than on the balance between tightening via the exchange rate and tightening via interest rates. A judicious leak to the effect that studies were being undertaken in the Treasury and the Inland Revenue into alternative ways of bringing greater neutrality to the tax treatment of owner-occupied housing would now be a very healthy thing for housing markets and the economy.

Yours sincerely



John Muellbauer

NUFFIELD COLLEGE

OXFORD OX1 1NF

Telephone: OXFORD(0865)278500

Direct Line 2

22 June 1988

Sir Alan Walters
The World Bank
1818 H St NW
Washington DC 20433
USA

Dear Alan

It was most kind of you to write in response to the papers I sent you.

You are quite right to criticize me for underplaying the mobility of firms. In our full research paper, "Housing, Wages and UK Labour Markets", which is in production as a CEPR discussion paper, I had in fact covered this point in some detail.

I am certain, with you, that a good deal of beneficial job creation outside the South East is now going on. Looking back at history, I suspect that was true also in 1972-3 when the previous peak in the regional house price/earnings difference occurred. Did you know that the peak outward net migration from the South East since estimates begin (in 1961) was in 1973 when 69,000 more people left than moved in? However, there is strong evidence of rising wage pressure and an outward shift in the u/v curve then which suggests that some of these moves could not have been benign. Are you keeping a close watch on the situation in London now? One hears all kinds of horror stories about labour shortages there. Not only have London allowances rocketed in the last year, further increases are on their way and on Saturday the FT reported 30% wage settlements for new shopworker recruits there. The financial services sector seems the only one where pressures are easing.

On consumption and the trade deficit, which now looks more likely to be £10b than £4b, I do not think you have the story of 1971-75 quite right. The savings ratio increased sharply from 1971 to 1975 reaching its peak in 1975, two years after the house price/earnings or house price/RPI ratio peaked. Note the very sharp fall in these ratios from 1973 to 1975. I fear that the main explanation for the sharp increase in the savings ratio in 1971 to 1975 is the sharp rise in mortgage rates and in inflation. The former would have trapped people with mortgages into forced saving via the well-known front-end loading effect. The latter would have wiped out a substantial part of households' real liquid balances and so made them want to rebuild these by saving. Note, by the way, that 1980 saw the post war peak in the savings ratio with the same two factors of interest rates (the all time record mortgage rate) and inflation at work.

We did some very preliminary econometric work on annual data for the change in the savings ratio ΔSR for 1959-1987. This supports my claims about inflation $\Delta \ln(RPI)$ and interest rates represented by MLR. We also find what one would expect regarding short term income growth $\Delta \ln(RPCPDI)$, which refers to real per capita personal disposable income, and changes in consumer credit controls (ΔCC) using the Treasury's old measure. The remaining three terms in the equation are rather worrying. The stabilizing feedback of the change in the savings ratio to last year's level disappears after 1981. And the log ratio of UK house prices to per capita personal disposable income $\ln(HP/PCPDI)$ is very significant for the whole period with an apparent jump in its coefficient after 1981. The whole equation reads as follows:

$$\begin{aligned} \Delta SR = & 0.04 + 0.38 \Delta \ln(RPCPDI) - 0.15 SR_{-1}^* + 0.11 \Delta \ln RPI \\ & (3.3) \quad (8.6) \quad (3.0) \quad (2.9) \\ & + 0.19(MLR/100) - 0.014 \ln(HP/PCPDI) - 0.023 \ln(HP/PCPDI)^* + 0.0006 \Delta CC \\ & (2.6) \quad (3.3) \quad (1.9) \quad (3.7) \end{aligned}$$

standard error = 0.00523, $R^2 = 0.87$, Durbin-Watson = 2.52

Note that SR_{-1}^* = lagged savings ratio until 1981 and zero thereafter and $\ln(HP/PCPDI)^*$ = ($\ln(HP/PCPDI)$ minus its 1981 value) after 1981 and zero before 1981. If the latter variable is dropped, the coefficient on the house price/income ratio for the whole period becomes - 0.019 with a t - ratio of 6.2.

W Thus, high levels of the house price/income ratio strikingly reduce the savings ratio.

Two related worries immediately come to mind. The first is that the house price/income ratio is endogenous. However, replacing it by its lagged value still gives a t-ratio of 5.1 as against 6.2 for the current value when no post 1981 shift in this effect is allowed for. The other worry is that the house price/income ratio is just a proxy for other causes of low savings ratios. The obvious one seems liquidity or liquidity growth. We therefore included $\Delta \ln(RPSL)$ and $\ln(RPSL)_{-1}$, where RPSL is real PSL2, in the above equation. These terms are individually and jointly insignificant.

Now, I must emphasize that this is very preliminary (though we did perform a couple of parameter stability tests) and I would not be at all surprised if better models could be found. Nevertheless, given its strength, I would be very surprised if the house price/income effect or something like it dropped out of a better model. You might also say that the lack of a stable solution for the savings ratio after 1981 is not very surprising since a long drawn out adjustment of household portfolios to the effective relaxation of credit constraints after 1981 has been taking place. This might be a reassuring argument if the value of housing wealth were not a major element in consumer wealth. But given that it is, and that in 1988 the national house price/income ratio is approaching its all time previous high and has greatly exceeded it in the

South East, the steady state consumption levels this implies are just not sustainable. At least, that is what I believe.

Let me turn now to your note of caution. I am proposing the rough maintenance of the status quo by raising the same revenue from owner occupiers in the new property tax as is currently collected from domestic rates paid by owner occupiers and phasing in this tax as rates are phased out. It seems hard to believe this could have the horrendous consequences you fear. It seems to me a much more sound way of gently deflating the absurd house and land price bubble than the alternative which is to repeat the interest rate experiences of 1972-1975 and 1978-1980 (though weaker unions and, hopefully, weaker commodity prices will prevent 1980 levels of interest rates returning). Under my proposal, interest rates could and would actually fall, easing the cash flow problems of recent first time buyers. Under the repeat of past interest rate performance these poor blighters receive a double blow. They are unlikely to be very grateful. And consider the radically different effects on the rest of the economy of these two ways of dealing with the problem.

I am relieved that you consider there is a possibility of introducing an imputed rent tax or a US style property tax. However, I am surprised that you see this a long, long way ahead. When you think about how important it is to minimize disturbance when undertaking tax reform, it seems incredibly obvious that a new property tax collected by the Inland Revenue should come in as domestic rates go out. If it does not, and people get used to a tax regime with no property tax, you are artificially creating mountainous obstacles to any subsequent reform, however ultimately desirable it is.

I enclose the non-technical summary for the CEPR paper which will be mailed directly to you from CEPR. I apologize in advance for the paper's length.

All the best



John Muellbauer

Non-technical summary

Much has been written on why wage inflation responds so little to high rates of unemployment both in Britain and elsewhere in Europe. Blanchard and Summers have attributed this to hysteresis effects, while Lindbeck and Snower have emphasized the differing roles of insiders and outsiders in the labour force. In the United Kingdom economists have also pointed to the characteristics of UK housing markets as a factor in explaining why wages do not respond to high unemployment. Rates of labour migration are much lower in Britain than in the United States, it is argued, and low labour mobility allows high wage inflation in the South-East to co-exist with high unemployment in other regions. Cross section evidence reveals an association of low migration rates with the regulation of rents and tenure and with the institution of council housing. Hughes and McCormick (1987) and Minford et al (1987) have used this evidence to argue that unemployment and wage pressure in Britain are higher than they would be with different housing institutions.

This paper examines the interaction between the labour and housing markets in Britain, integrating the owner-occupied sector more fully than in previous research. We explore the effects of this interaction on the behaviour of aggregate wages and for the relationship between aggregate unemployment and unfilled vacancies, which reflects mismatch between jobs and people. Our analysis confirms the importance of housing markets in labour market behaviour.

Our analysis emphasizes the importance of "sectoral" or segmented labour markets between which labour is slow to move, possibly as a result of the operation of the housing market. As a result, one segment of the national labour market may experience unemployment while there are at the same time unfilled vacancies or excess demand in another sector. Economic theory suggests that in such segmented markets, wage behaviour is influenced not only by aggregate excess demand, but its sectoral dispersion or "mismatch".

We take as our starting point the wage equations developed in recent work by Layard and Nickell. Their work explains employment, wages and the price level for the UK economy, based on theoretical framework in which monopolistic competition prevails in product markets and at least some firms use normal cost mark-up pricing. In labour markets, the approach gives explicit treatment to bargaining between employers and unions: the level of both the cost of living and of product prices is relevant for wage determination and "wage push" factors play an important role.

We use annual data from 1958-86 to first estimate an equation explaining the behaviour of aggregate wages. The explanatory variables in this equation (whose dependent variable is the real product wage, adjusted for the trend in productivity) include the level and the change in unemployment, a measure of union power, and a variable capturing mismatch changes (the absolute change in the employment share of industry and construction). We measure the effects of house prices by

means of an index of UK house prices relative to the average wage and adjusted for the proportion of owner-occupiers. We find that this variable enters as a two-year moving average with a two-year lag, suggesting that the cost of living effects of house prices take a long time to feed through. We also define a "regional difference" variable which is a measure of the gap between the house price/earnings ratio in the South East and the UK average. This operates as a moving average with an average lag of two years. The effects of variations in mobility which arise from changes in housing tenure structure and change in the Rent Acts are captured through a mobility index derived from previous work by Hughes and McCormick.

One of the consequences of restricted labour mobility is increased mismatch in the labour market and this should be reflected in a higher level of aggregate vacancies for a given level of aggregate unemployment. We therefore use annual data from 1958 to 1986 to estimate an equation in which unemployment depends on vacancies as well the benefit/wage ratio (reflecting "search" unemployment) and on the proportion of new entrants in the labour force. We introduce housing market influences through the same lagged moving average of the regional difference in the house price/earning ratio and the index of mobility used in the wage equation.

The joint evidence from the two equations is consistent with our theoretical interpretations. The wage equation fits particularly well compared to previous estimates and both equations pass a battery of specification tests and tests of alternative hypotheses with flying colours. It is also clear that the importance of the house price variables is robust to the specification of the final wage equation.

Our incorporation of the effects of house prices and housing tenure suggests very different conclusions concerning the determinants of wage behaviour from those reached by Layard and Nickell, although like Nickell, we find evidence of the importance of hysteresis in unemployment. In particular, we find that it is the changes in unemployment and sectoral mismatch, not the levels of these variables, which have the strongest influence on the level of real wages. This is consistent with interpretations of unemployment based on hysteresis or on insider-outsider behaviour. Such interpretations imply that wage pressure is affected by the sectoral dispersion of excess demand changes, for the same reasons that changes in (more than levels of) excess demand determine wage behaviour.

We find that union power has an important and strongly significant effect on wage pressure, although in our estimates, union density out-performs the theoretically more appropriate union/non-union mark-up. We suspect that this is the result of deficiencies in estimates of the latter for the 1980s.

Our estimates of the unemployment/vacancies relationship reveal strong evidence of the role played by the regional house price/earnings difference and our calculated measure of

mobility. We also find that the proportion of young entrants in the labour market and the benefit/wage ratio tend to increase the level of unemployment for any given level of vacancies.

We estimate the contributions of these factors to movements in the wage during the sample period. The level of unemployment and to an even greater extent its rate of change had a major effect on the real wage, though the increase in mismatch in the early 1980s offset the downward pressure on wages to a remarkable degree. The net result was only a very modest downward pressure on the real product wage. Union density also had a major influence on the real manual wage: the increase from the early 1960s to the peak at 1979 accounts for a 3.6% increase in the real wage. This is large relatively to the 2.5% increase in the productivity trend adjusted real manual wage over this period. The recent increases in the house price/earnings ratio and its regional difference imply a 4.4% increase in the real manual wage over the period 1984-8, while the effect on price inflation is even greater, given the feedbacks from wages to prices. The decline in union density and persistent high unemployment have offset much of the upward pressure from house prices on wages adjusted for the productivity trend in this period so that up to 1987, at any rate, there was little change.

In the long run, relatively high house prices in the South East benefit the unemployed elsewhere in the UK. These higher prices not only create an incentive to expand the supply of housing in the South East, but give firms an incentive to locate elsewhere. Our research suggests, however, that the institutional distortions associated with owner-occupation introduce important dynamic distortions into the housing market. There are major tax incentives which favour owner occupation relative to other financial assets or rented accommodation, including mortgage interest tax relief and the absence of capital gains tax on principal residences. These distortions, which the abolition of domestic rates will intensify, artificially raise the portfolio returns on owner occupation relative to other assets, with profound implications in economic upswings, especially when these are accompanied by rapid growth in financial liquidity. In such upswings the response of house prices to the growth of income and liquidity results in high own rates of return on owner occupied housing, which further stimulate demand. Even if other factors did not lead to faster economic growth in the South East, higher national housing demand tends not only to raise the national house price/earnings ratio but also to widen the South East's ratio relative to the rest of the UK, because housing supply is less elastic in the South East. As a result, the house/price earnings ratio in the South East rises relatively in upswings, especially those where financial liquidity is a major factor, as in the early 1970s and in the 1980s.

This leads to a "mobility trap". As the relative appreciation of house prices takes place, households in the South East are initially more reluctant to move to other areas: they would miss out on the further relative appreciation and may therefore be unable to move back to the South East at a later

date. Thus, few housing slots are freed for potential migrants to the South East, tending to increase still further the relative appreciation. Households outside the South East become increasingly unable to bridge the gap in house prices and so are less inclined to migrate.

As the house price/earnings differential approaches a peak, outward migration from the South East increases. At the same time, the credit constraint for potential migrants to the South East reaches a maximum. Also by this time additional new housing in the South East will have been built. This situation cannot persist and speculative expectations are eventually reversed: the result is a rapid fall, as in 1973-5, of the South East's premium in the house price/earnings differential. The rapidity of the fall is likely to be influenced by the initial reluctance of households outside the South East to invest in an expensive asset with a lower or negative prospective rate of return compared with their present housing. The peak and early part of this post-peak phase is likely to be a particularly uncomfortable one for firms in the South East trying to hold on to or to hire workers and, unless labour demand in the South East is slackening, is likely to be associated with strong wage pressure there. 1973, for example, saw the largest ever recorded net outflow of people from the South East, with further large outflows in 1974 and 1975.

This process eventually leads firms to locate outside the South East and so relieve unemployment in other regions. In the short run, however, this process can impose significant costs. Wage increases in the South East, quickly followed by even larger house price increases there, can give workers in the South East an incentive to leave and, given credit rationing, be relatively ineffective in attracting new workers. Firms may therefore have to bear the brunt of the resource reallocation shifts engendered by this interaction of housing and labour markets.

The fiscal bias in favour of owner occupation greatly raises the portfolio return to housing relative to that which would prevail in a neutral tax system. Consumer expenditure is influenced by house price increases through wealth effects and the increase in collateral available for borrowing. This tends not only to increase aggregate consumer expenditure and imports but also to increase regional disparities. The greater increase in consumer expenditure in the South East has regional multiplier effects which feed back through household demand into South East housing prices. This adds to the overshooting tendencies which have been discussed above. These tendencies have been exacerbated by the liberalization of credit markets in the 1980s and would be reduced by a more neutral tax treatment of owner-occupied housing. Our results emphasize the hazards of liberalizing financial markets while enormous fiscal distortions remain in place.

CONFIDENTIAL

FROM: P J CROPPER
DATE: 5 July 1988

CHANCELLOR

cc PS/Chancellor
Sir T Burns
Mr Scholar
Mr Culpin
Mr Odling-Smee
Mr Sedgwick
Mr Hibberd
Mr C J Riley

1. Max
2. 6/7. 12/7

There is a note
about letter from
Muellbauer - PR
attach.

PROFESSOR MUELLBAUER

I fear the non-technical summary of Professor Muellbauer's paper is too technical for me. But I hardly think one needs to read beyond paragraph two of his accompanying letter to you, which must surely be right.

2. I cannot see the Conservative Party reversing its engines on owner occupation for some years yet. The private rented sector has to be shown to work first: hence my suggestion that personal tax relief should be extended to domestic rental payments up to £3,000 a year as a kick-start measure.

3. Somehow or other it is imperative that we create a market in accommodation, to stand alongside the market in property.

PR

P J CROPPER

*But we
have a point
about
PR -
accommodation
market*

*for*

FROM: A C S ALLAN

DATE: 8 July 1988

MR CROPPER

cc Sir T Burns
Mr Scholar
Mr Culpin
Mr Odling-Smee
Mr Sedgwick
Mr Hibberd
Mr C J Riley

PROFESSOR MUELLBAUER

The Chancellor was grateful for your minute of 5 July. On your point about it been imperative to create a market in accommodation, to stand alongside the market^r property, he noted that this is why we have injected private rented accommodation into the BES.

A handwritten signature in black ink, appearing to read 'A C S Allan', with a long horizontal stroke underneath.

A C S ALLAN

FINAL DRAFT

HOUSE PRICES

HMAS Directorate Analytical Paper

DoE
HGS
A.E.H
23.6.88



2 MARSHAM STREET
LONDON SW1P 3EB
01-212 3434

My ref:

Your ref:

The Rt Hon Nigel Lawson MP
HM Treasury
Parliament Street
LONDON
SW1 3AG

I should be grateful if you could let me know if there is any to view on paper based on this

25 July 1988

Dear Nigel

I would like you to see a paper about house prices prepared by Alan Holmans in my Department. The first few pages provide a very useful summary. The conclusions reinforce confidence in the policies I am following. The paper may also provide useful background in the management of the economy generally.

A copy of the paper has been sent also to Ian Byatt in the Treasury.

Nicholas Ridley

NICHOLAS RIDLEY

CH/EXCHEQUER	
REC.	26 JUL 1988
ACTION	CST
COPIES TO	Sir T. Burns



Table XIII	Average Earnings and Average Recorded Incomes: Regional Analysis 1987	51
Table XIV	Basic and Other Income of First-Time Purchasers in 1987: Regional Analysis	52
Table XV	Deposits Paid by First-Time Purchasers in 1987: Regional Analysis	53
Table XVI	Calculated Net Mortgage Outgoings As Percent of Recorded Income: Regional Analysis 1987	54
Table XVII	Migration Between South East England and the Rest of the United Kingdom 1971-1986	62
Table XVIII	Calculated Net Mortgage Outgoings in Relation to Net Income for First-Time Purchasers 1970-1988	66
Table XIX	Changes in the Population of England and Wales Aged 20 and Over: Future Prospects Compared With Previous Years	68
Annex A	<u>National Average House Prices:</u>	73
I	The Historical Record Since the End of the 1930's	73
II	Rents Before 1914	81
III	The Inter-War Years	85
Table A.1	Index Numbers of Prices of Second Hand Houses and the General Price Level 1934/39 to 1987	75
Table A.2	Bank and Building Society Indexes of House Prices 1982-87	77
Table A.3	Comparison of Indexes of Average House Prices 1946-70	78
Table A.4	Comparison of Measures of Changes of House Prices 1946-1970	79
Table A.5	Index of Prices of New Houses Mortgaged to Building Societies 1956-1987	80
Table A.6	Rents and Building Costs 1874-1913	82
Table A.7	Index Numbers of Average "Working Class" Rents in English Towns 1912	83
Table A.8	Average House Rent Per Head of Population Great Britain 1811-1851	84
Table A.9	Building Society New and Outstanding Loans 1928-1939	85
Table A.10	Calculation of Hypothetical Average House Prices 1930 - 1938	87
Annex B	<u>Geographical Pattern of House Prices:</u>	89
	<u>The Historical Pattern</u>	
	The Regional Pattern 1968-1987	89
	The Regional Pattern of House Prices Before 1968	95

Detailed Table of Contents

	<u>Page</u>
Summary, Conclusions, and Implications	1
I Scope and Purpose of the Study	5
II The Course of National Average House Prices in Outline	6
III The Geographical Pattern of House Prices Within England	13
IV Census and Explanations of the Course of House Prices Nationally:	
(a) Short-Run Fluctuations	19
(b) The Long Term Trend of House Prices	32
V Causes and Consequences of the Geographical Dispersions of House Prices	42
VI House Prices and Policy:	
(a) Increases in House Prices Nationally	55
(b) The Inter-Regional Dispersion	61
VII The Future	64
VIII Statistics and Research	69
Graph A National Average House Prices in Real Terms	8
Graph B House Prices in Real Terms in the South and North East	16
Graph C Ratio of House Prices South East: North	16
Graph D Land and House Prices	38
Table I Increase in House Prices by Region 1982-87	12
Table II Index Numbers of the Regional Spread of House Prices 1969-70 to 1987	13
Table III Sources of Loans For House Purchasers Buying on Mortgage in 1981, 1982, 1983, and 1st Quarter of 1984	15
Table IV Net Mortgage Lending by Source 1977-1987	22
Table V Mortgage Interest Rates Compared With Inflation and Long Term Gilt Edged Rates	23
Table VI Sales of Dwellings for Owner-Occupation in UK and USA	29
Table VII Indexes of House Building Costs in Real Terms: Public and Private Sectors 1971-1987	33
Table VIII Regional Pattern of House Prices and Earnings in 1970 and 1987	42
Table IX Distribution of Population Growth in England 1931-1986	45
Table X Unemployment Rates in the South East Compared With the National Average 1935-38 to 1985-87	46
Table XI New Dwellings Completed for Private Owners: Regional Analysis 1919-1940 and 1945-1987	47
Table XII Regional Analysis of Prices and Mortgages in Relation to Income England 1987	50

<u>Annex E</u>	<u>House Prices and Land Prices in Other Countries</u>	
I	Levels of House Prices in the Other Countries	133
II	House Prices in the USA	136
III	Germany	143
IV	France	147
V	Netherlands	151
VI	Sweden	153
Table E.1	Exchange Rates for Comparison Between Countries	134
Table E.2	Average Price of Houses in Britain and Five Other Countries in 1981	135
Table E.3	Average Price of New Houses in Comparison With GDP per Head (1981)	136
Table E.4	Index of Price of New Houses in USA 1963-1986	137
Table E.5	Median Price of New and Second-Hand One-Family Houses 1970-1987	138
Table E.6	Median Sale Price of Existing One-Family Homes in Selected Areas of USA 1985	141
Table E.7	Average Site Values For One-Family Houses Sold With FHA Mortgages 1975-1984	142
Table E.8	Representative House Prices for Main Cities in Germany 1984	144
Table E.9	Average Price of Building Land in Germany 1970-1986	146
Table E.10	Indexes of House Prices in France 1977-1983	148
Table E.11	House Prices (per Sq.Metre) by Type of Area in France	148
Table E.12	Price of Flats Sold with Vacant Possession in Paris 1979-1986	150
Table E.13	Index of House Prices in the Netherlands 1965-1985	151
Table E.14	Average Prices of One Family Houses in Provinces and Major Cities of the Netherlands 1965 and 1985	152
Table E.15	Indexes of House Prices in Sweden 1975-1985	153
Table E.16	Average House Prices in Counties of Sweden 1984 and 1985	154
Table E.17	Prices of Building Land in Sweden 1978-1985	155
<u>Annex F</u>	<u>Difference Between Regions in Circumstances of House Purchasers With Building Society Mortgages</u>	156
Table F.1	Number of House Purchase Advances in UK in 1983 and 1987	157
Table F.2	Regional Pattern of Owner-Occupation and House Purchase on Mortgage 1983 and 1987	158
Table F.3	Previous Tenure of First-Time Purchasers in 1987: Regional Analysis	159
Table F.4	First-Time Purchasers in 1987 Analysed by Number and Sex of Borrowers	160

Table B.1	Measures of the Regional Dispersion of House Prices 1982-1986	92
Table B.3	Price Ratios For three Bedroomed Semi-Detached Houses 1966-68	94
Table B.4	Co-Operative Permanent Building Society Regional House Price Indexes 1953-1970	96
Table B.5	Annual Average Percentage Rates of Increase of Regional Price Indexes 1953-1970	97
Table B.6	Regional Pattern of House Prices 1939 and 1953-70	98
Table B.7	Urban Rents 1912: Analysis by Region	100
<u>Annex C</u>	<u>House Prices at Sub-Regional Level</u>	104
Table C.1	Average Price of Second Hand Houses in First Quarter of 1988 (Halifax Building Society)	105
Table C.2	Average Prices Paid for Houses in London in 1984/85 and 1986/87	110
<u>Annex D</u>	<u>House Prices, Building Costs, and Land Prices: The Historical Record</u>	112
	Building Costs	112
	Land Prices: National Trends	119
	Land prices: The Regional Picture	125
Table D.1	Index Numbers of Cost of New Housing Building Compared With House Prices 1948-1987	113
Table D.2	Index Numbers of Price of Building Materials 1938-1987	116
Table D.3	Pay in the Construction Industry Compared With Other Industries 1938-1987	117
Table D.4	Changes in House Building Costs Compared With Price of Building Materials and Pay in the Construction Industry 1981-1987	119
Table D.5	Land Prices and the Price of New Houses 1963-1987	120
Table D.6	New House Prices, Land Prices, and Building Costs 1963-1987	122
Table D.7	Increases House Prices and Land Prices in the Booms 1970-73 to 1982-87	124
Table D.8	Average Prices of Building Land by REgion 1963 and 1970	125
Table D.9	Regional Index Numbers of Price Per Plot In Real Terms 1970-1987	126
Table D.10	Comparison of Increases in Land Prices in Real Terms by Region 1970-1987	127
Table D.11	"Residues" Between House Prices and Land Prices in 1987 Regional Analysis	128
Table D.12	Comparison of House and Land Prices in 1970-73 and 1982-87	129

Table F.5	Regional Analysis of Age and Composition of First Time Purchaser Households	161
Table F.6	Mean Recorded Income of First-Time Purchasers by Type of Household in 1987: Regional Analysis	162
<u>Annex G</u>	<u>Inter-Regional Migration</u>	164
Table G.1	Migration Inwards to and Outwards from South England 1980-81	165
Table G.2	Employment Status of Migrants to and from South East England 1980-81	166
Table G.3	Housing Circumstances of Migrants to and from South East England 1980-81	167
Table G.4	Migration to and from the South East 1971-76, to and from London 1977-86, and to and from South East excluding London 1977-86	168
<u>Annex H</u>	<u>Crowding and Sharing in 1911</u>	171
Table H.1	Densities of Occupation: England and Wales 1911	172

(g) At the end of the 1930's the difference in house prices between the North of England and the South East was only 3:4, notwithstanding the housing boom, and the recovery of the economy as a whole, being more heavily concentrated in the South East than any subsequent economic expansion. Before 1914 there is no sign of a North/South difference in rents, only a 'capital city' difference between London and the provinces

(h) In the 1950's the inter-regional house price differences were similar to the 1930's. But when private house building boomed at the very end of the 1950's and the early 1960's, house prices rose much faster than elsewhere, producing the 4:7 difference between the North and South East that was the central tendency of the regional structure of house prices from the late 1960's to 1984 or 1985. Since then the difference has widened further

(i) The history suggests as the main explanation a stronger demand pressing against a supply that is more limited than elsewhere. That the explanation is not just demand generated by economic prosperity is suggested by the experience of the Midlands, where unemployment rates were even lower than in the South East for many years but with house prices closer to those in the North than those in the South East

(j) Short of a slump, like that which greatly compressed inter-regional house price differences in the Netherlands, not much of the widening in house price differentials since 1982 is likely to be reversed

3. Whether levels of house price changes matter, and if so to who and how much, is a separate question from what explains the levels and changes observed. The conclusion reached here is that house prices do matter, for several reasons:

(i) Effects on the ability of households to afford "a decent home for every family at a price within their means" (1971 and 1977 formulation); or "a separate home for every family that wishes to have one" (1945). Increases in house prices relative to income increase the difficulty of many households in buying adequate housing, and prevent some from doing so altogether unless income-related assistance is made available to supplement tax relief. Rising house prices pull up market rents and market-related rents, and hence increase the expenditure on Housing Benefit required to give effect to the "decent home for every family" objective

(ii) Effects on inter-area mobility, including labour mobility. Although the effects can be over-stated, the risk is obviously there. Reliance on market

SUMMARY, CONCLUSIONS AND IMPLICATIONS

House prices are an extremely complex subject, and the paper is in consequence long. A summary must necessarily be selective, and discussion of the issues raised fairly cursory. The summary is therefore expressed in fairly bald terms, for supporting evidence and the detailed arguments reference must be made to the paper, and to the annexes.

2. The main findings may be summarised:

(a) House prices, and earlier on rents, have an upward trend relative to the general level of prices in the long term. When adjusted for the rise in quality of the accommodation bought or rented, the rise is distinctly less than the rise in real incomes

(b) The 1930's (possibly part of the 1920's as well) are the only true exception to this trend

(c) There have been variations around this trend, notably the booms of 1971-73 and 1978-80, and subsequent house price falls in real terms

(d) The cause of the upward trend is considered to be primarily a demand generated by rising incomes pressing against a supply that can expand only at a modest rate. Before 1914 transport and travel costs limited the useable supply; since the 1940's controls over the use of land; the inter-war years could be an exception through a revolution in passenger transport combined with an absence of restraint over the use of land

(e) The short run fluctuations have been due to swings in demand, in which changes in the supply of house purchase credit were important. The boom in house prices since 1982 is no exception to this generalisation. A move to a competitive market for house purchase loans coincided with a rise in incomes heavily weighted towards those sections of the community most likely to buy houses. De-regulation of house purchase credit in the 1980's generated a boom just as did de-regulation of bank lending in the early 1970's and hire purchase at the end of the 1950's.

(f) In the short run house prices can move independently of other prices. That the increases in 1971-73 and 1978-80 were subsequently largely reversed in real terms was due in considerable part to chance; if inflation stays at around 4%, not much of the house price boom of 1982-87 will be reversed in real terms, short of a house price collapse as in the Netherlands

very limited responsiveness of the house building to changes in demand. As a proposition about the short run there is probably something in the Home Counties planners' view that more land released would benefit builders at the expense of the sellers of land without doing anything much for house buyers. For a better result than this the policy would have to be public and presented in a way that would lead people to expect it to be permanent.

6. If the inflation rate continues to run as in the past four years or so, which most forecasters expect and which is the maximum that the Government would appear to regard as acceptable, the increase in the 'real' price of housing (i.e. relative to the general price level) and the widening of the geographical spread are for the most part water under the bridge and will not be reversed. Economic revival in the Midlands and North might narrow the differential slightly through a faster rise in house prices there; but that is all.

7. During the 1990's the number of new entrants to owner-occupation will fall, partly owing to demography (the end of the effect of the "baby boom" on household formation) and partly because the long shift from renting to owning can go little further. That need not by itself cause a house price slump on the Dutch model, but will make the market more at risk to such a slump if financial and economic developments, for instance high interest rates and credit restriction and a recession in the economy depress demand. The risk would be all the greater if previously there had been a strong boom, again on the Dutch parallel. To guard against a speculative boom would therefore seem important. Accurate monitoring of house prices is as necessary as it ever was, but the accuracy of monitoring has deteriorated with the diminishing share of mortgage^{business}/done by building societies. More comprehensive information is needed. A fresh look at the Inland Revenue information would seem desirable, but would be unlikely to suffice by itself, owing to the time-lags to which the data are subject. Lenders would have to provide the information about the prices of the houses on which they approve and complete mortgages, and the mortgage amounts. The British mortgage market is sufficiently lucrative to attract foreign banks; there would therefore appear to be no injustice in imposing as a condition for operating in this market an obligation to provide house price information in a prescribed form.

adjustments (higher pay in the high house price areas, moves away by firms and individuals) would result in serious consequences in economic terms (labour shortage) and housing terms (crowding and sharing) during a long drawn out transition

(iii) Oscillations in the rate of rise of house prices may raise costs permanently, on the evidence of the after effects of the boom of the early 1970's. One mechanism by which it does so is deterring entry of new firms to house building and delaying the response of supply to changes in demand

(iv) A slump in actual house prices as in the Netherlands would be an unmitigated misfortune. It would reduce mobility, and could threaten the solvency of lending institutions. The mortgage banks in the Netherlands had to be rescued

(v) Rising house prices benefit sellers of land at the expense of house buyers. In 1987 the average price paid for building land was £15,000 per plot; identified private sector to private sales 97,000 plots; so total amount paid was almost £1,500 million. Since identified sales to private owners are far less than the number of starts year after year, the true figure for sales must be well above the figure quoted, perhaps as much as double. Most of this is pure windfall

For all these reasons house prices matter, particularly rapid increases.

4. The scope for policy measures is not great. On the demand side nationally, selective credit control might logically be considered, but in the present climate of opinion it would be heresy. The method tried in 1973-79 depended on the building societies being the dominant lenders and not competing with each other for mortgage business, and so could not be revived. The method would probably have to be on the lines of hire purchase control, but used in the USA in 1950-52 to regulate house purchase credit. National 'supply side' measures include building industry training and possibly 'indicative planning' with the building materials industries to reduce the risk of shortages. This again has the flavour of the 1960's and 1970's.

5. Regionally and locally 'supply side' measures mean land supply. All the pressures are in the direction of tightening up. In part this is because the opinion has become widespread that there are plenty of houses hence building yet more is a low priority. Short-run tactics in defending public expenditure policies have led Ministers to encourage this view. To reverse it, perhaps as part of an 'indicative planning' approach, would encounter obvious difficulties. What could be expected from a modest additional release of land would be limited by the expectations of buyers and sellers born of three decades of a 'short' market, and the

(d) Part V discusses how the geographical pattern of house prices is to be explained, and what effects it has. How and why is there now a difference of some 1:2 in house prices between the North and London and the South East when the income difference is only 100:130 at most. How do people in the South accommodate to house prices that are so much higher in relation to income, particularly as the proportion of owner-occupiers is higher in the South (London included) than in the North. Some further information relevant to this issue is in Annex F. How are the changes through time in the width of the spread of house prices to be explained, and is the widening of the spread since 1983 novel in any way. What effects, for good or ill, does the "North/South divide" in house prices have on the economy and society.

(e) Part VI of the paper reviews the policy issues. The stance of present and previous governments on house prices is outlined briefly including the attempts in the 1970's to moderate instability in the rate of rise of house prices by stabilising the volume of lending by building societies, and what experience with this policy showed. What measures would now be feasible to reduce instability or to hold down the long term level of house prices. Why should high and rising house prices be a matter of concern from the standpoint of housing policy (e.g. 'pricing out' of potential first-time purchasers), or from the standpoint of macro-economic policy (e.g. "equity withdrawal" from the housing market to finance consumption

(f) Part VII comments on the future. Are the mechanisms that brought about at least a partial reversal of past booms in house prices relative to the general level of prices and incomes likely to operate again, likewise the narrowing of the inter-regional spread of house prices after earlier widening? How serious a prospect is a fall in house prices. Note that there was such a fall in house prices in Britain in the early 1950's (see Part II below, and in more detail in Annex A). A much more recent and spectacular instance is the fall in house prices in the Netherlands, between 25% and 30% in nominal terms between 1978 and 1982 (see Annex E)

(g) Part VIII puts forward proposals for analysis and collection of information to fill gaps in knowledge about house prices and the influences on them.

Part II. The Course of National Average House Prices In Outline

3. The course of national average house prices can be plotted in index-number form since the late 1930's. Details are given in Annex A, particularly Tables A.1 and A.3. Since the end of the 1930's, eight phases can be distinguished.

I. Scope and Purpose of the Study

House prices are a highly complex subject with effects and inter-actions right across the housing system and into the economy as a whole. A study of the subject must therefore necessarily be selective. The features of house prices that attract most interest have varied through time. At the time of writing (1988) what attracts most interest is the difference in house prices between North and South. Ten to fifteen years ago the focus of policy interest was stabilisation, the attempt to so influence the volume of lending for house purchase as to avoid 'feasts' of mortgage lending leading to house price surges like that of 1971-73 followed by 'famines' as in 1973-74 which caused a slump. Further back still, the rise in the house prices at a rate as fast as earnings and possibly faster was the occasion for concern about whether house purchase was being put beyond the reach of increasing numbers of households. That is a concern that could well be reappearing. Current policy issues necessarily have a substantial influence on the content of this paper, but an attempt is made to set them in the longer term context.

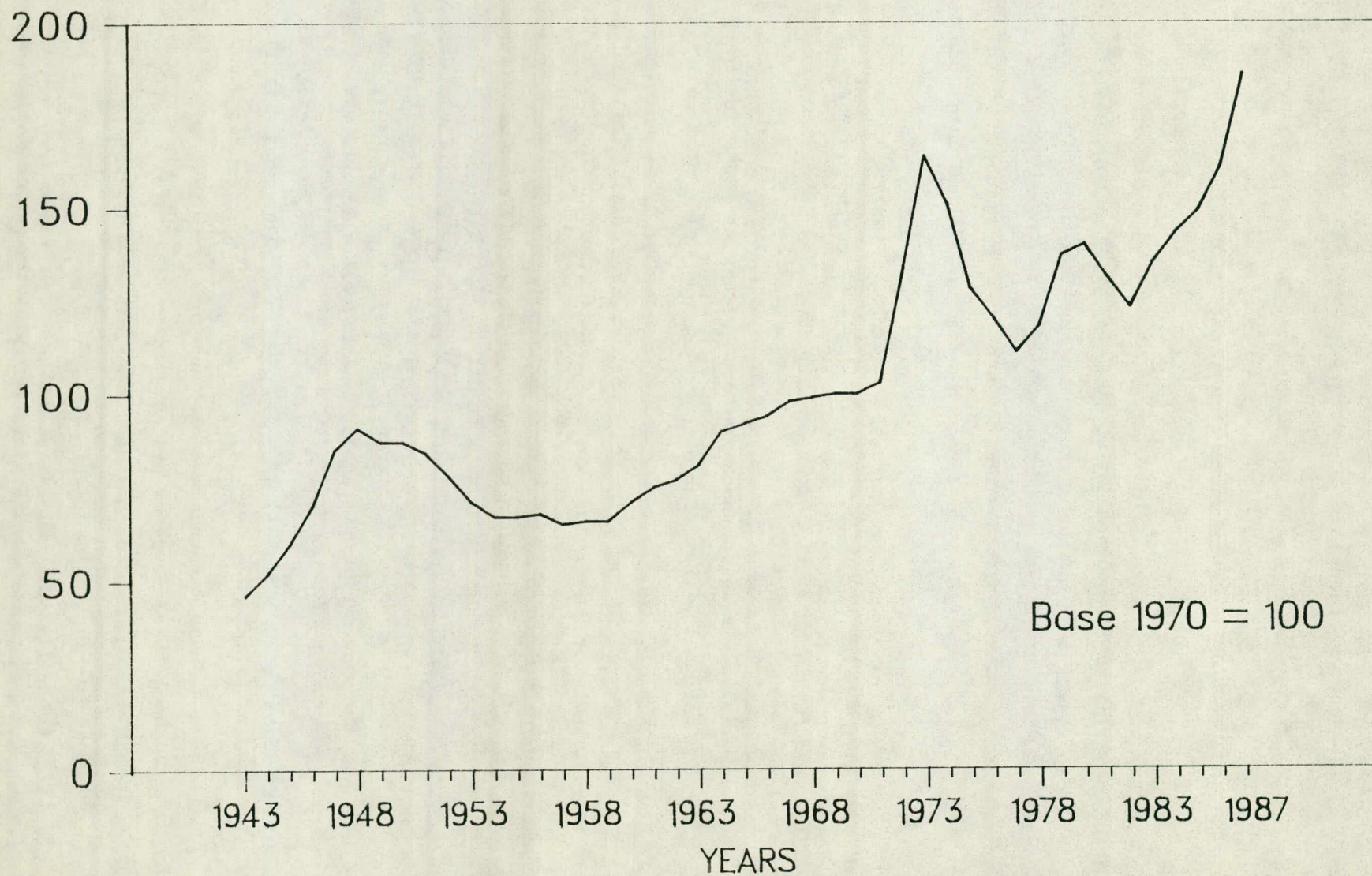
2. The contents of the paper in outline are:

(a) Part II of the paper gives a factual account of the course of the national average level of house prices, in absolute terms, relative to the general price level, and relative to incomes. A fuller account is in Annex A. The long term trend is to be distinguished from short run increases and decreases relative to trend. Interpretation of the historical record is alluded to only briefly, as interpretation is explored in more detail in Part IV of the paper

(b) Part III gives a factual account of the geographical pattern of house prices, with particular reference to North and South but also other differences. A fuller account of what is known about the geographical pattern of house prices is in Annex B (regional differences) and Annex C (sub-regional differences). Whether anything resembling the British geographical variation in house prices is to be found in other countries is commented on in Annex E

(c) Part IV of the paper discusses the mechanisms that 'drive' house prices nationally, distinguishing the long term trend and shorter run departures from trend. Explanatory influences examined include household incomes, mortgage interest rates, and the volume of mortgage credit; and building costs, productivity in the building and building materials industries, and the supply of building land

GRAPH A : NATIONAL AVERAGE HOUSE PRICES IN REAL TERMS



Before well into the 1960's the uncertainty of some of the figures is such as to give a verbal account some advantages over quoting percentage changes. But the chronology itself is not in doubt, and that itself is important for the conclusions that can be reached about explanations for increases in house prices.

(i) a steep rise in house prices during the war and early post-war years, levelling off at the end of the 1940's

(ii) a definite fall in house prices in nominal terms between 1951 and 1954

(iii) a gradual increase in house prices between 1954 and the end of the 1950's but at a rate below the increase in the general price level

(iv) a rapid rise between the beginning of the 1960's and the end of the decade, with a strong boom in 1962-64 and then a temporary slackening

(v) the house prices boom of the early 1970's, which more than doubled house prices within three years. During 1972 house prices rose by 50%, fourth quarter to fourth quarter

(vi) a sharp check to house prices in 1974, followed by a rise at a rate well below that of the general price level until 1977

(vii) a boom in house prices from early 1978 until late 1980, followed by a slow rise in money terms but below the rate of inflation until 1982

(viii) a boom in house prices from 1982 to date. (spring of 1988)

4. The chronology outlined in the previous paragraph made only brief reference to the general price level. But between the 1930's and 1987, the general price level rose over twenty-fold. Clearly, in an analysis of house prices in the longer term the fall in the value of money must be allowed for: it is the movement of house prices relative to other prices that is significant.

Graph A shows the movement of house prices in real terms, that is to say relative to the general level of prices. It is taken from Annex A, Table A.1, but adjusted from 1983 onwards to include the price of houses where the purchase was financed by a bank loan (Table A.2)

about lending by new organisations like mortgage corporations suggests that even if banks are included, house prices are still under-stated though probably only slightly.

7. Separating the effects of quality changes from 'true' house price changes is therefore difficult and speculative. Between 1968 and 1982 (a year chosen to exclude the most recent surge in house prices) the weighted index shows that house prices rose in real terms by 1.6% a year when standardised in the ways described. During this period quality is very likely to have risen through central heating and better insulation. In 1971 49% of owner-occupied dwellings had central heating (GHS 1971, Table 5.13); in 1982 71% (GHS 1982, Table 5.19), so jobbing back to 1968 would give 43% of owner-occupied houses with central heating, an increase of 28 percentage points in the 14 years. The cost of central heating is probably between 5% and 10% of house values, so the increase in the proportions of central heating could explain an increase of 2-2½% in house values. Better insulation, including double glazing and extensions might raise the figure to 3-4%, but hardly more. That would put the average increase in prices due to higher quality at about 0.2% to 0.3% a year, with a 'true' price increase of about 20% in the 14 years, about 1.3% a year.

8. The calculation of 'true' price increases cannot be carried back before 1968 in the same way, because before then the price index does not exclude 'mix' changes. The contrasts between the movement of prices in the different sub-periods make any calculation of the trend rate of increase of house prices in real terms highly sensitive to the base dates chosen. There is no uniquely 'correct' starting point; but from inspection of the run of figures in Table A.1, it would seem that if the period covered is not to include the war, 1948 would be the best year with which to start. The steep increase in prices in the war and immediate post war years appears to have been over; and in the economy as a whole the after effects of the war were beginning to subside. Since 1948 was at the top of a boom it can be compared with 1987 rather than 1982. In the period of almost 40 years there was an increase of about 90% in 'real' house prices (including allowance for understatement due to omission of transactions financed by banks). It might be assumed that the amount of 'quality' increase was similar in terms of an annual rate as that estimated for 1968-1982. Mix changes would make the increase in simple average prices more likely to over-estimate the 'true' price increase than to

5. Although in an analysis relating to the longer term it is necessary to exclude the effect of the fall in the value of money when looking at house prices, in the shorter term this is less obviously true. The rate of rise of the general price level responds to circumstances that have little or no short run effect on house prices, and vice-versa. The mid-1970's provide the clearest example. Between 1973 and 1977 the average prices of second-hand houses rose by just over 30%, equivalent to 7% a year. The rise was less than this in 1974 when the housing market was depressed by an extremely sharp cut in the volume of house purchase lending, rather more in 1975, 1976, and 1977 when demand was rising again but met without much pressure on prices by running down the stock of unsold dwellings, carried forward from the earlier slump. At the same time, though, the general price level rose by 95%, as a consequence first of the strongest boom in commodity prices on record in time of peace, then of the five-fold increase in oil prices at the end of 1973, and then the 'pay explosion' caused by the first two and (more arguably) the end of statutory pay restraint in 1974. Arithmetically the combination of the movements of house prices and of the general price level produced a fall of almost one-third in the 'real' price of houses between 1973 and 1977 (see Annex A, Table A.1). But it would be highly erroneous to infer from this, or to use language that conveys the impression, that housing market conditions led to a fall of one-third in real house prices in the sense that if the rise in the general price level had run at only 6% a year (the 1963-73 average rate) house prices would have fallen by 15% in cash terms between 1973 and 1977. This caveat about 'real' house prices in the short run is highly important in comparing the booms of 1970-73, 1978-80, and 1983 to date. It is equally important for any judgements about whether the increase in 'real' house prices since 1982 will be reversed.

6. Graph A shows that house prices in real terms had an upward trend. But with so highly variable a series as 'real' house prices any changes in the underlying trend are very difficult to discern, and any estimate of the trend rate of increase very dependent on the choice of start and end years. Changes in average house prices can be due to changes in the mix of types and location of dwellings sold and in their quality as well as 'true' price increase, in the sense of an increase in the price when like is compared with like. From 1968 onwards the index of house prices is weighted for a constant mix of regions, type of house, size (in terms of numbers of rooms) and age. This weighting would not exclude any changes in size of dwelling not reflected in number of rooms, nor would it exclude the growing prevalence of central heating or better standards of insulation, through double glazing and in other ways. The index is unweighted before 1968. From about 1982 onwards it is subject to downward bias brought about by being calculated from the price of houses sold with building society mortgages. Annex A, Table A.2 shows the effect of bank mortgages not being included. Fragmentary information

10. Possible explanations are discussed in Part IV of this paper. Before that, however, it is necessary to look at some of what lies behind the national average, notably the geographical variation. Before turning to that question, it is useful to show the geographical pattern of increases in house prices in 1982-87 to show that house prices have risen in real terms in all areas: there has not been simply a South Eastern boom, though the inter-regional differences have been greater and lasted longer than in previous house price booms. Table I shows the increase in house prices as measured by the Department of the Environment's mix-adjusted index. The increase in real terms is calculated by reference to the Index of Retail Prices, which rose by 25.4% between 1982 and 1987.

Table I Increase in House Prices by Region

	1982	1987	1987 at 1982 Value of Money
North	100	140	112
Yorkshire and Humberside	100	150	119
North West	100	143	114
East Midlands	100	164	131
West Midlands	100	153	122
East Anglia	100	187	149
Greater London	100	224	178
South East excluding London	100	203	162
South West	100	177	141
England	100	181	144
Wales	100	181	114
Scotland	100	142	113
Northern Ireland	100	135	108

Note: Price index is taken from Housing and Construction Statistics 1976-1986, Table 10.8. 1987 values from DoE, not yet published.

11. House prices have not risen in real terms in the Midlands and North of England and in Wales, Scotland, and Northern Ireland. The increase in the South of England, and particularly London and the South East, was however very substantially greater.

under-estimate it owing to changes in mix of dwellings sold, due, for example to more post-1918 relative to pre-1918 dwellings (since the Valuation Office's figures would not count in formerly rented dwellings when first sold for owner-occupation) and improvements to the existing stock. On that basis the increase due to changes in quality is likely to have been about 10% and the "true" price increase in real terms about 75% over the period, that is to say an average of 1.4 to 1.5 percent a year. During this period real personal disposable income per head rose by some 2.3 percent a year. The broad picture is thus of an increase in "true" house prices that is part way between the increase in the general price level and the increase in disposable income per head. If anything, the increase in house prices was rather higher than half-way between the rise in the general price level and the rise in disposable income per head. In arriving at this estimate the amount taken out of the rise in average house prices on account of rising average quality is small, under 0.3% a year. Another approach has been to compare estimated gross fixed investment in existing private dwellings with the estimated value of the privately owned housing stock. This method was used by P Spencer in 'UK House Prices-Not an Inflation Signal' (Credit Suisse First Boston, 1987), and if valid implies an increase in "quality" of over 1 percent a year. Whether expenditure on improvements and alterations by private owners does enhance the market value of their houses in this way is not known; but experience with "valuation gap" with public sector and grant aided improvements suggest that it may well not do so. There would be nothing surprising about this, since alterations may well enhance the satisfaction that occupiers get from their houses without adding to the sale value. But here the important point is that if expenditure on improving privately owned housing is used as a guide to the amount of improvement, the implication is that the calculation outlined above under-estimates the amount of quality improvement and therefore over-states the rise in "true" house prices. From this it follows that there is no case on long term but post-war evidence, for putting the "true" price increase for houses, abstracting from changes in mix of dwelling sold and in their average quality, as high as the average rise in real disposable incomes. This has important implications, which are discussed in Section IV of the paper.

9. The same evidence shows house prices (excluding mix and quality effects) to have risen faster than the general price level, even if expenditure on improvements and alterations is assumed to be reflected in its entirety in house values.

When possible causes are considered for this behaviour of house prices, it is necessary to look back to before the post-war period. The information available is discussed in Annex A. In the nineteenth century rents rose relative to the general price level by much more than can be accounted for by rising quality. In the inter-war years such evidence as has come to hand is against there having been any increase in house prices relative to the general price level, notwithstanding the housing boom. But the information is too thin for this to be asserted categorically at this stage.

spread widened again. It did so more slowly in terms of percentage points per year than in 1970-72, because the increase in house prices in absolute terms was considerably slower (see Annex A, Table A.1). The speed with which the inter-regional relativities could alter through differential rates of growth was thus slower, as a matter of arithmetic. By 1986, the spread was as wide as it had been in 1972, but not wider. Whether anything new was happening remained unproven.

14. That may perhaps be termed the received view. There is a question to be raised about whether further increases in house prices in 1987 which took the width of the dispersion some way beyond what it had been in 1972 called it into question. The suggestion was that new forces must be at work to produce a widening of the dispersions that had gone beyond the previous maximum reached in 1972. But before considering that question, it is desirable to pause over whether the movement of regional house prices between the late 1960's and the mid-1980's should be regarded as the norm against which to assess whether something abnormal was happening. The evidence about whether the pattern of regional house prices followed this pattern is discussed in Annex B. It is much thinner than would be desirable since it consists of indexes compiled by one building society, the Nationwide (ex. Co-operative Permanent). Nevertheless there is a strong case for concluding that the pattern displayed in Table II was not typical of earlier years. In contrast with the stability shown between the late 1960's and the mid-1980's, there was before the mid-1960's a very marked widening in the geographical spread. In the later 1950's and the first half of the 1960's house prices rose much more in the South East than they did in the north of England. Graphs B and C show this widening. Graph B shows "real" house prices in the North of England and the South East (including London). Graph C shows the ratio of average house prices in South East to house prices in the North. This ratio shows more clearly the changes in the spread of house prices than do the ratios in Table II. Since house sales in the South East are about one-third of the UK total, increases in house prices in the South East pull up the UK average, so comparing house prices in the South East with the UK average contains an element of comparing the South East with itself. From 1970 onwards the basis of the figures in the weighted indexes calculated from the Building Society Mortgage Survey, and before then the Co-Operative Permanent Building Society indexes. Reliance on building society sources may have led to the widening of the differences being under-stated in the 1980's, since the proportion of transactions financed by building society loans was lower, and by bank loans higher, in the South of England than in the Midlands and North. Table III shows the available figures. Nationally, the average price of houses bought with bank mortgages rose faster than for houses bought with building society mortgages (see Annex A). The weight for bank-financed purchases in an average for banks and building societies combined would be higher in the South East than in the North.

Part III The Geographical Pattern of House Prices Within England

12. There are substantial inter-regional differences in levels as well as in rates of increase in house prices and these are summarised in Table II. A comparison is made between 1969-70, a period of comparative stability; 1972 when house prices were rising very fast; 1975-77 another period of near stability; 1980, at the end of the next boom; 1982, and then 1987.

Table II Index Numbers of the Regional Spread of House Prices

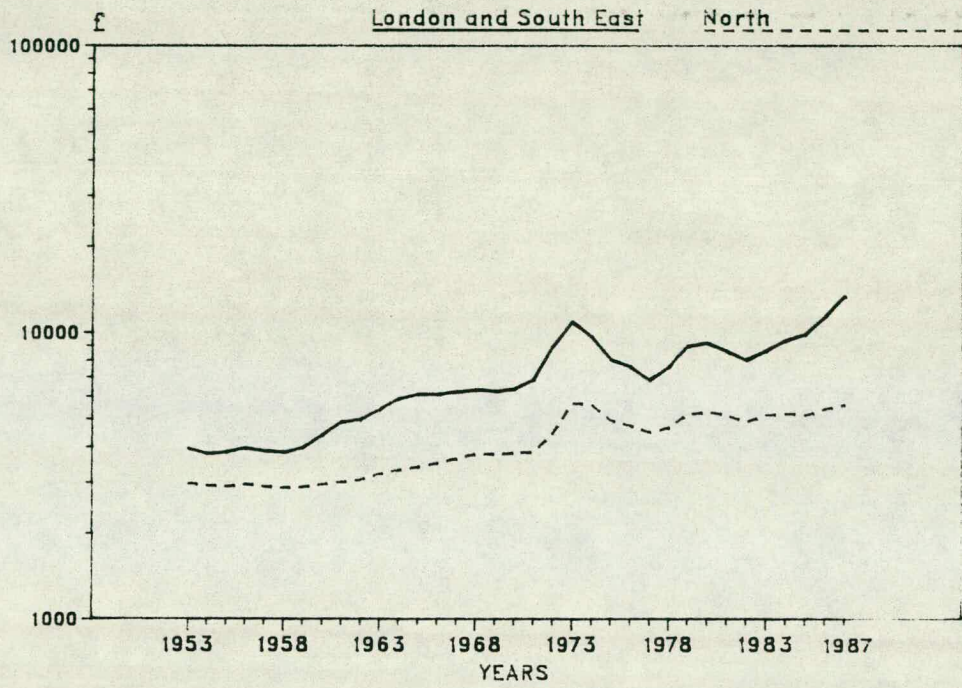
(UK average = 100)

	1969-70	1972	1975-77	1980	1982	1987
North	80	73	83	75	76	68
Yorkshire and Humberside	74	66	78	75	77	69
North West	84	78	83	85	88	73
East Midlands	81	76	84	80	82	79
West Midlands	92	85	92	92	99	106
East Anglia	92	95	93	97	130	163
Greater London	136	151	124	131	126	142
Rest of South East	125	134	122	126	108	110
South West	98	105	101	107		

Source: Calculated from Annex B, Table B.1,

13. In the period covered by Table II the changes in the inter-regional spread of house prices took place through differential rates of price increase, not absolute falls in house prices. When the rise in house prices accelerated in 1971 and 1972, and again in 1978 and 1979, the acceleration was soonest and strongest in the South East, with the Midlands and North following later. When the rise in prices was checked at the end of 1973 and in 1980, the check came soonest and sharpest in the South East. This process took place without there being much concern about a North/South divide in house prices. Such concern was not expressed in 1972 and 1973, notwithstanding the widening in the spread of house prices that Table II shows. Between 1981 and 1987 the

GRAPH B : HOUSE PROCES IN REAL TERMS IN THE NORTH AND SOUTH-EAST



GRAPH C : RATIO OF HOUSE PRICES SOUTH-EAST - NORTH

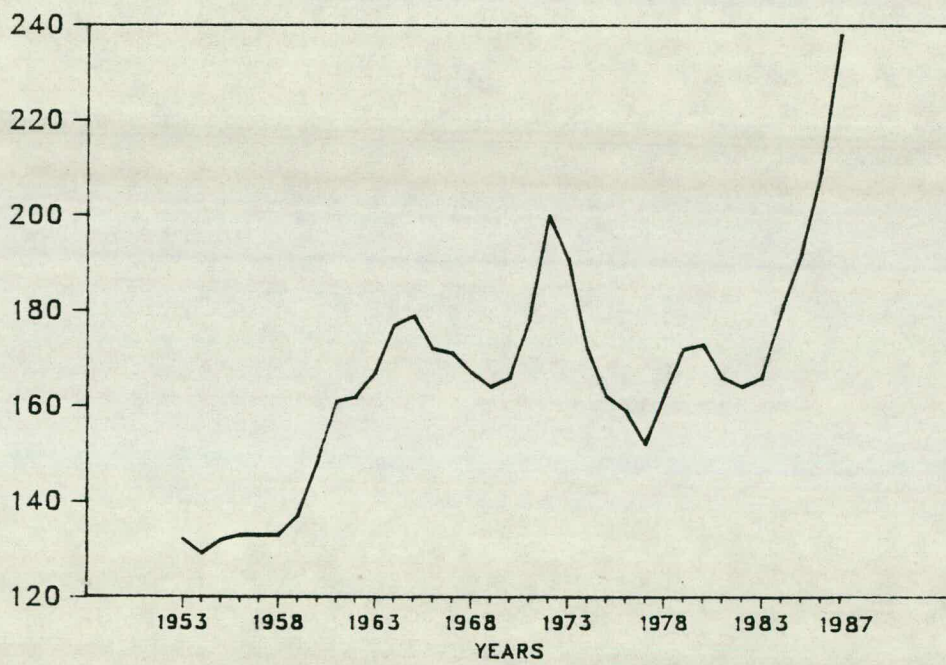


Table III. Sources of Loans For House Purchasers Buying on Mortgage in 1981, 1982, 1983, and the First Quarter of 1984

	(percent)				
	Building Society	Banks	Local Authority	Other	Total
North	76	10	11	2	100
Yorkshire and Humberside	80	12	5	3	100
North West	74	14	10	2	100
East Midlands	72	15	9	3	100
West Midlands	80	11	7	2	100
East Anglia	74	18	6	2	100
Greater London	72	19	5	3	100
Rest of South East	74	18	5	3	100
South West	73	16	7	4	100
England	75	15	7	3	100

Source: Labour Force Survey 1984, Housing Trailer

graphically, and the exclusion altogether of transactions financed by banks and other lenders. Nevertheless, the information is sufficient to show that regional boundaries are not merely arbitrary and that the North/South differential is not simply an artefact of classification. If like is compared as far as possible with like at county and town level, the North/South differential is still to be seen. The widely commented on "ripple" effect, the process by which the strong demand for housing in the South East has brought up house prices in places outside the statistical South East region but influenced by the South Eastern economy is also shown to be genuine. As of early 1988, though, it had not brought prices there all the way up to South Eastern levels.

19. The building societies' information on local house prices covers too short a period to study the widening of the geographic spread of house prices. The sub-regional detail for the later 1960's that was derived from the Inland Revenue Valuation Office's information (see Annex B, Table B.3), may however be compared with the Halifax Building Society's local house prices to provide a broad assessment of change at sub-regional level in the Midlands and North. The comparison is commented on in Annex C. It suggests that in the West Midlands, Yorkshire, and the North West house prices in the industrial centres rose much less than in the rest of the regions, and hence that a considerable part of the widening of the difference between average house prices in South East England and the Midlands and North was due to house prices in the industrial cities as distinct from the Midlands and North as a whole. The steep falls in employment in those cities and towns could obviously be the reason. If it was the reason, though, the differential fall (relative to prices elsewhere) in the industrial cities would have to have had occurred after 1980. The time series required to establish whether or not this was so do not yet exist; but the timing of the changes at regional level is fully compatible with the effect of industrial depression on cities of the Midlands and North having been a major part of the explanation of the changes at regional level in the 1980's.

15. In Graphs B and C and in Table B.6 (Annex B) there is some suggestion that in the 1960's as in the 1970's the difference between northern and south-eastern house prices narrowed when the national house increase slackened and widened when it accelerated. The widening in 1964, and narrowing between 1967 and 1969 are instances that support this view. But plainly the difference widened very substantially in six years between 1959 and 1965.

16. In 1939 the difference in house prices between the South East and the North appears (see Annex B, Table B.6) to have been similar to what it was in the 1950's, or perhaps very slightly narrower. But whether the difference changed during the 1930's is not known. It is at present not possible to go back before 1939 in terms of house prices, but the pattern of urban rents in 1912 (see Annex B, Table B.7) is of interest. Rents in London were substantially higher (by a ratio of about 5:3) than in the cities and towns of the Provinces; but among those cities and towns there is no regional pattern. There is no sign of a North/South differential apart from London. Whether that was still so of house prices in 1939 cannot be ascertained definitely from the information available. There would be nothing surprising, of course, about a difference in house prices between the South-East (excluding London) and the North having emerged in the inter-war years despite there having been no North/South differential in rents before 1914. In the pre-1914 decade the industrial areas of the North (and Scotland and Wales) were substantially more prosperous than in the inter-war years, when economic growth was heavily concentrated in the South (see Part V of the paper).

17. On a long term view, therefore, the geographical pattern of house prices from the late 1960's to the early 1980's cannot be regarded as being the "normal" pattern. Between the late 1950's and the mid-1960's house prices rose much faster in the South East than in the North of England, more than doubling the difference between them in average house prices. This widening of the inter-regional dispersion was subsequently reversed only to a very limited extent; and in the mid-1980's there was a further substantial widening of the inter-regional house price dispersion. Possible explanations are discussed in Part V of the paper.

18. Whether analysing geographical differences in house prices in terms of the standard regions for statistical purposes obscures as much as it reveals is open to argument. Certainly there are very substantial intra-regional variations in house prices. Average house prices by county and for selected towns are shown in Annex C, taken from data published by the Halifax Building Society. Other building societies, notably Nationwide, now publish average house prices at local level, which has been made possible by developments in data processing that permit all mortgage records to be accessed, as distinct from a sample. Disadvantages are that the nature of the business done by different societies may vary geo-

22. Whether the housing market did work in this way, and in particular whether the amount of mortgage lending did have so strong an effect on the rate of rise of house prices was the subject of increasing controversy. That swings in the volume of mortgage lending influenced house building was not disputed. The connection was clearly visible in the time series, and indeed when the general level of interest rates rose the house builders argued the building societies to follow so as to keep mortgage rationing to a minimum. No one, least of all the building societies, told the house builders that what they were asking was pointless. In the later 1970's though the building societies argued with increasing vigour, that the volume of mortgage lending did not govern the rate of rise of house prices, and that the movement of personal income was much more important. In 1978 when house prices were accelerating, the government of the day invoked the Memorandum of Agreement (see Part VI of the paper, below) to call for a cut of £70 million a month (about 10%) in lending. When house prices continued to rise notwithstanding the cut in mortgage lending, the building societies contended their arguments were vindicated. But much the same had happened in 1973: with a rise in prices well under way, a reduction in lending (brought about then by the adverse movement of interest rates and consequent mortgage rationing) led to a fall in the volume of transactions, not a check to prices. In a market where expectations are important because many of the sellers have a choice of whether or not to trade at any particular price, rising prices influence expectations. If sellers do not receive offers at the prices they think they should get, their first reaction is to wait; the volume of transactions falls, but some purchasers who must buy pay the prices asked even if others do not. Some buyers pay the expected prices, so the measured price level continues to rise, until eventually difficulties of making sales lead more and more sellers to revise their views about acceptable prices.

23. This account of short-run fluctuations in the rate of rise of house prices attributes them to instability in the demand side of the market, not to supply. It is one of the most commonly quoted axioms of price theory that prices are determined in the short run by demand but in the long run by supply. That is to say, in the long term supply will expand if the price is above the cost of adding to the supply, and will contract if it is lower, so that quantities demanded and supplied will be brought into balance at a price approximately equal to the cost of adding to the supply (long run marginal cost). Whether owner-occupied housing is at least a partial exception because newly built houses are so small a proportion of the houses offered for sale will be commented on later in the paper. Here the concern is with short run fluctuations, and

Part IV. Causes and Explanations For the Course of House Prices Nationally

(a) Short-Term Fluctuations

20. The reasons for the long term upward trend in house prices are separate from the causes of the short-term fluctuations around the trend. The fluctuations and the trend are not necessarily totally distinct, for there is the possibility that sharp fluctuations result in the long term upward trend being steeper than it might otherwise have been. That this might well be so was part of the case deployed in the 1970's in support of measures to try to moderate the fluctuations in the rate of rise of house prices.

21. These measures had their origins in the house price boom of 1971-73, and the subsequent slump in the housing market. A key element of the context was one of domination of the market for house purchase loans by the building societies, who collectively rationed mortgage loans rather than charge market clearing interest rates. Mortgage rates and rates offered to investors were governed by the recommended rates agreement operated by the Building Societies Association. The building societies were not even collectively monopolists: insurance companies made house purchase loans in small numbers; and local authorities were active lenders until activity was cut in 1976 for public expenditure reasons. Nevertheless, the building societies collectively had very substantial market power. In these conditions a distinction was drawn between 'underlying' demand in the market for owner-occupied houses, which was the demand that there would be if potential purchasers could obtain all the mortgage money they would wish, subject to credit-worthiness, at current mortgage rates; and 'effective' demand, that part of underlying demand made effective in the market by access to credit. Mortgage rationing kept the two apart. When market interest rates were generally low and the building societies' competitive position strong, as in 1971 and the first half of 1972, the amount of rationing was small, and most borrowers could obtain as much as they wished. But when market interest rates rose sharply as in 1973 and early 1974, building societies followed the market only part of the way; their receipts from investors fell, and they rationed their mortgage lending to balance with their receipts. In these conditions there was considered to be a large gap between underlying and effective demand.

a constant value of money. The series starts with 1977, as a year of comparative plenty in the terms of the old regime.

Table IV Net Mortgage Lending

(£ million)

	Building Societies	Banks (a)	Miscellaneous Financial Institutions	All Others	Total	Total at 1980 Value of Money
1977	4,100	121		29	4,250	6,158
1978	5,115	275		23	5,413	7,242
1979	5,271	597		593	6,461	7,622
1980	5,722	593		1,018	7,333	7,333
1981	6,331	2,265		713	9,309	8,322
1982	8,147	5,078		912	14,137	11,638
1983	10,928	3,531	225	-159	14,525	11,429
1984	14,572	2,043	445	12	17,072	12,799
1985	14,711	4,223	425	-241	19,116	13,509
1986	19,541	4,671	2,406	-10	26,608	18,187
1987	15,210	10,030	3,736	575	29,551	19,390

Notes: (a) Monetary sector

Source: Financial Statistics April 1988, Table 9.4

25. Although the figures in Table IV include a considerable amount of lending for purposes related to housing (like house improvement) but not for house purchase strictly speaking, there can be no doubt about there having been a very large increase in lending for house purchase, ~~more than a doubling in real terms between 1980 and 1987~~. To contend that there was no connection between this increase in lending and the house price boom of the 1980's would appear far fetched. For a time it was argued that the absence of more than very modest increases in house prices in 1981 and 1982 bore out the contention that the volume of lending did not affect house prices, hence on that score at least the rapid expansion of lending could be viewed with equanimity. Subsequent events showed that contention to be invalid, as was to be expected from past experience: in 1970 and 1977 an expansion in lending took place without any acceleration of the rise of house prices, because the accumulation of unsold houses during the previous slump could absorb it. The same appears to have happened in 1981 and 1982. By 1983 the unsold houses had gone, and with the volume of lending continuing to expand, house prices rose. House purchase lending

examination of the conditions associated the phases summarised in paragraph 3 leaves no doubt that the source of the instability came from the demand side of the system, not supply. Whether the instability of demand was due more to instability in mortgage lending or variations in the rate of rise of incomes will be discussed later; but both these influences have their impact on the market through demand. The steep rise in house prices in the war and immediate post war years can reasonably be attributed to the supply contracting fast owing to the halt to house building. But the phases that are most difficult to explain are the fall in house prices in the early 1950's and then the very slow increase until 1959. Certainty is unattainable, not least because the housing market at this time was far worse documented statistically than it subsequently became. The suggestion may however be put forward that the supply side was an important part of the explanation, through very large sales of formerly rented housing for owner-occupation. The totals of owner-occupiers are firmly enough established and new building for private owners accurately enough recorded to leave no doubt that during the 1950's less than half of the increase in the owner-occupied stock came from new building. The rest came from sales of rented housing, on a scale larger than public sector sales in the 1980's. But unlike the public sector sales, which were predominantly to sitting tenants, many of the sales of hitherto privately rented dwellings were with vacant possession. The transfer from private renting to owner-occupation was once-and-for-all, and beyond the end of the 1950's there is no sign of instability of their source of supply having an independent effect. Changes in the supply of new dwellings can be seen to have responded, with a lag, to changes in demand and were not an independent source of instability.

24. The demand side of the market for owner-occupied housing is unusual in the extent to which it depends on credit. Surveys notably the three Movers Surveys and the 1984 Labour Force Survey housing trailer, have consistently shown that about 80 percent of all house purchase transactions take place with borrowed money. In the early 1980's the market for house purchase loans changed out of all recognition. The clearing banks entered the market in a big way, advertising their mortgage loans. The building societies abandoned the recommended rate system, and turned to the 'wholesale' money market for funds to supplement their traditional sources. The mortgage market became competitive, with competition for business in a way not seen since the 1930's. Mortgage rationing had gone, and with it the former distinction between underlying and effective demand. Mortgage loans were readily available at market rates. The consequence was an extremely rapid increase in the volume of lending, but with mortgage rates very substantially higher, relative to other interest rates, than formerly. Table III shows the volume of net mortgage lending, in nominal terms and at

1966	7.0	4.8	6.8	3.9	3.1	0.9
1967	7.1	4.8	6.7	2.4	4.7	2.4
1968	7.5	5.1	7.4	4.8	2.7	0.3
1969	8.3	5.6	9.0	5.4	2.9	0.2
1970	8.5	5.8	9.3	6.3	2.2	-0.5
1971	8.4	5.9	8.9	9.4	-1.0	-3.5
1972	8.2	5.7	9.0	7.3	0.9	-1.6
1973	10.6	7.4	10.9	9.1	1.5	-1.7
1974	11.0	7.4	15.0	16.0	-5.0	-8.6
1975	11.0	7.2	14.7	24.2	-13.2	-17.0
1976	11.1	7.2	14.3	16.5	-5.4	-9.3
1977	11.1	7.3	12.3	16.7	-5.6	-9.4
1978	10.2	6.8	11.9	8.3	1.9	-1.5
1979	12.0	8.4	11.4	13.3	-1.3	-4.9
1980	14.9	10.4	11.9	18.1	-3.4	-7.7
1981	13.6	9.5	13.0	11.9	2.7	-2.4
1982	13.0	9.1	11.9	8.7	4.3	0.4
1983	10.6	7.4	10.2	4.6	6.0	2.8
1984	11.4	8.0	10.2	5.0	6.4	3.0
1985	13.2	9.4	10.1	6.1	7.1	3.3
1986	11.8	8.4	9.5	3.4	8.4	5.0
1987	11.6	8.4	9.3	4.2	7.4	4.2
1988 (1st quarter)	10.3	7.5	9.0	3.4	6.9	4.1

Sources: Gross mortgage rate is BSA recommended rate; then advised rate; and then the 'basic' rate as published in Financial Statistics Table 13.12

Net mortgage rate is gross rate less relief at the basic rate of income tax since 1973 and at the standard rate less earned income relief in 1956-72. In 1936 the net rate is shown equal to the gross rate owing to the start of tax liability being much higher in relation to income.

'Long term interest rate' is the yield on 2½% Consols

'Inflation' is measured by the Index of Retail Prices, except in 1936 when consumers' expenditure deflator is used

expanded very fast in 1986 and 1987, and how important this was in explaining the very rapid increase in house prices is a key question about the house price boom of the mid-1980's.

26. The way in which financial conditions affected the housing market was different from earlier booms. With money readily available at market interest rates, and building societies, banks, and others competing to lend at those rates, the volume of house purchase lending is demand-determined via the demand to buy at specific interest rates and the return to lenders from mortgage lending as compared to other lines of business. This makes the demand side of the market depend on buyers' elasticity of demand with respect to house prices and interest rates jointly, together with the rates of interest that lenders can obtain elsewhere. During the housing boom of the 1980's buyers' demand has proved very inelastic with respect to high real interest rates. This is important for any conclusions about what determines house prices; but before commenting on some possible reasons why this should be so, it is useful to set out the facts that have to be explained. Here again a long historical run of figures is needed so that which is novel about recent events can be the more readily appreciated.

Table V Mortgage Interest Rates Compared With Inflation and the Long Term Gilt Edged Rates

	Building Society Gross	Mortgages Net of Tax Relief	Long Term Interest Rate	Inflation	"Real" Mortgage Rate Gross	Mortgage Rate Net
1936	5.0	5.0	2.9	0.7	4.3	4.3
1956	5.7	3.8	4.7	5.0	-0.7	-1.2
1957	6.0	4.0	5.0	3.6	2.4	0.4
1958	6.0	4.0	5.0	3.2	2.8	0.8
1959	5.8	4.1	5.8	0.6	5.2	3.5
1960	5.8	4.1	5.4	1.1	4.7	3.0
1961	6.3	4.4	6.2	3.3	3.0	1.1
1962	6.5	4.6	6.0	4.2	2.3	0.4
1963	6.0	4.2	5.6	2.0	4.0	2.2
1964	6.0	4.2	6.0	3.2	2.8	1.0
1965	6.7	4.6	6.4	4.8	1.9	-0.2

with most force, though, to times of rising interest rates, not to years of falling nominal rates (like 1986 and 1987) which would have been years of comparative plenty even under the old system. So other explanations may be looked for in addition. One that may be suggested is price leadership by the high cost suppliers, the building societies. Competition among the societies has led them to pay considerably higher rates than formerly for 'retail' deposits. For many years societies had a share rate and a lower and unimportant deposit rate. Then in the mid-1970's came time shares, which offered an enhanced rate but required the investor to tie up his money for two years. Since then the time periods have become progressively shorter, the penalties for early withdrawal smaller or in some cases nil, and the minimum investment required for an enhanced rate lower. The consequence has been to inflate the societies' costs; their mortgage rates are set by cost-plus and so are correspondingly high. Their market share has diminished (see Table IV) but in absolute terms their business has grown. The sheer size of the building societies makes it unlikely that rivals would try to take their business from them by price (i.e. mortgage interest rate) competition: to let the societies act as price leaders and nibble away at the edges of their market is a much safer strategy, and a lucrative one.

29. Price leadership may explain why lenders can charge such mortgage rates, but why borrowers pay them is an equally important question. More specifically, how is the demand to buy houses with borrowed money affected by interest rates, and in particular why have mortgage rates at record levels in real terms had so little visible effect in restraining the rise in house prices. The significance of 'real' versus nominal interest rates is controversial, because with fixed interest financing, high nominal interest rates produce a powerful "front loading" effect and consequent burden on borrowers in the early years of their mortgages. There is an extremely large difference in what the mortgagor has to pay in proportion to his income if the interest rate is 11% and the inflation rate 14% from what would happen if the real interest rate were minus 3% in the sense of the debt melting away at 3% a year while the borrower paid nothing. Nevertheless, in a world of perfect capital markets in which a house owner could borrow without limit against the increase in the value of his house, and there were no risks arising from not all house prices rising at the average rate, the 'real' interest rate can be shown to be the relevant interest rate for the rational person's house purchase decisions whatever the nominal interest rate and the rate of inflation. From this it was argued that concern about the effect of high nominal interest rates on the 'affordability' of housing (the term used in the USA) was ill-founded. This argument has never been convincing as applied to the real world of the British (or American)

27. Although the actual interest rate less the annual inflation rate is a somewhat contentious measure of real interest rates, there is no doubt at all that from 1983 onwards mortgage interest rates were extremely high in real terms, not just by the standards of the 1970's but by the standards of the 1950's and 1960's when the inflation rate was similar to what it was from 1983 onwards. Between 1955 and 1970 the inflation rate averaged 3.6% a term compared with 4.7% in 1983-87; but in 1955-70 mortgage rates net of tax averaged 1.0% in real terms, as against 3.7% in 1983-87. In gross of tax terms the contrast was even greater: 2.9% in 1986-70, but 7.1% in 1983-87. The high real mortgage rates have two components: the high real interest rates generally, and the "mortgage mark-up", the margin between the general level of interest rates and mortgage rates. In 1986-70 the rate on Consols (used because it provides a long time series that is unchanged in definitions) averaged 2.8 percent in real terms, and 5.2 percent in real terms. So the following comparisons can be made

	1986-70	1983-87	Difference
Consols rate in real terms	2.8	5.2	+2.4
Mortgage rate in real terms (gross)	2.9	7.1	+4.2
"Mortgage mark up"	+0.1	+1.9	+1.8

In arithmetical terms, rather over one-half of the difference in real mortgage interest rates can be accounted for by the higher level of real interest rates generally, and rather less than one half by higher mortgage mark up.

28. The high general level of interest rates would appear to be due to nominal interest rates remaining close to the levels to which they were pushed to restrain inflation, even though the inflation rate has since fallen back a long way. This is however a world-wide phenomenon, and too complex an issue to discuss here without leading the argument too far away from the central theme of the paper. The mortgage mark-up relative to other interest rates does deserve a further comment. That it exists and makes house purchase lending in Britain a lucrative business is not in doubt: its effect can be seen in the way foreign banks have entered the business, and more clearly still in the published profits of new commercial lenders. National Home Loans has reported profits that imply a margin of at least 1% on the amount lent. Why has competition not eroded these margins and brought mortgage interest rates closer to the general level of interest rates? It is not possible to be wholly certain; but an explanation that suggests itself is the way in which competition has worked. Under the arrangements that existed before 1981, the building societies did not follow market interest rates all the way up when they rose, but rationed mortgages instead at interest rates below market levels. The break-up of these arrangements led the rates charged for mortgage money being market rates, which would be expected to be higher. That argument would apply

1960's the supply of new houses appears to have responded fairly quickly and on a considerable scale to increases in demand; in 1970-73 the response was much more delayed; and in 1977-79 there was hardly any response at all, with the increase in demand going almost entirely into higher prices and hardly any into higher output.

32. The means by which changes in the volume of new lending for house purchase could have led to fluctuations in effective demand for houses were outlined earlier in this section. Although income is likely to have a powerful effect on the underlying demand to buy houses, what is lacking is any suggested mechanism by which demand generated by higher incomes could make itself effective in the market in the absence of a sufficient supply of credit. As noted above, survey evidence suggests that about 80% of all house purchases take place with borrowed money. So any boost to the ready-money section of the market generated by rising incomes could affect only a small part of the market, too small to have a powerful effect on the market as a whole. Once a surge in house prices has got under way, though, it can maintain its momentum even with some reduction in the volume of credit, as events in 1973 and 1979 showed. For households selling one house to buy another, the enhanced price received for the house being sold provides most of the money to pay for the house being bought. Expectations that house prices will rise still further provide a strong incentive to draw on savings or borrow from informal sources (family and friends, for instance) in order to buy as quickly as possible. An important reason why the controversy about the relative importance of short run increases in incomes and swings in the supply of house purchase credit proved so intractable is probably to be found in the way in which incomes policies were used alongside monetary and fiscal policy in the 1960's and 1970's. In the "go" phase of policy (to use the terms current in the 1960's and 1970's) reductions in income tax coincided with a more relaxed attitude to pay increases, so that real incomes rose faster than trend; at the same time interest rates were reduced, which enabled building societies to take in large amounts of money and expand their lending, as in 1959-60, 1963-64, 1967, 1971-72, and 1978. In the "stop" or restrictive phase, the opposite was true. Real incomes thus rose or fell, relative to trend at the same time as the supply of house purchase loans expanded or contracted.

33. Relevant to interpreting the evidence about British house price booms is whether, anything similar has occurred in other countries. The only countries for which the requisite house price data are immediately available are the USA

mortgage market; and experience with the very high 'real' mortgage rates of the 1980's appears to be on balance against it. Mortgage rates of 11-12% (gross) in nominal terms appear to be compatible with a house price boom when they signify 3% to 5% in real terms net of tax as when in net of tax terms they were negative in real terms. If this argument about the importance of nominal as opposed to real interest rate is broadly valid, there are implications for explaining the continuing rise in house prices in the mid-1980's. As Table V shows, the trend of mortgage rates in nominal terms has been distinctly downwards.

30. The effect of interest rates on the demand side of the housing market is not a subject on which the models of house price determination in Britain have much to say. The reason is the way in which mortgage rationing worked before 1981, being intensified as the general level of interest rates rose and relaxed when it fell. Over nearly all of the period for which a housing market^{model} could be estimated, therefore, any effects of movements of interest rates were merged with the effects of mortgage rationing. The principal question to which such models were addressed was how far the short-run variation in the rise of house prices was the consequence of changes in the volume of house purchase lending, in practice lending by building societies. The housing market is a very complicated market to model, because the length of time houses take to build, plus the time taken to acquire sites and the length of time before builders' change their perceptions of market prospects introduce lags that are long but of variable length. Lag structures are the key to such models, such as that by Hendry that was the basis (since much modified) of the housing market model DoE now uses. How far swings in the supply of house purchase credit explained the fluctuations in the rate of rise in house prices, and how far the explanation lay in short-run variation in the rate of rise of income (the only rival explanation) was highly contentious, not least because if instability in the volume of house purchase lending was the main explanation, then in the political circumstances of the 1970's the conclusion could be drawn that the volume of lending by building societies should be regulated. The policies pursued are referred to in Part VI of the paper: here the concern is with the analysis.

31. Reasons were advanced in paragraph 23 about for thinking that since the mid-1950's, at least, instability in the housing market came predominantly from the demand side of the market. What caused the short run fluctuations in the rate of rise of house prices, and in the volume of house building for private owners, is thus a question about the relative importance of the different causes of instability in the demand for houses, together with the reasons why the response from supply changed in the direction of being later and smaller. During the late 1950's and the

34. 1974 saw the deepest post-war slump in the British housing market, and in year-on-year terms the number of transactions was 20% below the previous peak; in 1980 the fall was only 11%. In the USA, in contrast, there was a fall between 1978 and 1982 of 50% in the number of dwellings sold. Equally extreme swings were seen in sales of new dwellings; and these swings were reflected in building activity. Starts of single residences (as contrasted with flats in blocks) fell by nearly 800,000 between 1978 and 1982; and then when the market turned, rose by 400,000 between 1982 and 1983. The slump did not cut the capacity of the American house building industry in the same way as appears to have happened in Britain in the mid-1970's (see next section). But whether the smaller swings in house prices in the USA were the consequence of the larger swings in the volume of transactions and in output is a complex question, and further inquiry would be needed before one could conclude that greater responsiveness of the supply side of the system in the US averted house price booms on the British scale, let alone what were the reasons for this greater responsiveness. Besides, it is not self-evident that more stable prices have advantages that exceed the disadvantages of much less stable volumes of transactions and of new building.

35. The record of house prices in the Netherlands (see Annex E, Table E.13 in contrast shows instability even greater than seen in Britain. Between 1972 and 1978 house prices tripled in nominal terms (compared with the doubling in Britain between 1970 and 1973), and by 75% relative to the general level of prices. This increase occurred at a time of strong expansion of house purchase credit, including increases in the amount lent in relation to the buyer's income and the value of the property. There were reports of loans greater than the market value of the property, secured on expected future increases in value. There then followed the crash, in which house prices fell in cash terms by between 25 and 30%, and by over 40% in real terms. No thorough study of the boom and the slump has yet come to hand, so it is not possible to say anything specific about in what ways (if at all) the boom contributed to the subsequent slump.

36. Both Dutch and US experience points to how important is an expansion of house purchase lending in explaining periods of boom in house prices, which supports the view that the boom in lending for house purchase (see Table III above) had much to do with the boom in house prices from 1983 onwards. The fall in interest rates in nominal terms is also likely to have contributed, for reasons already discussed. Incomes also are likely to have made a contribution. The increase in real disposable personal income per head between 1981 and 1987 was not particularly rapid 2.1% a year on average, though the increases in 1986 and 1987 were more substantial (3-3 1/2 percent); but the movement of real personal disposable income in total conceals a shift within it in the direction of people

and the Netherlands. Table E.4 in Annex E shows that the USA has experienced house price booms. In real terms (i.e. relative to the general price level) house prices in the USA rose by 9% between 1971 and 1973; and by 16% between 1975 and 1979. The latter corresponded to an increase of 56% in nominal terms. This was the largest increase in house prices in the USA since the war; but appears mild in comparison with the British house price booms. To conclude from this, though, that the American market for owner-occupied houses is more stable than the British would be unwarranted, given the wide swings in the number of sales. Table VI shows a comparison; the coverage of the figures is not exactly the same owing to the British figures being derived from financial institutions, but the differences of coverage are not sufficient to call the conclusion into question.

Table VI Sales of Dwellings for Owner-Occupation in UK and USA

	(thousands)			UK (b)
	New	USA (a) Second-Hand	Total	
1970	485	1,612	2,097	616
1971	656	2,018	2,674	738
1972	708	2,252	2,970	758
1973	634	2,334	2,968	641
1974	519	2,272	2,791	543
1975	549	2,476	3,025	785
1976	646	3,064	3,710	763
1977	819	3,650	4,469	<u>776</u> 1,008
1978	817	3,986	4,803	1,066
1979	709	3,827	4,536	1,007
1980	545	2,973	3,518	953
1981	436	2,419	2,855	1,013
1982	412	1,990	2,402	1,161
1983	623	2,719	3,342	1,225
1984	639	2,860	3,507	1,330

Notes: (a) One-family homes only

(b) House purchase advances by building societies, local authorities, and insurance companies 1970-77, all transactions (estimated) 1977-1984, excluding sales by local authorities to sitting tenants

Source: US from Statistical Abstract of the United States 1986, Tables 1301 and 1304

UK from A E Holmans, Flows of Funds Associated With House Purchase, Annex F

(b) The Long Term Trend of House Prices

37. The historical record discussed in Annex A shows clearly a long run upward trend in house prices in Britain, with only the inter-war years as an apparent exception. The trend was measured in ways that excluded as far as possible the effect of increases in the quality of the accommodation sold or rented, as distinct from 'true' price increases. To have regard to the rise in the quality of houses being sold, and to exclude it as far as possible from the measured increase in house prices, is all-important in interpreting the long term trend of house prices if real incomes are rising, as they have done for well over a century. In the absence of a zero income elasticity of demand for housing and a zero supply elasticity, neither of which is at all probable, even a slow rise in real income if prolonged will raise the quality of housing. So a constant ratio of simple average house prices, or rents, to real incomes will imply a slower rise in house prices (or rents) than incomes. The alleged constancy of the relationship of house prices and incomes in the long term therefore appears to be the consequence of measuring the increase in house prices inclusive of quality change. With quality change excluded, the historical record is one of an increase in house prices at a faster rate than the general price level but more slowly than real disposable incomes. This is also the historical record of rents between the 1870's and the turn of the century, when there was a free market in rents. The inter-war years appear to have been an exception to a very long term tendency of the price of housing, in the sense either of house prices or market rents, to rise relative to the general price level.

38. Three possible explanations, none of them mutually exclusive, might be put forward to explain why house prices (exclusive of quality changes) should rise faster than the general price level: technology, in the sense of a slower rise in productivity in the house building industry or the building materials industries, or both than in the economy as a whole; exercise of market power by housebuilding firms and their employees (or both) to secure increases in profits or pay relative to profits and pay in the rest of the economy; and limits^{to} the increase in the supply of housing due in turn to limits to the supply of land for house building, due either to geography and travel costs, or to policies.

39. The cost of building materials needs to be commented on only briefly. The historical record is summarised in Annex D, Table D.2. There was a sharp increase in costs between pre-war and post-war, mainly due to timber prices, and then stability until the building boom of the early 1970's led to an increase of about 20% in 'real' building material prices, which persisted after the boom collapsed. After that the trend ran level with a dip at the beginning of the 1980's when new house building fell; and a recovery in prices when house building revived;

people more likely to be house buyers. There is first the fact that the pay of people in employment has risen in real terms, whereas social security benefit scales have been up-rated with prices (or in some instances left unchanged in cash terms). Average pre-tax earnings (index for the whole economy) rose by some 17% in real terms between 1981 and 1987. It is people in employment that buy houses and not, for the most part, recipients of social security benefit. Within incomes from employment there was a further shift in favour of those most likely to be house buyers. Notwithstanding the growth of owner-occupation, people in non-manual occupations are more likely to be home owners, income for income, than are people in manual occupations. Calculations by the Department of Employment (Employment Gazette, February 1988, page 76) that between 1981 and 1986 average weekly earnings in real terms of men in full-time work in manual occupations rose by 10%, but in non-manual occupations by 16%. If the comparison is with 1979, before the beginning of the slump which bore more heavily (in terms of unemployment) on manual workers), the figures would be 6% and 22%. If the 1986-87 change is added, the increase between 1981 and 1986 would be 12% for manual workers, but 21% for non-manual workers. On the 1979 base (relevant because the change in income between then and 1981 could be made effective in the market by the credit expansion from 1981 onwards), the increases were 8% for manual workers and 28% for non-manual workers. These are pre-tax figures. At these levels reductions in base rate income tax were offset by higher National Insurance contributions and abolition of reduced rate. The comparisons would be as shown below, with the married man's tax allowance

	1979	1986	Change (%)
Gross earnings (1986 prices) (£)			
Manual	165.0	178.0	+7.9
Non Manual	200.0	255.2	+27.6
Earnings net of income tax and NI contributions			
Manual	124	133	+7
Non Manual	146	182	+25

At higher levels of income the tax changes would have worked to increase the advantage of house buyers, and may well have strengthened the upper end of the market. It is reasonable to conclude that the rise in incomes of the house buying part of the population rose substantially more than did the average, and that there is here a major reason why plentiful credit could generate a house price boom.

Public sector costs continued to decline in real terms, notwithstanding an increase of about 6% in the price of building materials in real terms and a 10% increase in average real earnings in the construction industry (Table D.2 and D.3). But in the private sector total costs as measured by the house building costs rose very substantially more than the cost of inputs. If 1983 is taken as base year in order to avoid difficulties that may have been caused for the private sector cost index by ambiguities in the house price measure when the banks first took a considerable amount of the house purchase business, then the change in real terms would be nil for public sector house building costs and plus 17 percent for the private sector, as against increases of 3 percent in real terms for the price of house building materials and 8 percent in building industry pay in real terms. Building material costs and wage earnings were the same in both sectors. There remain as explanations for the difference building firms' profit margins; and payments to self-employed workers. This method of payment is reputed to be very common in house building by private developers, but very little is known about the amounts paid, so caution is necessary in interpreting the difference between the movement of the index of total costs and the cost of inputs. Nevertheless, there is no reason at all to doubt that the index of private sector house building costs, or strictly speaking the output price index for private sector house building, had within it a very substantial increase in house builders' profits between the early 1980's and 1987.

42. There is no adequate time series for house builders' profits and profit margins to tie together the price of new houses, land prices, costs of labour and materials, and financing costs. Among the main reasons is the fact that most of the large house building firms have substantial interests in other branches of construction and in property, and their published profit figures include the profits or losses from these sides of their businesses as well as the profits from house building. Only snippets of "press cutting intelligence" are available about firms' profit margins, of which some samples are in Appendix A of Annex D. In the absence of such a time series, it is necessary to make use of comparisons between prices of inputs (labour and materials) and the price of the output (the private sector house building cost index); and between the house building cost index and the difference between new house prices and price per plot for house building land. Comparing new house prices and prices of building land in the same period is effectively valuing land at replacement cost or 'last-in-first-out', in order to attempt to measure the change in the profitability of house building as such, as distinct from the profit from holding land that is increasing in value. In the nature of their business, house builders who are developers who put up houses at their own risk and expense and offer them for sale (as distinct

but building material prices could not, on the evidence, have contributed much to the faster rise in house prices from 1983 onwards. Construction industry pay has not contributed either. The historical record summarised in Table D.3 of Annex D is of very close similarity between the movement of building industry pay and pay in the economy as a whole. Construction industry pay rose relative to pay elsewhere in the booms; but the margin gained was not great, and was lost before long. Up to 1987 the boom had not brought up building industry pay relative to pay elsewhere, probably because unemployment was much heavier than in other post-war building booms

40. Increases in the relative prices of inputs of building materials and labour were thus not an explanation (let alone "the" explanation) of the rise in house prices relative to the general price level. That is not, however, sufficient to exclude the "productivity" explanation because it does not bring to account the possibility of a comparatively slow rise in productivity in house building itself. Building costs are discussed in Annex D, and indexes of house building costs over a long run of years are tabulated in Table D.1. It shows house building costs for the public and private sectors separately. The distinction is important since the public sector index is calculated from contract prices, whereas the private sector index is calculated partly from the selling price of new houses less prices per plot for building land. The changes are summarised in Table VII below, which shows changes in 'real' building costs (i.e. relative to the general price level) between short term peaks and troughs.

Table VII. Indexes of House Building Costs in Real Terms

	(percent)	
	Public Sector	Private Sector
1971-74	+38	+29
1974-77	-12	-10
1977-81	+6	+13
1981-82	-9	-8
1982-87	-3	+23

Source: Annex D, Table D.1

41. Until 1982 the movement of the building cost indexes was similar in both sectors. The larger increase in the public sector in 1974 could well have been due to the increase in building there which got under way, with the encouragement of the government of the day, in 1973. After 1982 there was a complete contrast.

completions ran unambiguously higher than in the post slump years of the 1970's. The explanation that suggests itself for profits not being competed away by new entrants is that the losses and bankruptcies in the slump of 1974 drove a number of firms out of the house building business, and impressed on potential entrants that house building is a high risk business. Perception of these risks could well still be acting as a barrier to entry, behind which higher profit margins than formerly are earned.

45. Land prices may next be considered. Graph D shows the course of house and land prices since 1963, the year in which the land price series begins. The standard theory regards land prices as being demand determined. Land generally speaking has no cost of production, only values in alternative uses. On 'green-field' sites this alternative use is agriculture, so the supply price is agricultural value plus an addition to induce the owner to sell, plus the cost of servicing the land to make it useable for house building. Beyond that the value is demand-determined, subject to the extremely important proviso that sellers of land have expectations about the prices they should be able to get, and can decline to trade if less than this is offered. The same received theory has the price that builders will pay for land, if they have to, being governed by the price at which they expect to be able to sell the houses, less costs including enough profit to make the venture worthwhile. This method of 'residual value' is the standard one, and appears in the text-books for valuers. It does not yield a unique value in practice owing to differences in building efficiency, differences in perceptions about the rise in house prices in the interval before the houses are ready to sell; and differences of perception about by how much the selling price can be increased by design features to differentiate the product from other houses on offer. Over the years the preponderance of second hand houses in the market has increased. In 1986 and 1987 there were about 1,250,000 loans for the purchase of second hand houses (excluding local authority sales to sitting tenants) compared with 145,000 advances for the purchase of new houses, a ratio of old to new of nearly 9:1 in 1970 the figures were 470,000 and 145,000 a ratio of rather over 3:1; in the nine months to mid-year 1938, 296,000 houses in total were sold in England and Wales, of which 180,000 were second hand and 116,000 new (*), a ratio of only 1.5:1. Second-hand houses have no supply price, and no alternative use. With the rise in the proportion of all houses for sale that are second hand the market has become increasingly dominated on the supply side by second-hand houses. Their supply is fixed in the sense that sellers have only a choice between trading or not trading at a particular price, which

(*) Report of Inter-departmental Committee on the Selling Price of Houses, Cmd. 6670 (1945) page 10

from building to individual client's order, as is more common in some other countries) must buy building land before they can build houses and sell them. Some hold a 'land bank' of considerable size. It is often asserted that it is the increase in the value of the land between the time the developer buys it and the time he sells it with a house on it that produces the profit, and that the building as such only covers its costs, if that. Comparison of house prices, land prices, and building costs (Annex D, Table D.6) however, casts considerable doubt on this assertion.

43. The movement of average prices of building land is compared with the price of new houses and the general price level in Annex D, Table D.5; and the differences between house prices and land prices is compared with building costs in Table D.6. Land prices have risen faster over the run of years than have the price of new houses, as Table D.5 in Annex D shows, even though land prices fall sharply in nominal terms in 1974 and 1975. A comparison from peak to peak, 1973 to 1987, still shows a faster rise in land prices than in house prices though not by much if allowance is made for possible under-statement of the increase in house prices by an index derived from building society sources. Nevertheless, as is made clear in Annex D, it is evident that by no means all of the increase in house prices relative to the cost of building materials ^{went into land prices} and labour/. Builders' profit margins widened very substantially in the boom of 1982-87. The size of what in Table D.6 and the accompanying discussions is termed the 'residue', that is to say the difference between house prices and land prices, suggests that profit margins were if anything wide in 1987 than in 1973, once account is taken of the house prices measure being under-stated in 1987 through being derived from building society sources and the cost (or output price) index containing a sizeable profit element in 1987.

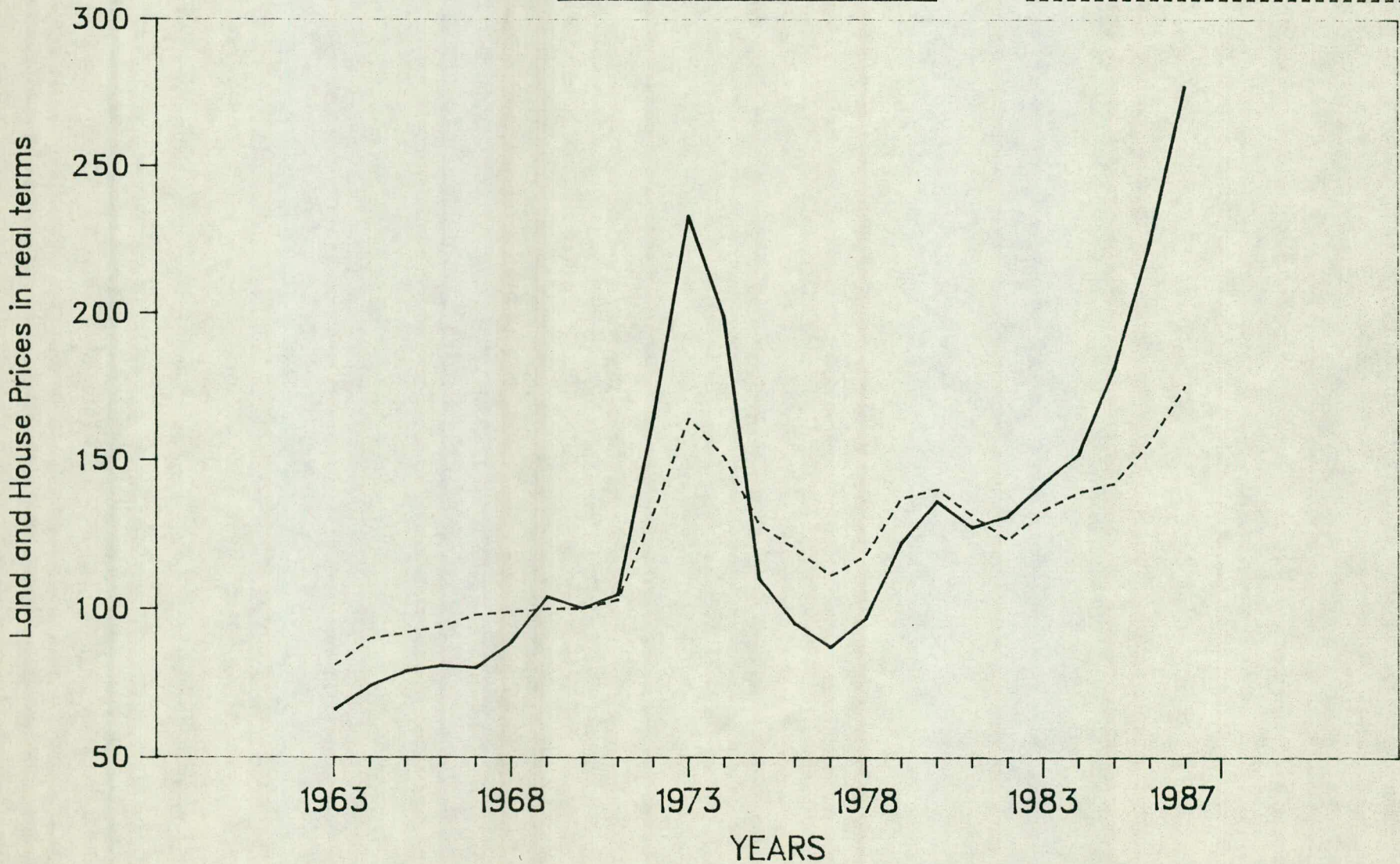
44. If this conclusion about developers' profit margins in the boom of the 1980's is broadly correct, then there is a question to be answered about how the house building industry could secure such profit margins with a substantially smaller volume of output. In 1972 196,000 dwellings were completed for private owners (GB figures) and in 1973 187,000; but in 1978 the figure was only 149,000; and even in 1986 and 1987 the figures were only 163,000 and 171,000 respectively.

After the slump of 1974 the house building industry could clearly make substantial profits out of a much smaller number of completions and sales than formerly needed for a 'boom' year. In the boom of the late 1970's higher prices brought much wider profit margins, but there was hardly any increase in new building (see Appendix Table B of Annex D); and in the boom of the 1980's it was not until 1986 that

GRAPH D : LAND AND HOUSE PRICES

Land prices in real terms

House prices in real terms



makes the market more dependent on expectations about future prices. With nearly nine-tenths of the supply coming onto the market being second hand houses, the difference that an increase in new building could make to the balance between quantity supplied and quantity demanded is now much smaller than it used to be.

47. The land price series does not at the time of writing go back before 1963, so it is not possible to say anything very specific about how land prices moved during the 1950's when house prices rose less than did the general level of house prices. What is notable about the 1950's, though, is how little of the growth of owner-occupation came from new building. Between 1951 and 1961 the estimated total of owner-occupied dwellings in England rose by almost 2.7 million, but less than 950,000 of them were newly built, and of those almost 300,000 were built in 1959 and 1960. The demand for owner-occupied housing was met mainly from sales of formerly rented houses, which make no demand on land. As Table B of Annex D shows, new house building began to rise at the end of the 1950's; as soon as it did so, house prices began to rise fast, particularly in the South East (see Graphs B and C) which suggests pressure on land supply.

48. In interpreting the movement of house prices in Britain in the longer term, it is relevant to inquire whether experience has been similar in other countries. In the USA the index of house prices in Annex E, Table E.4 shows a rising trend in the 1970's after abstracting from short-term cyclical movements, but not in the 1960's or (apparently) in the 1980's. Increases in construction costs were generally blamed for the rise in house prices in real terms, though with some tendency to attribute partial responsibility to stricter land use policies imposed in the name of "the environment". Site values appear lower in the USA in relation to house prices than in Britain: for the dwellings covered by the source of Table E.7 in Annex E, site values were equal to 20-25 percent of the price. The value of the site here includes services and works; and refers to dwellings that are for the most part detached houses. Table D.6 shows plot prices equal to over about 30% (in 1986) of prices of new dwellings, which include flats and terrace houses and in general use much less land than do American one-family houses, most of which are detached.

49. The extreme fluctuations in house prices in the Netherlands in the period covered by the immediately available indexes make it impossible to identify any trend. Other countries' experience does not add much, therefore, to interpreting the long term trend of British house prices. Statistics of rents are in general better than of house prices, because rents are so important a part of the cost of living. But comparisons between countries of the history of rents in relation to the general price level would be too great a diversion from the theme of this paper.

46. The proposition that the market price of land for house building is determined by house prices (less building costs and a 'normal' profit) does not depend on what proportion of the supply of housing for sale is second hand. It does, though depend on the supply of building land being limited and unresponsive to price increases. The theory of land values was worked out in the early years of the nineteenth century, from rent of corn-producing land being high because the price of corn during the Napoleonic wars was high, and not vice versa. If rents for corn growing land had stayed at pre-war levels 'farmers would live like gentlemen' but the public would not get their bread any cheaper. The same applies to house prices, mutatis mutandis. Land prices are pulled up by house prices, rather than house prices being pushed up by rising land prices. To the individual house builder the market price of land is an externally determined cost like that of building materials or labour. But for the house building industry as a whole the price of land is demand determined, on this hypothesis. Central to this hypothesis is that the supply of land is un-responsive to changes in quantities demanded. In the nineteenth century transport costs in money and time are probably what limited the supply of land that was useable for house building. The inter-war years then saw a revolution in public passenger transport, with the result that supply of land useable for house building increased very greatly, so that the building boom of the late 1920's and still more the 1930's could proceed without running into land shortages, and this new supply could keep house prices from rising. The net transfer of land from agriculture to urban uses is estimated to have risen from 22,000 acres a year in 1922-26 to 52,000 a year in 1926-31 and 62,000 a year in 1931-39 (*) with results that by the end of the 1930's had been widely criticised as "sprawl". Post-war planning policy attempted to prevent any repetition. As a consequence, the limit to the supply of house building land was brought back by policy. The growth of private car ownership would have been expected to produce an even greater increase in the amount of land useable for house building than did the growth of public transport in the inter-war years, if land use policies (or lack of them) had remained as in the inter-war years. A market in which for many years supply, in this instance of building land, has been short generates expectations on the part of sellers that if they encounter difficulty in making sales all they have to do is wait. Evidence about how this may have affected land prices is discussed in Annex D.

(*) Table 3 of R H Best in A W Rogers (ED.) Urban Growth, Farmland Losses and Planning, Wye College, University of London, 1978

Part V. Causes and Consequences of the Geographical Dispersion of House Prices

52. In Part III of the paper the facts about the geographical pattern of house prices in England were outlined briefly, and they are discussed more fully in Annex B. A highly important fact is that the spread of house prices is much wider than the spread of pay between regions. Table VII shows average earnings of adult men (1970) or men paid at adult rates (1987) employed full-time, manual and non-manual occupations together.

Table VIII The Regional Pattern of Average Earnings and Average House Prices

	<u>1970</u>		<u>1987</u>	
	Earnings	House Prices	Earnings	House Prices
Northern	93	79	92	68
Yorkshire and Humberside	92	73	92	69
North West	97	84	95	73
East Midlands	93	80	91	79
West Midlands	102	90	92	81
East Anglia	91	91	93	106
Greater London	115	138	125	163
South East excl. London	101	125	103	142
South West	93	98	93	111

Source: Earnings from New Earnings Survey, 1970, Table 70; 1987 Part E Table 110. House Prices from Annex B, Table B.1

53. The geographical pattern of earnings was fairly stable, the only changes being the steep fall (relative to the national averages, though not in absolute terms) in the West Midlands, and the increase in London. The earnings data relate to place of employment, not residence, hence London earnings levels affect the housing market in the rest of the South East as well. There was some increase in incomes in the London and South East relative to the rest of the country; but it was much smaller than the increase in house prices there.

54. That housing should be more costly relative to income in London can be well understood. The demand to live there is strong; and because there is little unused land in London available for house building, the supply of housing

50. Information is however readily available about prices of building land in Germany, which is summarised in Annex E, Table E.9. There is evidence both of an upward trend of land prices in real terms, and a strong association between short-run deviations of land prices from trend and building activity. The breaking of the building boom in 1973 was associated with a fall in land prices in real terms, and the building slump of the mid-1980's was likewise associated with a fall in land prices, in 1985 in nominal terms as well as real terms. A similar mechanism appears to have been at work in Germany to that described above for Britain, which is of interest in that Germany (Federal Republic) has a land area similar to that of Britain with a population of about 10 percent larger, and a strict system of land use control. Levels as well changes in land prices may be compared. In 1986 the average price of building land in Germany ("baureifes Land", literally land ripe for building) was 121.07 DM per square metre, i.e. 1,210,000 DM a hectare. At purchasing power parity (see Annex E) this was equivalent to between £280,000 and £290,000 per hectare. In 1986 the average price per hectare in England and Wales was £261,000, only fractionally less than the figure for Germany. Exchange rates and purchasing parities are a source of difficulty, but on this evidence, British land prices are not distinctly high in comparison with those in Germany. Real incomes in Germany are some 10-15 percent higher than in England, so land prices are probably rather higher in relation to income in England than in Germany, particularly if the 30% increase in land prices in England between 1986 and 1987 is brought into account. An average value for land prices in Germany in 1987 is not yet available at the time of writing, but from the state of the German residential building industry an increase of anything like 30% between 1986 and 1987 is improbable.

51. Taken as a whole the course of land prices in Britain supports the hypothesis of their being demand-determined, and driven by the market price of houses, which is increasingly determined in the market for second-hand houses.

56. The distinction between those influences that affect demand and those that affect supply is useful also in looking at the regional pattern of house prices as well as the rate of rise of the national average. On the demand side are population growth and incomes, both of which in modern British conditions are linked to economic prosperity. Table IX shows the way in which population change has been distributed between regions; the 1930's are included because they were a period when economic growth was very unevenly distributed, yet (apparently) the inter-regional disparities in house prices were nothing like what they subsequently became. Owing to changes in boundaries of Greater London and then the counties outside London, the areas used before 1961 are not exactly comparable; but the discontinuities are too small to matter in the present context.

locally can expand very little. The alternative is to live outside London, but the costs of travel in money and time limit the extent to which this is feasible for many people. These forces produced a large differential between rents in London and rents elsewhere in the country under free market conditions, long before Green Belts or other controls on land use appeared on the scene. As Table B.5 in Annex B shows in 1912 rents in London were on average two-thirds higher in London than in the Provinces. The same survey that collected the information about rents also collected information about pay, and that rates of pay in London were in general about 10-15% higher than elsewhere. Salaried occupations were not covered, so the difference in pay between London and the Provinces cannot be directly compared with the difference in income shown in Table VII. London is far from being the only capital city where house prices are much higher than in the rest of the country. In the Netherlands the difference in house prices between The Hague and the more distant provinces is on the same scale as that between London and the north of England (Annex E, Table E.14), and the same is so of the difference between prices in Stockholm and most of the rest of Sweden (Table E.16). In Paris (Annex E, Table E.11) the difference in house prices compared with rural France is considerably greater than that between London and the north. Germany and the US do not have any one city with the dominance of London, Paris, or Stockholm, so a "capital city effect" is not to be found here. In countries with a dominant capital city, though, there are substantially higher house prices there than in the rest of the country, and London does not appear out of line in this respect.

55. The high house prices, relative to the rest of the country in the South East outside London raise issues different from those raised by London house prices. There is no sign of a South/North difference apart from London, in the 1912 data on rents. For the inter-war years there is only the estimate of the difference between North and South East in 1939 that can be deduced from the Co-operative Permanent (now Nationwide) Building Society's indexes (see Annex B, Table B.6). That suggests a difference of 25-30% between the North and South East. If it really was as narrow as this, important implications follow. Further investigations that would confirm or modify this estimate would be very desirable, likewise to show how, if at all, the regional pattern of house prices changed in the inter-war years.

of demand in the North compared with the South is clearly illustrated; so is the worsening of the economic fortunes of the Midlands, especially the West Midlands which changed from an area of boom in the 1950's and 1960's (like the late 1930's) to industrial depression in the 1980's. That contrast was shown in the income figures in Table VIII it is also shown in the unemployment pattern, which is discussed below.

58. Unemployment rates in South East England are compared with the national average in Table x. It is desirable to look back to the 1930's, even though the figures are not fully comparable with those for later years.

Table x Unemployment Rates In South East England Compared With the National Average

	(percent)		
	South East (including London)	National Average (Great Britain)	Difference
1935-38	7.3	13.6	6.3
1965-69	1.3	1.9	0.6
1970-74	1.7	2.7	1.0
1975-79	3.4	4.7	1.3
1980-84	7.2	10.1	2.9
1985-87 (a)	8.0	10.8	2.8

Notes: (a) Base for percentage in working population (i.e. including self employed) instead of employees in employment plus unemployed

Sources: 1935-38 from insured employees and registered unemployed, Tables 110 and 162 of Labour Statistics Historical Abstract 1965-1984 from Economic Trends Annual Supplement 1986, pages 106-108; 1985-87 from Employment Gazette

59. The figures for 1935-38 almost certainly over-state the unemployment rate in London and the South East relative to the GB average owing to the more limited coverage of unemployment insurance. The non-insured and less unemployment-prone occupations (notably public administration, and banking and finance) were more than proportionally represented in London and the South East. Even without this proviso, though, it is clear that the contrast in unemployment rates between London and the South East and the rest of Britain was substantially greater in the 1930's than in the 1980's. The difference in unemployment rates between the South East and the rest of Britain was indeed greater in the 1980's than in the previous post-war decades: the slump struck

Table IX- Distribution of Population Growth in England 1931-1986

	(thousands)					
	1931-39	1939-51	1951-61	1961-71	1971-81	1981-86
North	+55	+463	+306	+491	-192	-142
Midlands	+367	+742	+590	+706	+241	+62
East Anglia and South West	+98	+507	+271	+599	+476	+259
South East excl. London	+602	+829	+1,400	+1,502	+608	+285
Outer London	+907	+280	-10	-22	-346	-13
Inner London (a)	-395	-660	-155	-426	-377	-17
<u>England</u>	<u>+1,636</u>	<u>+2,164</u>	<u>+2,402</u>	<u>+2,851</u>	<u>+409</u>	<u>+434</u>

Note: (a) The London County Council area plus the City

Source: Census and Census-based estimates. 1931-39 from Registrar General's Statistical Review for 1939, Table E

57. The change in total population is a less than wholly satisfactory measure of the demographic component of the geographical pattern of the demand for housing, since the number of households that can form depends on the number of adults, not children. The contrast between the increases of over 2.8 million in the population in 1961-71 and only 0.4 million in 1971-81 was due mainly to births: the difference in the increase in households was much less than this, 1.55 million as against 1.85 million. The rise and fall in birth rates varied little between regions, though, so that births do not distort comparisons between regions for the same period, as distinct from comparisons over time for the same regions. Table IX shows how in the inter-war years population growth was concentrated in outer London; then as outer London filled up, the concentration of growth moved to the South East outside London; and then into East Anglia and the South West, the parts of the "South" most distant from London. In the 1980's, the decline in the population of London slowed down almost to a stop. The population of inner London began to decline between the 1901 and 1911 censuses; not until the mid-1980's was this fall halted. In interpreting the population changes that Table IX ^{shows} shows, caution is called for about whether what is being measured is demand or supply, in the sense of the outward shift in growth reflecting decisions about where land would be made available rather than where people would prefer to live. The lower pressure

61. The very high proportion of the national total of new building for private owners in the inter-war years that was in London and the South East must be emphasised, because at the end of the period the difference in house prices compared with the rest of the country appears to have been so narrow by later standards. During the 1950's there was again a high concentration of new building for private owners in the South East, and it would be surprising if pure chance was the reason why for most of the period the inter-regional differences in house prices remained little changed from the end of the 1930's. In the early 1960's house prices in the South East rose much faster than elsewhere; that this happened at a time when the South East's share of total building for private owners fell is unlikely to be due just to coincidence. In the 1980's building in the South East (and East Anglia and the South West) rose relative to the rest of the country; Table X shows that in 1983-87 new building for private owners in the South East averaged 7,000 a year higher and in the South West and East Anglia 4,000 a year higher than in 1976-79; but in the Midlands and North 2,000 a year lower. There was clearly some elasticity in the supply of new housing for private owners in the South East in the 1980's; but evidently not enough to keep house prices from rising sharply there.

62. The geographical pattern of land prices, and the relationship of land prices and house prices (see Annex D, Tables D.9 and D.11) is consistent with most of the increase in house prices in real terms being the consequence of an increase in demand pressing against a supply that at times expands less rapidly than demand. Table D.12 shows that the average price of new houses net of land prices (termed the "residue" in Table D.12) increased substantially faster between 1982 and 1987 in the South East outside London (just over 80%) than in the North (the North Yorkshire and Humberside, and North West standard regions) where the increase was 60% only; the difference between the increase in house prices (110% and 65%) was far from being absorbed entirely by the difference in the increase in land prices. These comparisons suggest that in the boom of the 1980's there was quite a difference between North and South in the profitability of house building as such, over and above the appreciation in the value of land between the time the developer acquires it and the time he sells it with a house on it. The very widely held perception in the house building industry that the South Eastern markets are the most lucrative appears well founded in fact, notwithstanding the state of the land market there.

63. The information about house prices in other countries summarised in Annex E shows that wide differences in house prices associated with differences in the strength of demand are not unique to England. The contrasts in house prices in the more prosperous and less prosperous parts of Germany are in point here; so too, owing to the difference in systems of land use control and geographical availability of land, are the contrasts in the USA between prices in the older

harder in the industrial towns of the Midlands and North than in the South East. To that extent the difference in economic prosperity between the South East and the rest of the country has widened, and that is relevant, along with the fairly modest widening in the difference in earnings that Table/ ^{VIII} shows, to a differential increase in demand for owner-occupied housing in the South East. But the fact that the difference was nowhere near as great as in the 1930's is very important in assessing how far demand side influences deriving from regional differences in prosperity can explain the price pattern in the 1980's.

60. The supply side of the market is important as well as the demand, and on the supply side a look may first be taken at new building for private owners.

Table XI New Dwellings Completed For Private Owners

	London and South East	East Anglia and South- West	Midlands	North	England
	(percentages)				
1919-40	45.9	8.8	17.4	28.0	100.0
1945-60	42.1	12.6	20.0	25.2	100.0
1961-65	36.5	15.4	19.9	28.1	100.0
1966-70	33.9	17.5	20.3	28.4	100.0
1971-75	30.6	19.7	21.0	28.6	100.0
1976-79	33.5	19.7	19.9	26.9	100.0
1980-82	34.6	20.6	20.6	24.1	100.0
1983-87	36.5	21.3	19.9	22.3	100.0
	(annual averages in thousands)				
1961-70	64	31	34	47	177
1971-75	47	30	32	43	152
1976-79	42	25	25	34	125
1980-82	36	22	22	25	105
1983-87	49	29	27	30	135

Source: 1919-1940 from local authorities' returns to Ministry of Health, tabulated in J L Marshall, 'The Pattern of House Building in England and Wales in the Inter-War Years Scottish Journal of Political Economy 1968; 1945 and later from Housing Statistics and Housing and Construction Statistics

Table XII Regional Analysis of Prices and Mortgage Advances in Relation to Income: England 1987

	First-Time Purchasers (excl. LA Sitting Tenants)				Moving Owner-Occupiers			
	Average Price	Average Advance	Average Recorded Income	Ratio of Average Advance to Average Recorded Income	Average Price	Average Advance	Average Recorded Income	Ratio of Average Advance to Average Recorded Income
Northern	21,807	19,118	10,347	1.85	33,847	23,021	13,357	1.72
Yorkshire and Humberside	21,684	19,021	10,303	1.85	34,468	22,308	12,528	1.78
North West	23,067	19,856	10,668	1.86	36,625	24,092	13,537	1.78
East Midlands	25,753	22,070	11,173	1.98	39,228	24,630	13,091	1.88
West Midlands	24,773	21,346	10,940	1.95	41,335	25,593	13,651	1.87
East Anglia	34,597	28,555	12,703	2.25	51,927	29,507	14,352	2.06
London	57,339	46,324	19,510	2.37	82,623	45,327	20,905	2.17
Rest of South East	44,902	37,453	15,798	2.37	69,588	37,463	17,583	2.13
South West	34,809	28,663	12,651	2.27	52,899	30,007	14,811	2.03
<u>England</u>	33,495	28,122	13,068	2.15	51,359	29,936	15,141	1.98

Source: Building Society Mortgage Survey

industrial cities like Philadelphia and Detroit and the 'boom' areas like California and more recently New England and New York (see Annex E, Table E.6). That the collapse of house prices in the Netherlands led to compression of geographical differences in house prices (see Annex E, Table E.14) is important evidence about how important can be the demand side of the market in explaining inter-area differences in house prices.

64. This emphasis on demand points to the need to look at how the wide inter-regional dispersion of house prices in England is reconciled with the much narrower dispersion of income that Table VIII shows. It is necessary to look at the amounts borrowed and the purchasers' incomes, which are shown in Table XI. Separate details are given for first-time purchasers and other owner-occupiers, since in an area where house prices are high, someone selling one house to buy another will have a correspondingly large sum from selling the previous house to help pay for the house being bought. First-time purchasers have no such protection.

66. Table XII shows substantially greater inter-regional variation in the ratio of average recorded income to average earnings for first-time purchasers than for moving owner-occupiers. It is therefore on first-term purchasers that attention needs to be focussed when considering why average recorded income of house buyers should be much higher in relation to the general level of incomes in the parts of the country where house prices are highest. Given the definition of 'recorded' income, part of the explanation might be found in more of the purchasers in the South East being households with two earners. The Building Society Mortgage Survey does not record the number of earners; but some light may be thrown on the matter by using the distinction between total recorded income (as in Tables XII and XIII) and the 'basic' income of the sole or first-named borrower.

Table XIV Basic and Other Income of First-Time Purchasers in 1987

	(1)	(2)	(3)	(4)
	All Recorded Income As Percent of Earnings	Average of Basic Income As Percent of Earnings	Proportion of Buyers With Other Incomes (a) (%)	Average Amount of Other Income (b)
North	0.97	0.79	40	4,711
Yorkshire and Humberside	0.96	0.78	39	4,922
North West	0.97	0.77	42	5,058
East Midlands	1.05	0.83	50	4,762
West Midlands	1.02	0.82	43	4,871
East Anglia	1.17	0.93	48	5,398
South East incl London	1.29	0.99	54	7,345
South West	1.16	0.92	49	5,375
England	1.11	0.87	47	5,879

Notes: (a) "Other" income is recorded income other than basic income

(b) Averaged over buyers with 'other' income, i.e. excluding zeroes

Source: Building Society Mortgage Survey

67. Table XIII shows that although "other" income is a larger proportion of total recorded income of first-time purchasers in South East England than elsewhere, 'basic' income is nevertheless higher there in relation to earnings. Basic income was about 27% higher in relation to earnings in the South East than in the North, as against a difference of 33% in recorded income. A higher proportion

65. Both first-time purchasers and moving owner-occupiers in London and the rest of the South East took much larger mortgages in relation to income than in the north of England. The average ratio of advance to recorded income in London and the South East was about 28% higher than in the North for first-time purchasers, and 24% higher than for moving owner-occupiers. Arithmetically the difference between the spread of house prices between North and South (1:2.1 between the three regions of the north of England and London and the South East) and the spread of earnings (1:1.2) can be accounted for under three heads:

- (i) Higher outgoings in relation to recorded incomes
- (ii) Larger deposits in proportion to the purchase price
- (iii) Recorded incomes much higher in relation to average earnings

Of these, (i) is the obverse of the difference in the ratio of the amount advanced to recorded income. The other two may be considered in more detail. Recorded incomes are compared in Table ^{XIII} / with average earnings of men paid at adult rates.

Table XIII Average Earnings and Average Recorded Incomes 1987

	(£ a year)				
	(1)	(2)	(3)	(4)	(5)
	Average Earnings	Average Recorded Incomes First-time Purchasers	Average Recorded Incomes Former Owner- Occupiers	(2) as Multiple of (1)	(3) as Multiple of (1)
Northern	10,712	10,347	13,357	0.97	1.25
Yorkshire and Humberside	10,754	10,303	12,528	0.96	1.16
North West	11,050	10,668	13,537	0.97	1.23
East Midlands	10,618	11,173	13,091	1.05	1.23
West Midlands	10,748	10,940	13,651	1.02	1.27
East Anglia	10,863	12,703	14,352	1.17	1.32
South East (incl London)	13,213	17,002	18,250	1.29	1.38
South West	10,884	12,651	14,811	1.16	1.36
England	11,752	13,068	15,141	1.11	1.29

Source: Average earnings from New Earnings Survey 1987 Part E Table 110, multiplied by 52.

in the ratio of median deposit to price for first-time purchasers are not large. First-time buyers in the regions where house prices are high finance their purchasers primarily by taking larger mortgages in relation to income. The effect that this has on outgoings in relation to income is shown in Table XVI Mean mortgage amounts were calculated for first-time purchasers within ranges of recorded income, and net outgoings calculated for 25 year annuity mortgages equal to those amounts, at the average basic rate charged by building societies in 1987, 11.54% less tax relief at 27%, the basic rate of income tax set by the 1987 budget. Recorded income is not converted to net income because the mix of tax relief entitlement could well have differed between regions.

Table XVI Calculated Net Mortgage Outgoings As Percent of Recorded Income for First-Time Purchasers in 1987

	£8,000 but under £10,000	£10,000 but under £12,000	£12,000 but under £14,000	£14,000 but under £16,000
North (a)	19.8	18.2	16.6	15.8
Midlands (b)	21.7	19.6	18.2	17.1
East Anglia and South West	26.6	24.4	21.8	20.9
South East excl. Greater London	28.7	26.8	25.4	24.3
Greater London	(c)	30.1	27.1	27.1
England	22.6	21.6	20.6	20.9

Note: (a) Comprises Northern, Yorkshire and Humberside, and North West Regions

(b) Comprises East midlands and West Midlands regions

(c) Sample number too small

Source: Building Society Mortgage Survey

70. In the high house price areas, first-time buyers take on much larger mortgage repayments than do people with similar incomes in areas where house prices are lower. In the ranges of recorded income within which are average earnings of men employed full-time, £10,000 to £12,000 in all except London and £12,000 to £14,000 in London, the difference is over 8 percent of recorded income between the South East excluding London and the north. In terms of net income after deducting tax and national insurance contributions, the difference was around 11% of income. House buyers in the regions where house prices are low do not to any marked degree buy more "up-market" houses than do their opposite numbers in terms of income in the areas where house prices are much higher. They spend much more of their income on something other than housing.

of buyers with more than one income is thus not the main explanation of why recorded incomes of first-time purchasers are so much higher in the regions where house prices are highest.

68. Deposits paid by first-time purchasers (strictly speaking the amount of the purchase price not borrowed from building societies) were higher on average in the regions where house prices are high. A comparatively high deposit could lead to prospective purchasers having to wait a longer time before they could accumulate the deposit; or to increased dependence on assistance from family and other informal sources.

Table XV Deposits Paid By First-Time Purchasers 1987

	(1)	(2)	(3)	(4)
	Mean Deposit	Median Deposit	(1) As Percent of Average Price	(2) As Percent of Average Price
Northern	2,689	1,017	12.3	4.7
Yorkshire and Humberside	2,662	1,180	12.3	5.4
North West	3,210	1,278	13.9	5.5
East Midlands	3,683	1,225	14.3	4.8
West Midlands	3,427	1,263	13.8	5.1
East Anglia	6,042	2,197	17.5	6.4
Greater London	11,014	5,195	19.2	9.1
Rest of South East	7,448	3,504	16.6	7.8
South West	6,146	2,126	17.7	6.1
England	5,372	1,706	16.0	5.1

Source: Building Society Mortgage Survey. Local authority sitting tenants are excluded

69. The medians in Table XV are probably a better guide to the deposits needed by first-time purchasers in the true sense of the term, as there are reasons for thinking that many of the instances of large deposits paid by first-time purchasers are paid ^{by} people selling one house to buy another but with a spell of renting in between. The large deposits are in reality the proceeds of the previous sale; they affect the mean deposit but have little effect on the median. The differences

74. House prices and the national economy may be considered first. It has been contended that an acceleration of rise of house prices causes inflation to worsen; and that even if there is no causal link, an acceleration of rate of increase in house prices is a harbinger of worsening inflation. In more technical terms it is a "leading indicator" of inflation. The historical record here is shown in annual terms in Table A.1 of Annex A. From that table it is evident that the case for accelerating house prices being either a cause of worsening inflation or a leading indicator of it rests essentially on the booms in house prices in 1971-72 and 1978-79 being followed by the surges of inflation in 1973-75 and 1979-80. The variations in the rate of rise of house prices and general inflation in the 1960's were too small for a "leading indicator" effect to be identified; and in the 1950's there was no connection. The 1973-75 surge in inflation owed much to the commodity boom and then the first "oil shock"; and the inflationary surge in 1979-80 was in substantial part due to the second "oil shock". Neither had anything to do with British house prices. No means suggests itself whereby the rise in house prices could have caused either the 'Yom Kippur war' or the revolution in Iran, let alone both. The surge in pay in 1974 can be explained in terms that have nothing to do with house prices. In terms of the historical record a causal role for house price booms in causing a worsening of inflation, or their being leading indicators must be rejected. On the contrary, house prices appear in the short run to have a considerable degree of independence from the course of inflation generally. The mechanisms suggested by which a faster rise in house prices could cause a worsening of inflation are unconvincing: a detailed examination of "equity withdrawal (A E Holmans, 'Flows of Funds Associated With House Purchase in the United Kingdom 1977-1984, Government Economic Service Working Paper No.92), shows that only a very limited amount of extra consumers' expenditure could be financed out of borrowing by moving owner-occupiers who take larger loans than they strictly 'need' to. The 'leading indicator' hypothesis, stated with any precision, is that house prices are more flexible than most other prices in the economy and so respond more quickly to an increase in the quantity of money or credit, a proposition not tested by more sophisticated means than inspection of the historical record for lack of a theory in the required detail of exactly how changes in the quantity of money affect prices.

75. An argument distinct from 'equity withdrawal' is that rising house prices lead to increased consumption expenditure in relation to income by means of a wealth effect. A sense of increased wealth may make householders willing to run down their holdings of cash and deposits with banks and other financial institutions; and increased house values can be used as security for loans. The fall

71. In Annex F a short review is made of the circumstances of first-time purchasers in the different regions to see what evidence there is about what effect the differences in house prices have on who becomes an owner-occupier and when. Only London stands out from the other regions in first-time purchasers (excluding in all instances local authority sitting tenants) being older, and more likely to have rented from a private landlord before buying. In the South East outside London there is little difference from the midlands and north in this respect, perhaps surprisingly so. The other way in which first-time buyers are distinctive is in the high proportion of individual buyers, and of two men and two women buying jointly. The percentages are distinctly different, but the numbers were not large: in 1987 the estimated number of instances where there were two joint mortgagors of the same sex was between 5,000 and 6,000 in London, between 5,000 and 6,000 in the rest of the South East, and 5,000 elsewhere in England. Buyers where there was only one mortgagor were much more numerous at 170,000 in England as a whole. These are not necessarily all one-adult households, because it is possible for a married couple to have the mortgage in the husband's name only. This is becoming rarer, though, and it is likely that a substantial proportion are individuals living alone.

72. In the change in the number of first-time purchasers by region between 1983 and 1987 (Annex F, Table F.2) there are signs of high house prices in the south of England squeezing out potential purchasers., of an estimated increase of 58,000 in England as a whole, 32,000 were in the three regions of the north of England, 8,000 in the midlands and only 18,000 in the south. These figures are less than firm owing to pro-rata allocation between regions of buyers with loans from sources other than building societies. But even if loans by banks to first-time purchasers were disproportionately for purchases in the south, the increase between 1983 and 1987 would still have been comparatively larger in the north than the south.

Part VI House Prices and Policy

(a) Increases in House Prices Nationally

73. Do the level, or rate of rise, or both, of house prices matter, and if so to who and why may next be considered. It is convenient to distinguish between the national average and the geographical spread, not least because the inter-regional dispersion has become the subject of major and widespread concern only in the 1980's.

responsiveness of the supply of new houses to changes in demand, making the whole system more vulnerable to surges in demand and possibly steepening the upward trend in house prices via ratchets. A separate question is whether a boom in house prices with a rapid rate of increase enhances the risk of a subsequent slump, in a way that would not occur with a more gradual increase. An outright fall in house prices in nominal terms as distinct from relative to the general level of house prices last occurred in Britain in the early 1950's. Since then the proportion of households that are owner-occupiers has doubled, and the number of owner-occupiers trebled. The amount of house purchase debt, including loans to finance improvement of owner-occupied houses, has risen some fifteen-fold in real terms. The amount of damage that would be done by a slump in house prices in cash terms would be very substantially greater than in the early 1950's. The most recent instance of a slump in house prices in nominal terms was in the Netherlands at the end of the 1970's (see Annex E Table E.1), when there was a fall of between 25 and 30 percent. The Dutch mortgage banks had to be rescued by mergers. This slump was preceded by a very strong boom. Whether the first was caused by the second is uncertain; but obviously there are grounds for concern.

79. There are thus several reasons for regarding the rate of rise of house prices as a matter for concern. But the scope for government measures to hold down the rate of rise of house prices is, however, limited. Direct control of house prices has been considered. An inter-Departmental Committee was set up in March 1945 (under the Coalition Government) to devise a scheme; its terms of reference were: "to consider and report whether it is practicable to control effectively the selling price of houses with and without vacant possession and to prevent undue financial advantages being taken of the present housing shortage, and if so what measures should be taken to effect those objects"; and it reported in August 1945 with the outline of a scheme (inter-Departmental Committee on the Selling price of Houses, Report, Cmd 6670 (1945). The government of the day did not attempt to implement it. If direct control is considered to be only of historical interest, the measures available divide into 'supply side' and 'demand side' measures. The supply side consists of land supply and the land market, with related issues like conditions attached to planning permission and charges for services; and the building industry and the building materials industries. There have been changes over the years in views about what government can usefully try to do about improving training and promoting technical progress; and about the value of indicative planning as a way of reducing the chance of industries being unable to meet demand because their suppliers have too little capacity. Shortages of building materials, in particular bricks, in 1987 when the output of the housebuilding industry was only two-thirds of it had been only ten years earlier, may yet bring this subject back on to the agenda.

in the personal savings ratio (as calculated from the difference between personal disposable income and consumption) since 1983 is consistent with the hypothesis. But there is no sign of such a fall in the savings ratio in 1971-73 or 1978-79. The savings ratio calculated in the way described rose in those years, substantially so in the early 1970's. A full test would be a complicated matter, with allowance needed for the effect of general inflation in eroding the value of personal deposits with banks, bulding societies etc.

76. Another route by which a house price boom does economic harm is through allegedly depriving the 'productive' economy of investible funds. In its simplest form this proposition has very little substence. Transfers of ownership of existing assets, in this case houses and land, cannot absorb real resources other than those employed in conveyancing and estate agency. Buyers have to borrow more, but the sellers have more funds to invest. The same points are relevant to another version, that the demand of house buyers for credit causes interest rates to be higher than they would otherwise be, to the detriment of industry and trade directly, and possibly indirectly through causing the exchange rate to be higher than it would be. This argument would appear to have substance to the extent that gross fixed investment in housing is increased out of borrowed money, but not through increases in the price at which existing houses change hands. In the latter case there is a circular flow of funds but little or no effect on resources.

77. The harmful effects of increases in house prices are to be found rather in the effect on the 'affordability' of housing; and the disruptive effects of major instability in the rate of rise. Because most good quality housing that is rented could also be sold for owner-occupation, rising house prices pull market rents up with them. A policy for ensuring access to adequate housing for households unable to afford it from their own funds, "a decent home for every family at a price within their means" in the language of 1971 and 1977, becomes increasingly costly. The prices paid for land for building for letting by 'social' landlords, or by commercial landlords whose tenants are enabled to pay the rent by Housing Benefit are governed by a market in which the owner-occupiers are dominant. A house price boom therefore raises the cost in public expenditure terms of providing housing to rent for those not able to rent.

78. Move generally, severe instability of house prices appears to be harmful in itself. The record of building costs (see Annex D.1) is consistent with the boom of the early 1970's having pulled up building costs by some 15-20% in real terms in a way that was never reversed. The record of land prices similarly is consistent with a ratchet effect which can be overcome only by a slump as severe as in 1974. That slump appears to have affected permanently and adversely the

would have to consist of the proceeds of the previous sale plus a percentage. A scheme on these lines could probably be made to work, given that house purchase transactions have to be reported to the Inland Revenue and in most parts of the country recorded by the Land Registry. Mortgages have similarly to be recorded as charges against title. Whether selective credit controls through a more complex version of Regulation X would be acceptable may be questioned, but the American experience suggests that it could be implemented even with a multiplicity of lenders, since that was so of the American mortgage market even in 1950.

82. The other way to affect the demand side of the market for owner-occupied houses is through taxation. Reduction or abolition of tax relief on mortgage interest has its advocates, as does charging income tax on the rental value of owner-occupied houses. These changes, if implemented, would reduce the price of houses, relative to what they would otherwise have been, in the medium and long term. The case for and against a combination of mortgage interest relief and tax on the rental value (neutral treatment for owner-occupied housing as an investment good) or no tax relief and no tax on rental value (neutral treatment for owner-occupied housing as a consumer good) is well-trodden ground and need not be gone into here. A point to note, though, is that in themselves they could not do anything about 'affordability'. A tax on rental value or a withdrawal of tax relief would raise outgoings per pound of purchase price; in the limiting case of full shifting, the fall in the price and the increase in outgoings per pound of price would balance, with no net change in affordability; but with less than full shifting, the affordability problem would be worsened. Whether tax relief on mortgage interest has been fully shifted into prices may be questioned, though, on both theoretical and evidential grounds. The theoretical ground is that the conditions required for full shifting (principally absence of any significant response from supply to an increase in demand) would if applied prevent increases in income producing any improvement in housing conditions. And if that were so it is hard to see where the improvement in conditions in privately owned housing could have come from. The argument from evidence is that shifting into prices would have gone mainly into land prices (see Part V of the paper). Tax relief or its equivalent has been available to all house buyers since 1968, in all parts of the country. Full shifting would require a higher ratio of land prices to house prices than observed in the North of England at all times, and higher than observed in the South East in years like 1980 and 1981.

80. On the demand side, the key to avoiding excessive increases in house prices has hitherto been seen in avoiding excessive increases in the supply of credit for house purchase finance. Over three quarters of all house purchases are financed at least in part by loans, and nine-tenths of purchases by new entrants. Hence, it has been argued, by stabilising the supply of house purchase, so too could the demand side of the market be stabilised.

The one attempt in Britain to diminish instability in the housing market by means of reducing instability of effective demand was through the "Memorandum of Agreement" negotiated between the Government and building societies in 1973 and modified in 1975. The purpose was to regulate the volume of lending for house purchase to keep it in line with what the market would take at an acceptable level of house prices. When building societies had funds more than sufficient for their volume of lending the funds not needed for the moment would be accumulated as liquid assets and drawn on when interest rates rose and the inflow of funds diminished. In February 1978 the government of the day considered that an accelerating rise in house prices was in prospect, and invoked the Memorandum of Agreement to call on the building societies to reduce their lending by £70 million a month, about 10 percent. The building societies complied reluctantly, but their wish to rid themselves of a system they had accepted in 1973 for fear of something worse (for the Opposition of the day talked about a statutory scheme) strengthened. With the change of government in 1979, the Memorandum of Agreement and the attempt to stabilise the housing market via mortgage lending was allowed to lapse.

81. As a form of selective credit control, the Memorandum of Agreement depended on credit rationing, and the associated absence of competition in mortgage lending, and it is hard to see how a scheme on these lines could be made to work when there is a competitive market for mortgage money with some of the competitors being from Japan or the Persian Gulf. If selective restraint over the volume of house purchase credit were to be desired, a different technique would be to require a minimum deposit as a percentage of the price, which could be raised or lowered in the same way as the controls over hire purchase in the 1950's and 1960's. Such a control was in force in the USA between 1950 and 1952, Regulation X issued by the Board of Governors of the Federal Reserve System in October 1950 under the authority of the Defense Productions Act of that year. The minimum deposit was at a percentage related to the price of the house, 10% of the first \$5,000 rising to 50% of the amount in excess of \$24,250. A percentage scale of this kind would have much less effect on moving owner-occupiers than first-time purchasers, so to make it equally effective for moving owner-occupiers it

Table XVII Migration Between South East England and Midlands, North, Wales, Scotland and Northern Ireland

(thousands)

	Inward to South East	Outward from South East	Balance (Net Inflow +)
1971	189	165	+24
1972	175	180	-5
1973	155	175	-20
1974	168	175	-7
1975	162	165	-3
1976	150	144	+6
1977	155	139	+16
1978	162	138	+24
1979	151	132	+19
1980	155	131	+24
1981	147	120	+27
1982	152	127	+25
1983	157	124	+33
1984	158	128	+30
1985	159	139	+20
1986	188	154	+34

Source: See Annex G, Table G.4

95. The run of figures is consistent with the widening difference in house prices in 1971-73 having discouraged inward migration to the South East and encouraged outward migration. But there is no sign of the same having happened when the difference in house prices next widened, between 1977 and 1980, or in 1982-86. If there was an effect on migration to the South East in the 1980's, then it was not large enough to be visible to the naked eye. If the argument is cast in terms that but for the widening of the differential in house prices the rise in inward migration to the South East in 1986 (for example) would have been even larger, then a test would require a fully specified model of migration flows between regions, something difficult to construct given the lack of precision in statistics in Britain of internal migration.

(b) The Inter-Regional Dispersions

83. Policy aspects of the inter-regional dispersion of house prices have attracted comment only since 1984 or 1985. There are two lines of argument. One is that the differentials in house prices inhibit mobility of labour, both from the North and Midlands to the South East and vice-versa (owing to the fear that if one moves away one will be unable to return to the South East because the rise in house prices there will exceed the rate of return on any way of investing the proceeds of selling). The consequence is to reduce efficiency and output and cause unemployment to be higher than it need otherwise be because there are vacancies unfilled in London or the South East and men who could fill them unemployed or under-employed in the North. Conversely, pressure of demand will be higher in the South East, with pay rising faster there than it would do if demand pressure were more evenly spread. Professor Muellbauer has argued, in papers that have attracted widespread attention, that such pay increases in the South East will feed through into national pay bargaining, and hence the rate of inflation. A totally different set of inferences can, however, be drawn from the same facts. It can be contended, as Professor Minford has done, that the widening difference in house prices is a signal that the South East is "full up", that firms and employees should move North (or not move South), and that more of those who want to live in the South should make do with part of a house or, if they must have a flat or house to themselves, go without other forms of consumption. Firms that think that they must stay in London must offer higher pay. In this way equilibrium will be reached in both the labour market and the housing market.

84. The special feature of Professor Muellbauer's analysis is the claim that widening or narrowing of the inter-regional differences and not the absolute rate of rise in house prices influences inflation. Taken literally, he is saying that if (for sake of argument) house prices in the South East rose by 10% a year, then the effect on inflation will be considerably less if house prices in the Midlands and North also rise by 10% a year instead of by (say) 5% only. That argument would seem to imply that migration to the South East is highly responsive to house price differences, and that the balance between labour supply and demand there is highly sensitive to migration. Neither has yet been demonstrated. The immediately available information about migration to and from the South East is summarised in Annex G. The annual aggregated figures are shown in Table XVII below.

Part VII The Future

89. Five issues for the future of British house prices may be mentioned: (i) How much further will the boom in house prices go; (ii) will a substantial part of the surge in 'real' house prices in 1983-87 be reversed in the same as the surges in 1971-73 and 1978-80; (iii) will the inter-regional differences in house prices narrow again, as they did following the previous booms; (iv) by extension from (ii), is a fall in nominal (or cash) house prices, as distinct from real, house prices a real possibility; and (v) what will be the effects on house prices of the abolition of domestic rates, and what would be the effect of imposing VAT on new house building, should the European Community insist on this.

90. On (i), a check or halt to the house price boom, it is important to recall that what halted the booms of 1971-73 and 1978-80 was credit restriction and higher interest rates. In the late summer of 1973 interest rates were raised very sharply in response to foreign exchange pressures, and at the end of the year they were raised still further in an attempt to resist pressures arising from the "oil shock" and the threatened coal strike. In 1979 the new government had recourse to monetary measures to restrain inflation, which took the Bank of England's Minimum Lending Rate to 17% and mortgage rates to 15%, hitherto unheard-of levels. At the end of 1973³ the rise in house prices came almost to a stop in money terms. The same would be likely to happen again if interest rates were sharply raised. Whether this is in prospect is very hard to say. With the unemployment rate over 8% and the rate of inflation under 4% (Index of Retail Prices, year-on-year) the economic situation is very different from either 1973 or 1979, with unemployment much higher and inflation much lower. But there is always the chance of a foreign exchange crisis leading to steep increases in interest rates and credit restrictions irrespective of the state of the home economy. That could readily halt the house price boom.

91. Short of a foreign exchange crisis and increase in interest rates, it would be expected that an increasing inability of buyers to afford ever-rising proportions of their income for mortgage repayments would in terms retard the rise in house prices, but neither theory nor past evidence gives any indication of when and how rapidly. First-time purchasers' net outgoings have risen substantially relative to recorded incomes net of calculated tax payments and National Insurance contributions; but mortgage interest rates have an important influence here as well as the size of the mortgage advance in relation to income, as Table XVIII shows,

86. That the balance between labour supply and demand in South East England is very sensitive to migration cannot be demonstrated from the information available. Table G.2 of Annex G shows that 'economically active' (i.e. either in employment or seeking employment) movers inwards from the rest of Great Britain totalled 103,000 in the year before the 1981 Census, and outward movers 84,000. The total economically active population of the South East as enumerated by the Census was 8.1 million; so a doubling of net inward migration of economically active men and women from 19,000 to 40,000 would make one-quarter of one percent difference to the economically active population of the South East when the proportion of the economically active population there that was unemployed was 7.4% (Census 1981 National Report, Table 12). Even with all allowances made for the importance of changes at the margin, it is hard to see why changes in migration or lack of them could have effects on the scale that the Muellbauer analysis contends.

87. A system that is self-equilibrating inter-regionally through responses by individuals and firms to differences in house prices is obviously logically possible. How it would work would depend heavily on speed of adjustment. Such evidence as is available, for instance that on migration flows summarised in Annex G suggests that it is very slow. The structure of pay changes slowly; moreover in the free-market conditions before 1914 the difference between pay in London and in the provinces was nowhere near large enough to offset the higher rents. That did not deter people from coming to London or oblige them to move out: 'equilibrium' (of a kind) was achieved through much worse overcrowding in London. Some details are given in Annex H. They are now very old history, but of ^{value as} evidence of how market processes worked when there was an unconstrained market in housing. This overcrowding was the origin of the 'Garden City' movement, and then new towns and overspill after 1945. Whether a market solution is attainable by the market incentives route depends on what is allowed to count as a solution, particularly as applied to housing conditions.

88. Action on the demand side to reduce the inter-regional house price differences falls under the heading of regional policy, which is far too complex a subject to discuss here. On the supply side it appears that there is little to be done without making more land available, but great difficulty in judging what a modest extra provision of land would do. What seems needed is to break the expectation that the price building land will fetch will continue to rise, so that there is no risk in deciding to sell later rather than sooner if the price new offered falls short of expectations. A return to the policies of the 1930's would do this, but that is not what is relevant to current discussions. How much would be enough is very hard to judge, so too is how soon the result would be more advantageous prices for buyers and not higher profit margins for builders.

maximum mortgage amount attracting tax relief remaining at £30,000, a ratio of net outgoings to net income of 28.7% (the maximum shown in Table XVIII would imply a ratio of advance to net income of 2.52 and an advance of £4,600 higher than the actual amount in the first quarter of 1988. With an unchanged deposit, that would imply a price about 13% higher. In short, if interest rates fall there is considerable scope for a further rise in house prices relative to incomes. Even if they do not, the inter-regional comparisons in Table XVI suggests that house prices could rise a long way relative to incomes in the Midlands and North before being retarded by inability of buyers to pay. That would produce a considerable rise in national average house prices, even if in the South East house prices rose no faster than income.

93. These considerations are also relevant to whether much of the increase in house prices relative to incomes is likely to be reversed. When at the end of 1973 and the end of 1979 the rise in nominal house prices slowed down a long way, more rapid inflation in the economy as a whole brought house prices sharply downwards in real terms. The inflation rates that did this were far above anything now in prospect, 44% between 1973 and 1975, and 22% between 1980 and 1982. With 3% to 4% a year inflation, the increase of over 40% in "real" house prices between 1982 and 1987 would take 12 to 18 years to reverse if house prices rose only by 1% a year in cash terms. The former mechanism is not available unless general inflation becomes far worse. Provided the government's economic policies succeed in keeping inflation at broadly its present rate and all the more so if it is reduced, most of the increase in 'real' house prices will persist unless there is a substantial fall in house prices in cash terms.

94. Concern is sometimes expressed about the possibility of a fall in house prices, notwithstanding the past history of rising prices or even because of it. One of the arguments for a fall in house prices being likely to occur some time is merely that "what goes up must come down". This expression referred originally to the effect of gravity on shell splinters from anti-aircraft fire, and to transfer it to asset prices is merely to substitute analogy for analysis. A much more urgent cause for concern is the experience in the Netherlands, outlined in Annex E, Table E.13. There an extremely strong house price boom was followed by a fall of between 25 and 30 percent in nominal terms. The fall in house prices in Britain in 1951-54 (Annex A, Table A.1) has also to be noted. So evidently a fall in house prices in absolute terms is something that is possible.

95. That is not the same thing as saying that it is likely. An essential aspect of a fall in the price of a long lasting asset is an expectation of falling prices, such that people who are likely to want to buy at some stage think they will be able to buy at a lower price if they wait. That is the principle/a falling ^{of}

Table XVIII Calculated Net Mortgage Outgoings In Relation To Net Income For First-Time Purchasers (Excluding Local Authority Sitting Tenants)

	Ratio of Mortgage Advance to Recorded Income	Mortgage Rate (Gross) (a) (%)	Tax Relief Rate (b) (%)	Net Mortgage Outgoings as Percent of Calculated Net Income (c)
1970	1.96	8.5	32.1	18.6
1971	1.96	8.4	30.1	19.0
1972	2.17	8.2	30.1	20.3
1973	2.24	10.6	30	25.2
1974	2.03	11.0	33	23.7
1975	1.94	11.0	35	22.8
1976	1.88	11.1	35	22.3
1977	1.77	11.1	34	20.6
1978	1.82	10.2	33	20.0
1979	1.79	12.0	30	22.6
1980	1.67	14.9	30	25.5
1981	1.74	13.6	30	25.1
1982	1.76	13.0	30	24.5
1983	1.97	10.6	30	25.0
1984	1.99	11.4	3.0	26.4
1985	2.00	13.2	30	29.4
1986	2.08	11.8	29	28.3
1987	2.12	11.6	27	28.7
1988 (Q.1)	2.19	10.2	27	27.5

- Source notes: (a) Building Societies recommended rate, and then building societies 'basic' rate
- (b) Basic rate (standard rate less earned income relief in 1970, 1971, 1972) set by budget in each year. In 1988 Q.1 the rate in effect
- (c) Recorded income less income tax on the assumption that the married man's allowance applies and that all income is assessable for National Insurance contributions

92. If mortgage rates fell further, house prices could rise relative to income without the ratio of net outgoings to net income rising above levels already reached. With a mortgage rate of 8.5 percent, the rate in the late 1960's when the rate of inflation was at about its present level, and relief at 25% and the

for houses to buy is likely to be smaller relative to the supply than at any time since the mid-1920's and the war years. **Table XIX** shows the projected number of adults in the population. Since everybody who can head a household in 2005 or earlier is now already alive, the margin of uncertainty about the estimate is not very great. Most new household heads are under age 30; so the population aged 20-34 is shown separately. The increase in the adult population will slow down very sharply; and there will be a steep fall in the number of men and women in their twenties, from whom most first time buyers are drawn.

Table XIX Changes In Population of England and Wales Aged 20 and Over: Future Prospects Compared With Previous Years

	Total Population Aged 20 and Over		Population Aged 20-34	
	Total	Change	Total	Change
1971 (*)	34,150	+966	9,938	+844
1976	34,584	+434	10,374	+436
1981	35,414	+830	10,829	+455
1986	36,942	+1,328	11,265	+436
1991	37,862	+1,120	11,824	+559
1996	38,255	+393	11,317	-507
2001	38,444	+189	10,165	-1,152
2006	38,761	+317	9,453	-712

Note: (*) Change is between 1976 and 1981

Source: 1971 to 1981 from Population Trends No.49, Table 7; projected figures from 1986 onwards from OPCS Monitor PP2 86/1

98. With the fall in new demand for housing that the population prospects imply, the housing market is likely to be much more vulnerable to an economic slump in the 1990's than hitherto. The slump of the early 1980's which took unemployment well past the two million mark almost stopped the rise in house prices and caused a considerable fall in new building, but not a fall in house prices. The fall in share prices in the autumn of 1987 is unlikely to hit more than the very top of the market, because too few households own enough shares for the rest of the market to be affected.

99. Somewhat similar considerations apply to the regional pattern of house prices. In the absence of a sharp slackening in the rise in the national average brought about by credit restriction, a slackening sooner and sharper by house prices in the South East while prices in the Midlands and North continue to rise cannot be relied on to narrow the dispersion of prices as it did before. Exactly why

market for a currency, or for share prices. Those markets additionally are organised in ways that permit 'bear' sales, of currency or shares that the seller does not possess in the expectation of being able to buy them in at a lower price before delivery has to be made. This process is not possible in the housing market. Just as important, perhaps more so, is that in Britain most owner-occupiers could only sell their house if they bought another to replace it. In the absence a broad market in houses to rent, it is not possible to sell, rent a house for two or three years, and then buy back into owner-occupation for substantially less than was received from selling the house. The knowledge of there not being the rental opportunities to do this is likely to dissuade most owner-occupier from trying it, even if he expected house prices to fall.

96. The scope for expectations of a fall in house prices to be self-fulfilling is thus likely to be limited to delaying purchases. The fact that a moving owner-occupier must normally sell his present house if he is to buy another means that if would-be movers delay their purchases they delay their sales as well. Quantity demanded and quantity supplied fall by approximately equal amounts. Because movers usually want something different from what they are selling, imbalances could occur in particular parts of the market. But moving owner-occupiers who expected prices to fall could not tip the balance between quantities demanded and quantities supplied in the same way as the balance between buyers and sellers on the Stock Exchange is altered if investing institutions put their money on deposit and wait for prices to fall. The scope for holding off in the expectation of lower prices later, without reducing the supply at the same time, is restricted to first-time purchasers. Their opportunities to act in this way are reduced by the high cost and short supply of alternatives.

97. The number of first-time purchasers who could delay their purchases, though, is not nil, and is unlikely to be negligible. The question is what could initiate such an expectation of lower prices for houses. The long term prospect, in the middle and later 1990's is one of a smaller demand from new entrants to owner-occupation and a larger supply from households dissolved and leaving owner-occupation. The increase in the supply of second hand houses is likely to be gradual, as owing to past increases in owner-occupation, more and more of the households dissolved are owner-occupiers. On the demand side, the number of new households is likely to fall fast during the 1990's as the decline in births in the later 1960's and the first half of the 1970's comes through into the population of household-forming age. At the same time the shift from renting to owner-occupation which has for many years reinforced the demand side of the housing market, is likely to be almost at an end. In the middle and later 1990's, the demand

is uniformly prosperous, and differences within the geographical North could be important. How much, for example, of the falling back of average Northern house prices relative to the South has occurred in the industrial cities and towns hardest hit by the slump of the early 1980's.

103. All the currently collected information about house prices measures changes over time by means of comparisons of averages. Nothing can be shown by this means about the dispersions around the averager of rates of change of the price of individual dwellings. Such information was extracted in the 1970's from Inland Revenue Valuation office records and used in the Housing Policy Technical Volume, Chapter VI, published in 1977. Work on this aspect of house prices ceased when work by DoE on the Valuation Office data was stopped in 1980. For many purposes, for instance the risks run by borrowing on indexed mortgages, or studying whether former council houses or flats keep up in value with the rest of the market, there is a need for information about the dispersions of individual house price increases around the average.

104. The Valuation Office data refer to properties and prices, not purchasers and their mortgages. For that reference has to be made to the lenders. Information provided by other lenders is thin (the banks) or non-existent (the mortgage companies and other new lenders). Information is needed from them of the standard provided by the building societies. Since mortgage business is lucrative, there would seem no injustice in imposing as a condition for doing house purchase business an obligation to provide adequate information, on the lines of what the building societies do by agreement. Obviously agreement would be preferable, but reserve powers on the lines of those in the Statistics of Trade Act would seem advantageous. That Act cannot itself be used because mortgage lending is deemed not to be "trade".

105. A related area of current information which is much weaker than it needs to be is house builders' profits. The need is for current information on profit margins, and a time-series for profits that will tie together the price of new houses, land prices, and building costs. Without such information it is not possible to get far into the question of development profits, and for how long would a more ample supply of building land and lower land prices give more of the development profit to builders without benefiting house buyers, the present day counterpart of the contention during the Napoleonic wars that lower rents would not result in cheaper bread but merely that 'farmers would live like gentlemen'. Profit margins and indexes of profits would seem very much an area for investigation by consultants affiliated to firms of accountants.

that happened is uncertain. Given a higher pressure of demand relative to supply in the South East for reasons to do with land availability, it is easy to see why when house prices turn upwards the increase should be soonest and strongest in the South East; but why the slow down should be sooner and quicker there is much harder to explain. The constant long term dispersion of house prices shown in Annex B to be true only of the period from the late 1960's to the early 1980's.

100. Abolishing domestic rates will put upward pressure on house prices, but the extent is very hard to forecast, not least because it is not known whether buyers do perceive rates as a tax on housing. Whether the European Community will require the United Kingdom to impose VAT on new house building remains to be seen at the time of writing. If it does so, imposing VAT and abolishing domestic rates would go in opposite directions, and might approximately cancel out.

Part VIII. Statistics and Research

101. The frequency with which the Building Society Mortgage Survey has been cited as the source for tables in this paper shows how dependent British housing statistics are on information collected from building societies. The statistical system was set up in the mid-1960's when building societies dominated the housing market. That dominance has since the early 1980's been much eroded, and the ability to monitor the housing market with information collected from building societies has in consequence deteriorated. There is therefore a need for information about house prices that is collected uniformly from all the lenders, or from a source independent of house purchase lenders. The latter would have to be the Valuation Office of the Board of Inland Revenue, with which have to be deposited (by statute) particulars of all conveyances in England and Wales. Work was undertaken in the 1970's to sample these records and use them as a source of house price statistics. Problems were encountered, and in 1980 the work was abandoned as part of the cuts in government statistical work. Growing use of computers for holding data in District Valuers' offices, though, could well make renewed efforts more fruitful.

102. The same records would in principle be the best source of sub-regional and local house price information. Electronic data processing has enabled building societies to make their full records (as distinct from samples) of new mortgages available to researchers to study small area house prices (see Annex C).

It is ironic that this has happened at the very time when building societies' information has come to cover much less of the market than it used to do. The increased interest in the geographical pattern of house prices emphasises the need for local information. Regional boundaries are partly arbitrary and regions are heterogeneous. Not all of the South East outside London

insights provided by (now) nearly 6 years of competition for mortgage business after just over a quarter century of mortgage rationing. Experience with extremely high real mortgage interest rates could also to advantage be taken into an assessment of the relative importance of nominal and real interest rates as influences on the demand to buy houses.

109. The fall in house prices in the Netherlands would appear well worth studying in some detail. As far as is known it is the only instance of such a crash in nominal house values. Its causes would need to be looked at in some detail before assurances that "it couldn't happen here" could be based on something more solid than mere assertion. Enquiries have not thus far brought to light any comprehensive study of the episode in the Netherlands.

106. As well as better current information on house prices, the analysis would be strengthened by better information about house prices in the past, and rents even further back. The historical record is the only source of evidence (as distinct from theory) about the geographical pattern of house prices, and the course of house prices nationally, that there would be with a more relaxed system of control of land use. The ex-Co-Operative Permanent Building Society's indexes are a worryingly thin base for the important finding that the spread of house prices between the North and South East was comparatively narrow at end of the 1930's; and that not until the very end of the 1950's did this alter. It would be very useful to have this finding confirmed or modified; and to see how the regional pattern of house prices changed during the 1930's. Since the boom of the 1930's is the largest private house building boom in British history, the way in which national average house prices changed during this boom is likewise of great interest. There would therefore be substantial advantages from work to construct national and regional average house prices year by year in the inter-war years in the 1940's, the 1950's, and the early 1960's. The material with which to do this might be looked for in building societies' records, where these still exist, and in the 'particulars deposited' with the Inland Revenue Valuation Office, if these have been retained.

107. Regional differences in rents before 1914 are still of interest, as the last time there was an untrammelled free market in rented houses. The information collected by the Board of Trade in 1912 covered only "working class" rents, and major towns. The latter is a more serious limitation, given that there were so few large towns in the South apart from London. If there really was no North/South difference in rents but only a "capital city" difference, then that is important. To research the regional pattern of rents would be an 'academic' enterprise. Possible sources include records of Schedule A assessments for income tax and the House Duty assessments.

108. As well as data collection, there is a need for further work on the theory. All the theoretical work on house prices has been to do with the national average. Even Professor Muellbauer's work on the consequences (as he assesses them) of changes in the inter-regional pattern of house prices does not seek to investigate their cause. There is no theoretical explanation of the geographical pattern of house prices and why it has changed; and hence no basis for prediction of what future changes are to be expected. The theory of the changes in national average price of houses could to advantage be reviewed, to incorporate the evidence and the

4. The DoE index was compiled from two sources, the Building Society Mortgage Survey from 1966 onwards, and for earlier years data produced by the Valuation Office of the Inland Revenue. The Valuation Office produced average prices of dwellings that had previously been sold within the previous five years. These data referred to England and Wales; so before 1966 the index is strictly speaking an index of house prices in England and Wales. From 1966 to 1968 the prices calculated from the Building Society Mortgage Survey were simple average prices; from then onwards a weighted index which standardises for region age of dwelling, type of dwelling, and number of rooms. The weighted index is considered to be preferred to the Nationwide Building Society's index on account of breadth of coverage, all the large societies and a sample of smaller societies, instead of just one. But in the earlier period the cross-check is useful, because the restriction of the Valuation Office's figures to dwellings that had been previously sold within the last four years might introduce biases. Both indexes refer only to dwellings sold with vacant possession.

5. Over a long period in which the value of money has fallen a long way, it is necessary when looking at house prices to abstract from changes in the general price level, even though in the short run house prices may be powerfully influenced by circumstances that have little or no effect on the general price level. Measuring changes in the general price level has however its own problems over so long a period. From 1956 the retail price index is used, following standard official practice in measuring changes in the value of money. But the index from 1947 to 1956 used 1938 weights, and before then the official cost of living index was calculated from a very narrow range of goods and services with obsolete weights and from 1941 to 1945 was stabilised by food subsidies. Before 1956, therefore, the consumers expenditure deflator from the national income accounts is used.

NATIONAL AVERAGE HOUSE PRICES:
THE HISTORICAL RECORD

Changes in the market price of housing may in principle be measured either from selling prices with vacant possession, or market rents. Since the Second World War changes in the market price of housing may be measured over time by the movement of the average price of houses sold with vacant possession. Before World War I changes in the market price of housing may be measured by reference to rents. In the inter-war years, however, no comparable measure is available at the time of writing. Rent restriction makes information about rents very difficult to use, beyond a simple comparison of the level of non-controlled rents in the mid-1930's with pre-1914 rents. House price information for the inter-war years probably still exists in building societies' records and perhaps too in the 'particulars deposited' with the Valuation Office of the Board of Inland Revenue, but the research to extract from them an index of house prices has not been done. To link the pre-1914 and post-1939 periods an attempt is made to use information from building societies on average outstanding loans and average new loans, but it must be handled extremely cautiously because ratios of advance to prices appear to have altered during the period, in a way that thus far is only partially documented.

2. The reason for attempting to take the historical record of the price of housing back into the nineteenth century is to provide comparisons with more recent years. Such comparisons can go some way to show what is novel and what is not, and hence what cannot plausibly be attributed to causes that have come on the scene only recently. Before 1914 there was a housing market in which the State intervened in only a very limited way. In the inter-war years restrictions on the use of land for house building were very mild compared with subsequent policies.

I. The Historical Record Since The End of the 1930's

3. The historical record of house prices is sketched by means of the index of second-hand house prices compiled by the Department of the Environment. For the 1960's and earlier years it is compared with the only other national house price indexes that reach back to the 1930's, those compiled by the Co-operative Permanent Building Society (subsequently re-named Nationwide). For the most recent years (since 1982) the DoE index is supplemented by a measure of house prices that includes transactions financed by banks. All the indexes refer to dwellings sold with vacant possession; the different prices fetched by houses sold subject to tenancy are a separate subject, not discussed here.

1973	210.1	128.0	164
1974	223.7	148.5	151
1975	236.1	184.5	128
1976	257	214.9	120
1977	276	249.1	111
1978	319	269.7	118
1979	418	305.9	137
1980	505	360.9	140
1981	529	403.9	131
1982	540	438.6	123
1983	611	458.1	133
1984	667	481.4	139
1985	727	510.7	142
1986	823	528.2	156
1987	965	550.0	175

Sources: For all years other than 1943 and 1944 the index compiled by DoE from the sources described in paragraph 4 above.

1943 and 1944 from the Valuation Office source (described in paragraph 4) taken from page 7 of the Report of the Inter-Departmental Committee on the selling Price of Houses, Cmd 6670, 1945

6. The reduction in building societies' share of lending for house purchase means that since the early 1980's there can be less confidence than formerly about how accurately house price information derived from building societies' lending depicts the movement of house prices as a whole. The only other information about house prices (apart from lending by insurance companies, which is now very small) is about the prices of houses where the purchases are financed by banks. From the fourth quarter of 1982 information has been collected from banks about the number of dwellings on which they approved mortgages, distributed between ranges of prices. Average prices have to be estimated from the distribution. Notwithstanding uncertainties about this estimation, it is clear that the average price of houses sold with bank mortgages has risen faster than the average price of houses sold with building society mortgages. Table A.2 shows index numbers of dwellings sold with building society and bank mortgages, and a weighted average

Table A.1 Index Numbers of Prices of Second Hand Houses and the General Price Level

(1970 = 100)

	House Prices	General Price Level	"Real" House Prices
1934/39	12.0	24.2	50
1943	17.1	37.5	46
1944	20.0	38.6	52
1945	23.8	39.7	60
1946	28.7	40.9	70
1947	37.1	43.8	85
1948	42.3	46.5	91
1949	41.2	47.6	87
1950	42.6	48.8	87
1951	44.9	53.4	84
1952	44.2	56.6	78
1953	40.9	57.8	71
1954	39.7	58.9	67
1955	40.7	61.0	67
1956	41.9	62.0	68
1957	41.9	64.2	65
1958	42.7	66.2	65
1959	43.9	66.6	66
1960	47.5	67.3	71
1961	52.0	69.6	75
1962	55.7	72.5	77
1963	60.1	74.0	81
1964	68.4	76.4	90
1965	73.6	80.1	92
1966	77.9	83.2	94
1967	83.6	85.2	98
1968	88.7	89.3	99
1969	93.9	94.1	100
1970	100.0	100.0	100
1971	113.1	109.4	103
1972	154.6	117.3	132

8. At the other end of the period that the index in Table A.1 covers, it is useful to compare it with the Nationwide Building Society's indexes. Since turning points as well as average rates of increase are important, a year-by-year comparison is needed. The indexes published by the Nationwide Building Society begin with 1946, and for that reason the comparison is on that basis. The form in which the indexes were published, though, was on base 1939. The comparison can therefore be taken back to pre-World War II.

Table A.3 Comparison of Indexes of House Prices 1946-1970

	DoE from Valuation Office	Nationwide Modern Second-hand houses	Nationwide Older Second-hand houses
1934-39 (DoE) or 1939 (Nationwide)	42	44	52
1946	100	100	100
1947	129	125	121
1948	147	120	121
1949	144	131	131
1950	148	133	135
1951	156	145	150
1952	154	138	143
1953	143	135	144
1954	138	132	142
1955	142	139	148
1956	146	143	152
1957	146	144	156
1958	149	146	159
1959	153	153	167
1960	166	164	180
1961	181	179	198
1962	194	186	210
1963	209	210	229
1964	238	227	246
1965	256	245	264

of the two. To combine the bank data on mortgages completed, the bank series is lagged one quarter.

Table A.2 Bank and Building Society Average House Prices

	Building Societies (Mortgages Completed)	Banks (Mortgages Approved)	Combined Index
1982 Q4	98	98	...
1983 Q1	100	100	100
Q2	103	114	103
Q3	110	134	111
Q4	110	143	114
1984 Q1	109	160	112
Q2	115	184	117
Q3	121	180	125
Q4	119	168	124
1985 Q1	116	157	123
Q2	124	175	127
Q3	126	173	133
Q4	130	172	137
1986 Q1	134	172	139
Q2	140	176	143
Q3	152	191	156
Q4	152	195	161
1987 Q1	148	201	160
Q2	158	208	166
Q3	166	210	176
Q4	171	211	181

Source: Department of Environment

7. Between the first half of 1983 and the second half of 1987 the building society data show an increase of 66% in average house prices; but the index for banks and building societies combined show an increase of 76%. The difference is not dramatic, but needs to be borne in mind in any consideration of how house prices in 1983 and subsequently compare with previous booms.

12. The other measure of house prices that can be used for much of the period covered is for new houses mortgaged to building societies. The series began with 1956; before then there were too few new dwellings built for an average price to be meaningful. When the accelerating rise in house prices in 1971 and 1972 led to the sources/ ^{of house price statistics} being examined more closely, it was found that some of the building societies contributing to this series provided the average price of new houses on which mortgages were approved, and others the average price at the mortgage completion stage. There is on average a lag of between one and three months between the two stages, which was of little importance at the rates of increase of house prices experienced in the 1960's, but of very considerable importance when house prices rose at annual rates well into double figures. Since the source of data for the weighted index of second-hand house prices measures prices at the mortgage completion stage, the completions sub-series is used for comparability with the index of the price of second hand houses. Again for comparability it has been re-calculated to base 1970 = 100 and expressed in real terms as well.

Table A. 5 Index of Prices of New Houses Mortgaged to Building Societies

	New Houses (Nominal)	New Houses (Real)	Second-Hand Houses (Real)
1956	45	73	68
1957	46	72	65
1958	47	71	65
1959	47	71	66
1960	50	74	71
1961	55	79	75
1962	58	80	77
1963	62.1	84	81
1964	66.7	87	90
1965	73.2	91	92
1966	78.3	94	94
1967	83.2	98	98
1968	86.8	97	99
1969	93.9	100	100
1970	100.0	100	100
<hr/>			
1971	109	100	103
1972	139	118	132
1973	189	148	164
1974	214	144	151
1975	227	123	128

1966	271	253	276
1967	291	272	298
1968	309	288	319
1969	327	304	338
1970	348	321	364

Source: See Table A.1 for DoE index; Nationwide Building Society's indexes from Nationwide Building Society Occasional Bulletin No.135, June 1976

9. The pre-war to post-war change is difficult to compare owing to the base for the DoE index being 1934-39 and for the Co-Operative Permanent/Nationwide 1939, also the contrast between the latter's series for modern and older houses. But the indexes agree on there having been at least a doubling of house prices between pre-war and 1946, and perhaps rather more.

10. The post-war chronology that the indexes show is broadly similar, except for 1948 ^{and 1949} when the Valuation Office data incorporated into the DoE index show a further rise whereas the Nationwide indexes show stability or a fall. Both sources agree on an outright fall in house prices in the early 1950's, an important point of agreement; a slow increase in house prices from 1954 to the end of the decade; and then a rapid increase. Table A.4 shows the comparisons more precisely.

Table A.4 Comparisons of Measures of Change of House Prices

	1946-51	1951-54	1954-59	1959-70
<u>Percentage Changes</u>				
DoE index	+56.4	-11.5	+10.6	+127.8
Nationwide - modern second-hand houses	+45	-9	+16	+110
Nationwide - older second-hand houses	+50	-5	+18	+118
<u>Annual Average Changes (% a year)</u>				
DoE Index	+9.4	-4.0	+2.0	+7.8
Nationwide - modern second-hand houses	+7.7	-3.0	+3.0	+7.0
Nationwide - older second-hand houses	+8.5	-1.7	+3.4	+7.3

11. The comparison suggests that in interpreting the history of house prices it is safe to reckon on there having been a doubling of house prices during the war years; a further substantial increase (in the region of 50%) between 1946 and 1951; a fall between 1951 and 1954, of rather uncertain amount but which undoubtedly happened; a modest rise between 1954 and the end of the decade; and then an increase averaging 7 to 8% a year up to 1970.

Table A.6 Rents and Building Costs 1874 - 1913

	1874	1880	1890	1900	1913
Rents (Weber)	82.6	90.5	92.7	100.0	102.4
Building-costs (Maywald)	107.3	94.5	89.0	100.0	101.7
Consumers' expenditure deflator (Feinstein)	108.8	101.8	95.5	100.0	106.8
"Real" rents	75.9	88.9	97.1	100.0	95.9
"Real" building costs	98.6	92.8	93.2	100.0	95.2

Sources: Rents from the index by B Weber, published posthumously in Appendix 13 of J Parry Lewis, Building Cycles and Britain's Economic Growth, Macmillan, London, 1965

Building costs and the consumers' expenditure deflator published in Tables 61 and 63 of C H Feinstein, National Income Expenditure and Output of the United Kingdom 1855-1965, Cambridge University Press, Cambridge, 1972

15. Since the House Duty assessments measured actual rentals, Weber's index derived from them includes the effect of rises in the quality of the houses rented as well as true rent increase. There is no wholly reliable way of measuring changes in quality; the method used here is to take the increase in cost (at constant prices) per new dwelling assumed by Feinstein in deriving his estimate of gross fixed investment in dwellings from the number of houses built (C H Feinstein, National Income Expenditure and Output, page 186). His assumptions were an increase of 1% a year up to 1889; 5% a year in 1890 (to allow for new building regulations); 2% a year in 1890-1900 and then 1½% a year to 1913. Rents refer to the whole stock; so given the rise in the quality of new dwellings, the rate of increase in the average quality of the whole stock depends on the ratio of new building to total stock and on demolitions. Estimates of new building and demolition were taken from K M Riley 'An Estimate of the Age Distribution of the Housing Stock in Great Britain', Urban Studies 1973; together with Feinstein's assumptions about the quality of new houses built, they imply an increase of about 0.3% a year in the average quality of the housing stock. If that is broadly right, it implies that there was an average increase of about 0.8% a year in rents in real terms, excluding the effects of quality change, in 1874-1900. This is equal to rather more than one-half of the estimated average increase in earnings in real terms. Rents fell in real terms between 1900 and 1913, for reasons that include the fall in real wages, the increase in housing supply relative to demand in the boom at the end of the 1890's and the beginning of the 1900's, and some of the increase in local rates being shifted into rents.

1976	251	117	120
1977	270	108	111
1978	314	116	118
1979	391	128	137
1980	483	134	140
1981	517	128	131
1982	541	123	123
1983	589	129	133
1984	642	133	139
1985	691	135	142
1986	(797)	151	156
1987	923	168	175

Sources for new house prices: 1956-67 for Housing Statistics No.24, Table 50; Housing and Construction Statistics No 14 Supplementary Table I for 1967-70; Economic Trends October 1982 for 1970-75; Housing and Construction Statistics 1975-1985 Table 10.8 for 1975-85

13. The rise in the price of new houses was if anything slightly slower than the rise in the price of second-hand houses, with less marked short-run variation. The acceleration was less sharp in the booms of 1962-64, 1970-73, and 1977-80, and the subsequent slowing down was less abrupt. A supposed reason for this is that builders typically offer batches of houses for sale at advertised prices, which they increase only after an interval and do not decrease at all (owing to the ill-will of people who bought at the opening price); second-hand houses, in contrast, are sold at prices determined individually, and so respond more quickly. Subject to this proviso, the history of house prices since 1956 does not appear materially different if read in terms of new house prices.

II. Rents Before 1914

14. Evidence about the course of rents before 1914 is provided by the assessments for House Duty. This duty was imposed in 1851 to replace the window tax. It was charged on the occupier on the basis of gross rentals, assessed every five years. Houses with an annual rental of £20 or less were exempt from duty. Details of the assessments for houses below the £20 limit were first published for 1874, so from then onwards the House Duty assessments could be used as the source for an index of rents. Table A.6 shows the values of this index for selected years, compared with the general price level and building costs.

of the national income in the first half of the nineteenth century constructed by Phyllis Deane and W A Cole. They are summarised in Table A.8; the figure for 1801 is left out as being even more insecure than the others. To allow for the effect of the increasing proportion of the population housed in towns, total house rent is compared with weighted population, in which the urban population has a weight of two and the rural population one. Revaluation to constant prices was by the same index as used by Deane and Cole for converting their estimates of gross domestic product from current to constant prices.

Table A.8 Average House Rent Per Head of Population: Great Britain 1811-1851

	1811	1821	1831	1841	1851
(1) House rent (£ million)	17.2	17.9	22.0	37.0	42.6
(2) Population (million)	11.97	14.09	16.26	18.53	20.82
(3) Weighted population (million)	16.35	19.73	23.47	27.49	32.05
(4) Rent per head of weighted population (£)	1.05	0.91	0.94	1.35	1.33
(5) Indicator of value of money (gross domestic product deflator, 1865-85 = 100)	179	133	109	115	106
(6) Rent per head of weighted population at constant prices (£)	0.59	0.68	0.86	1.17	1.25
(7) (6) in index number form	8.7	100	126	172	184

Source: Phyllis Deane and W A Cole, British Economic Growth 1865 - 1959 (2nd Edition), Cambridge University Press, Cambridge. 1969
Tables 37 (house rent) and 72 (GDP deflator)

18. The increase in real terms in house rent per head of weighted population that the calculation in Table A.8 shows is sufficiently great for the inference that there was an increase to be robust with respect to the uncertainties about the price index. How fast real rents rose it is impossible to say on present evidence. But that the rising trend that is properly documented for the last quarter of the nineteenth century was not a novelty but a continuation of a trend of much earlier origin can be regarded as definite.

16. Building costs moved with the building cycle, but with no long term tendency to rise in real terms. The rise in rents in real terms cannot therefore be attributed to building costs; nor does it appear to have been due to any long term change in the cost of capital, as that appears to have been fairly stable in the long term (see A K Cairncross, Home and Foreign Investment 1870-1913, Cambridge University Press, Cambridge, 1953). The explanation has therefore to lie, by elimination, in land values. Alfred Marshall, the leading economist of his day, commented on this in his Principles of Economics.

"...ground rents in towns have risen, both extensively and intensively. For an increasing proportion of the population is living in houses on which ground rents on an urban scale have to be paid, and that scale is rising. But house rent proper, that is what remains of total rent after deducting the full rental value of the ground, is probably little, if at all, higher than at any previous time for similar accommodation" (8th Edition, Macmillan, London, 1922, page 676)

In Marshall's terms, the "extensive margin" of house building could not move out fast enough to obviate a rise in what he called "ground rents on an urban scale". The reasons why it could not comprised both transport technology and incomes. That this was so is further suggested by the relationship between size of town and average rents in 1912.

Table A.7 Index Numbers of Average "Working Class" Rents In English Towns 1912

London Inner Zone	116
London Middle Zone	100
London Outer Zone	87
Towns with populations over 250,000	62
Towns with populations between 100,000 and 250,000	63
Towns with populations between 50,000 and 100,000	55
Towns with populations under 50,000	51

Source: Enquiry by Labour Department of the Board of Trade, published in Report of Enquiry into Working Class Rents and Retail Prices, Parliamentary Papers 1913 Vol. LXVI, pages 4 - 5.

17. The rise in rents relative to the general price level that can be documented from Weber's index for the last quarter of the nineteenth century can be traced further back. The evidence is to be found in the house rent element in estimates

This is distinctly less than the difference between the average new advances and the average outstanding mortgage, which implies that the average new mortgage had risen before 1928. By how much it is not possible to say.

21. The change in new advances, though, will not be even approximately proportional to the change in prices if the ratio of advance to price is changing. During the 1930's the glut of building society funds reputedly led to considerably larger advances in relation to price. The only information so far available is that provided over thirty years ago by the Halifax Building Society and published by E.T. Nevin in The Mechanism of Cheap Money (University of Wales Press, Cardiff, 1955). One cannot necessarily assume that the average ratios of advance to price for the Halifax were typical, notwithstanding that society's size, but it is worth putting them into a calculation nonetheless. Table A.10 shows the average house prices that follow from taking the Halifax ratios as typical; building society advances of £1,000 or more are excluded as being likely to be for financing housing to let. A cross-check on the figures produced by this means can be derived from the index number for 1934-39 in Table A.1. The average price of second hand houses sold with building society mortgages in 1970 was £4,946, according to the Building Society Mortgage Survey, so an index value of 12.0 would correspond to £595. The calculation in Table A.10 gives an average of only £535 in 1934-38. The same method was applied to the average advances as calculated in Table A.9 would give £650. In view of the fact that building societies are known to have put substantial sums into loans for rented housing in the 1930's, to omit the loans over £1,000 (no other size-break is available) seems preferable, even though it may lead to some under-statement of the average new advance. Another possible reason for the discrepancy is that the Halifax made larger advances in relation to price than did all societies taken together.

III. The Inter War Years

19. As was mentioned at the beginning of this Annex, information about house prices in the inter-war years is sparse. Something can nevertheless be made of the figures for building society advances and outstanding mortgages, but unfortunately not until 1928 are numbers, as distinct from amounts available. There is a building cost series that links the inter-war with pre-1914 (and indeed post-1945), but to assume that prices and rents moved with building costs would be a question-begging assumption in the strict sense of the term. Table A.9 shows average outstanding building society advances and new loans.

Table A.9 Building Society New and Outstanding Loans 1928-1939

	Outstanding loans			New Loans		
	Number ('000)	Amount (£m)	Average (£)	Number ('000)	Amount (£m)	Average (£)
1928	554	228	412	116	59	509
1929	629	268	426	141	75	532
1930	720	316	421	159	89	559
1931	803	360	446	162	90	556
1932	869	388	446	159	82	516
1933	949	424	447	197	103	523
1934	1,067	476	446	238	125	525
1935	1,180	530	449	241	131	544
1936	1,295	587	453	252	140	556
1937	1,392	636	457	241	137	568
1938	1,478	687	465	232	137	591
1939	1,526	706	463	167	95	569

Source: Chief Registrar of Friendly Societies, tabulated in Building Societies Association, Compendium of Building Society Statistics Tables B1, B2, B3.

20. The impression conveyed by Table A.9 is of the average advance dropping in the early 1930's, but then rising. Average outstanding advances when the series started were some 75-80% of average new advances. At this time mortgages were typically at 6% for 20 years. From the number of new loans and advances, it would appear (from loans before 1928) that the average life of a mortgage was about 8 years and hence the average life thus far of outstanding mortgages was about 4 years. During that time about 12% of the capital would have been paid back.

in real terms. How to interpret the average rental in the de-controlled sector is open to argument, as it could be contended that rent restriction and security of tenure in the controlled sector led to un-met demand being diverted to the non-controlled sector, driving up prices there.

24. The best assessment that can be made of the course of house prices and market rents in the inter-war years, is the gap between the reasonably well documented forty years before World War I and the forty years since the end of World War II, is that in the 1930's house prices rose little at all in real terms, notwithstanding the boom; but that between pre-World War I and the beginning of the 1930's there had been some increase in the market price of housing in real terms, possibly in the region of 10 percent. But just when the increase took place is not known from present information.

Table A.10 Calculation of Hypothetical Average House Prices 1930-38

	(1)	(2)	(3)	(4)	(5)	(6)
	Average Advance (a) (£)	Percentage Deposit (%)	Implied Average House Prices (£)	Index of House Prices	Index of Building Costs	Index of General Price Level
1930	470	20.6	590	111	111	110
1931	474	21.2	600	113	107	105
1932	444	18.2	540	102	102	102
1933	446	15.8	530	100	100	100
1934	447	12.8	515	97	100	100
1935	452	15.1	530	100	102	101
1936	458	16.9	550	104	106	101
1937	464	14.4	540	102	112	105
1938	464	14.6	545	103	114	106

Note: (a) Excluding advance over £1,000

Sources: (2) from Nevin, op. cit., Table XLVIII

(5) Maywald's index, published in Table 63 in Feinstein, National Income and Output

(6) Table 61 in Feinstein, op. cit.

22. In view of all the qualifications cited in the previous paragraph, the implied average house prices worked out in Table A.10 must be used with caution. They would appear, though, to convey an impression of house prices falling in line with construction costs and the general price level in the early 1930's, and then rising at about the same rate as the general price level and if anything less than building costs in the rest of the 1930's. If that is correct it is an extremely important piece of house price history, given the scale of the housing boom in the 1930's.

23. On market rents, the only evidence to hand thus far about the increase between pre-1914 and the inter-war years is from the information collected for the Inter-Departmental Committee in the Rent Restrictions Acts which reported in 1937 (the "first Ridley" Committee). In paragraph 42 of its report (Cmd 5621, 1937) the average rent for de-controlled pre-1914 houses in urban areas outside London was put at 7s 6d a week, compared with 6s. a week for controlled lettings. The pre-1914 average rent was 4s. to 4s. 3d a week (all figures net of local rates), so the increase was some 75-85 percent. The increase in the general price level between 1913 and 1936, measured by the consumers' expenditure deflator, was between 60% and 65%, so that there appears to have been an increase of about 10% in rents

GEOGRAPHICAL PATTERN OF HOUSE PRICES:
THE HISTORICAL RECORD

The most commonly cited information about the geographical pattern of house prices in the longer term is the regional average prices derived from the Building Society Mortgage Survey and published in successive issues of Housing and Construction statistics. This survey began in 1966; but an analysis by region became available only from the second quarter of 1968 onwards. Before discussing other sources of house price data that can be used to cross-check the information from the Building Society Mortgage Survey or to show the regional pattern before 1968, it is convenient to set out the regional pattern that this source shows. The average price for all dwellings (new and second hand) in each region is expressed as a percentage of the UK average.

TABLE B.1, Continued

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Northern	82.3	86.2	83.6	77.5	75.1	76.9	76.4	75.7	77.7	73.3	67.1	67.6
Yorkshire and Humberside	78.7	78.5	77.6	75.3	75.0	79.4	76.9	78.8	76.8	75.0	70.6	68.7
North West	82.7	84.4	86.0	84.8	85.2	85.0	87.7	86.3	83.9	80.8	75.8	73.0
East Midlands	83.8	83.3	82.1	79.9	80.2	80.5	82.4	83.2	83.8	82.1	78.5	78.6
West Midlands	91.5	91.8	92.0	92.8	91.8	89.9	88.8	87.4	85.9	83.1	78.4	80.9
East Anglia	93.3	89.2	89.6	92.7	96.7	95.3	98.8	97.6	97.2	101.8	99.4	105.7
Greater London	122.5	122.7	122.9	129.5	131.2	127.2	129.9	130.9	135.2	142.4	151.2	163.4
Rest of South East	122.4	120.6	121.3	123.8	126.4	123.9	125.5	127.6	128.3	130.2	133.8	142.2
South West	102.4	99.3	99.4	102.9	107.2	104.8	107.9	105.8	105.2	105.9	106.2	110.5
UK	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average Price of All Dwellings: UK	12,704	13,650	15,594	19,925	23,596	24,188	23,644	26,471	29,106	31,103	36,276	40,419

Table B.1 Regional Price Relative For Average Price of All Houses as Shown By
The Building Society Mortgage Survey

	1968:2nd, 3rd, 4th Quarters	1969	1970	1971	1972	1973	1974	1975
Northern	78.1	80.0	79.2	77.9	73.4	74.6	76.8	81.5
Yorkshire and Humberside	76.5	74.1	73.0	71.4	66.2	71.0	75.4	76.8
North West	84.1	84.5	84.1	79.8	77.6	78.8	80.9	82.9
East Midlands	84.3	81.7	79.7	77.9	76.2	82.4	83.6	84.7
West Midlands	92.9	93.7	90.3	87.5	84.5	88.3	93.3	92.2
East Anglia	90.9	92.6	90.8	88.2	95.3	99.1	100.1	97.8
Greater London	137.9	133.5	138.3	140.9	150.7	145.3	135.2	126.6
Rest of South East	124.7	124.8	125.1	129.3	134.4	132.4	126.9	124.4
South West	97.9	96.9	98.1	98.8	105.4	109.3	105.6	102.6
UK	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average Price of All Dwellings:	4,402	4,640	4,975	5,632	7,374	9,942	10,990	11,787

4. Regions are far from homogeneous, and it is sometimes suggested that the way in which the country is divided into regions for administrative and statistical purposes obscures important distinctions. Grouping suburban and rural Cheshire with industrial Lancashire, and the Welsh Marches with Birmingham and the Black Country, for instance may, the argument runs, result in an industry/suburban and rural contrast being misinterpreted as a Midlands and North/Southern contrast. Some evidence that bears on whether this was so in the later 1960's is presented in Table B.3, which is based on analyses made by the Ministry of Housing and Local Government from data provided by the Valuation Office on prices of three bedroomed semi detached houses. This is the commonest single type of owner-occupied dwelling, and has been built in all parts of the country. Within each region, a distinction was drawn between the conurbations (as defined at the time for statistical purposes). What can be said about more recent information is commented on subsequently.

2. Several building societies now publish information on the price of houses bought with their mortgages, calculated from all transactions as distinct from a sample. Table B.2 compares the geographic pattern in 1982 and 1986 as shown by the Building Society Mortgage Survey (Table B.1) and the house price averages published by the Halifax and Nationwide Building Societies.

Table B.2 Measures of the Regional Dispersion of House Prices

	1982			1986		
	BSM	Halifax	Nationwide	BSM	Halifax	Nationwide
Northern	76	...	83	67	67	68
Yorkshire and Humberside	77	...	79	71	67	68
North West	88	...	84	76	77	72
East Midlands	82	...	82	79	76	79
West Midlands	89	...	89	78	79	78
East Anglia	99	...	98	99	101	103
Greater London	130	...	124	151	159	159
Outer Metropolitan Area (a))			133			159
) 126	126	...		134	141	
Outer South East (a))			110			120
South West	108	...	102	106	104	103
UK	100	...	100	100	100	100

Note: (a) These areas combined are the "Rest of South East"

3. It will be seen that the different building society sources show broadly the same picture, but not exactly. That there was a substantial widening in the inter-regional spread of house prices between 1982 and 1986 is not in doubt. It is possible that inter-regional differences in house prices may be under-stated by the building society data in Tables B.1 and B.2, owing to the growth of lending for house purchase by banks. The national average price of houses bought with bank mortgages is higher than the average for houses bought with building society mortgages; and, as Annex A shows, at national level average prices of houses bought with bank loans have risen faster than those financed by building societies. There is evidence from the 1984 Labour Force Survey housing trailer (i.e. supplement) to suggest that bank lending for house purchase was then more than proportionately concentrated in London and the South East. Whether that is still so is not known. If it is, then the inter-regional differences shown above will be under-stated.

5. Table B.3 does not show any tendency for house prices to be systematically lower in the conurbations of the North of England and the Midlands than in the rest of the regions; nor does it show the converse of this, a narrower difference in house prices between the rural areas of the North and the South East than for the regions as a whole. Although there were considerable intra-regional differences it does not appear that the inter-regional differences were merely or even mainly an artefact of those differences.

6. Similar information is not available for a recent year, but the building societies' complete mortgage records could be used to study intra regional patterns. Developments in data processing are increasingly being used by individual building societies to make possible analyses of house prices at sub-regional level. The information is summarised and commented on in Annex C. In general it provides a measure of support for the impression that although there is a difference in house prices between South East England and suburban and rural parts of the Midlands and North, it is the low house prices in the industrial areas of the Midlands and North that are responsible for much of the apparent contrast between house prices in the North and South. In this respect there was a change between 1966-68 and 1988. That the slump in the economy from 1980 onwards fell hardest on the industrial areas of the Midlands and North seems to be generally acknowledged, and that could explain the change. Information for intermediate years would reinforce the argument, however.

The Regional Pattern of House Prices Before 1968

7. The only source of information with which to go back before 1968 that is thus far to hand is the regional price indexes compiled by the Co-operative Permanent Building Society (now Nationwide). Until research of the kind discussed in Annex A produces more broadly based indexes, they may reasonably be used. The Co-operative Permanent BS's indexes (kindly supplied by the Nationwide Building Society) are for the Society's administrative regions as constituted at the time. There are separate indexes for the price of modern and older second hand houses. The indexes are quarterly, on base 1939 = 100, and begin with the 4th quarter of 1952. An attempt is made here to use them to study changes in the geographical pattern of house prices. The margin of error inherent in using the price data for a single society, and in the transformations required to estimate ratios of London and South Eastern house prices to the UK average are of course recognised, but to experiment nevertheless is considered worthwhile.

8. Table B.4 provides a summary. The years shown are 1953, the first full year the indexes cover; 1959 the year the national figures show to be the year immediately before the start of a rapid rise; 1965, and 1970.

TABLE B. 3

THREE-BEDROOMED SEMI-DETACHED HOUSES
AVERAGE OF PRICE RATIOS 1966-68

	.....Inter-War.....				.....Second Hand, Post-War.....			
	Conurbat- ions	Other Urban	Rural	Whole Region	Conurbat- ions	Other Urban	Rural	Whole Region
North	89	82	90	85	103	88	91	94
Yorkshire and Humberside	76	75	69	75	79	84	82	82
North West	85	78	85	82	92	87	90	90
East Midlands	n.a.	76	78	77	n.a.	85	(85)	(85)*
West Midlands	95	86	88	92	103	91	98	96
East Anglia	n.a.	87	86	87	n.a.	96	101	97
Greater London	144	n.a.	n.a.	144	147	n.a.	n.a.	147
Rest of South East	n.a.	113	113	113	n.a.	117	116	117
South West	n.a.	97	90	96	n.a.	100	100	100
England and Wales				100				100

Note: (*) Calculated from 1967 and 1968 only; 1966 figure for 'rural' rejected as "wild", only £2,320 = 61% of E and W average

Source: Calculated from Housing Statistics No.15, Supplementary Table III.

Table B.5 Annual Average Percentage Rates of Increase In Price Indexes

	Modern 1953-59	Second-Hand 1959-65	Houses 1965-70	Older 1953-59	Second-Hand 1959-65	Houses 1965-70
London and South Eastern	2.1	11.0	4.6	3.1	10.6	5.6
Southern	1.9	9.3	6.3	1.0	10.2	6.7
Western	1.5	7.9	4.6	2.1	7.2	6.5
Midland	0.7	6.9	6.2	0.7	6.9	6.7
Eastern	1.1	9.7	4.9	1.3	7.8	6.7
North Western	1.8	6.4	7.0	1.8	6.0	8.5
North Eastern	2.0	5.6	5.4	2.5	5.6	6.1
Wales	...	...	...	...	...	...
Scotland	1.5	8.4	6.4	1.8	8.8	7.1

10. Broadly the same picture is given by the two sets of index numbers. House prices in London and the South East rose only slightly faster than in the rest of Britain in 1953-59, very substantially faster in 1959-65, and then rather more slowly in 1965-70. Between 1939 and 1953 the rise in house prices in London and the South East was not materially faster, on the evidence of the Co-operative Permanent BS index, than in the rest of Britain.

11. The movement of the ratio between average house prices in London and the South East and in the country as a whole cannot be derived directly from Table B.4 and B.5 because the ratio can only be calculated from prices in money terms. An estimate was therefore made in the following way. Average prices for second-hand houses sold with building societies ^{mortgages} in the UK as a whole, London and the South East, and the three regions of the North of England combined together (Northern North West, Yorkshire and Humberside) were worked back year by year to 1953 and then to 1939 by reference to the indexes from which Tables B.4 and B.5 were derived. For this purpose the indexes for modern and older second hand houses were averaged. To reduce the risk of distortion through the starting year being un-typical, the calculation was made first with 1970 and then with 1969 as base year, and the results averaged. From the year by year house prices estimated in this way ratios were calculated between London and the South East and the UK average; the North and the UK average; and the average for London and the South East as a multiple of the average for the North (the South East-to-North ratio".) The year by year figures are in the Appendix; the results are summarised in Table B.6

Table B.4 Co-Operative Permanent Building Society Regional House Price Indexes

(1939 = 100)

	1953	1959	1965	1970
<u>Modern Second Hand Houses</u>				
London and South Eastern	326	368	687	861
Southern	310	346	588	799
Western (a)	304	331	523	654
Midland	340	353	527	713
Eastern	323	346	602	765
North Western	320	354	515	721
North Eastern	304	342	475	619
Wales (a)	...	...	...	660
Scotland	293	321	523	715
<u>Older Second Hand Houses</u>				
London and South Eastern	290	349	639	840
Southern	284	303	543	749
Western (a)	280	318	484	662
Midland	307	321	478	660
Eastern	290	314	494	702
North Western	287	319	453	681
North Eastern	276	321	446	600
Wales (a)	...	...	...	634
Scotland	268	299	497	701

Note: (a) Up to and including 1965, Wales was included in the 'Western' Division. Wales was separated in 1966, and a separate 'South Western' Division was formed

9. The index numbers in Table B.4 are re-presented in Table B.5 as annual average percentage increases after 1953.

13. The conclusion to which the Co-op Permanent's information points is that in the early 1950's the difference in house prices between London and the South East and the country as a whole was little different from what it had been in 1939, and that the same was true of the difference between London and the South East and the North of England. House prices in London and the South East might perhaps have been a little higher relative to the rest of the country, but by an amount that could be within the margin of error. That would have reversed a change in the opposite direction during the war years: in the half year ending March 1945, the average increase in price compared with pre-war of houses sold with vacant possession was 66% in London and the Home Counties, 88% in the North, compared with 80% in England and Wales as a whole (information compiled by Valuation Office for the Inter-departmental Committee on the Selling Price of Houses, published in the Committee's Report, Cmd 6670 (1945), page 7). This was equivalent to a fall of about 12% in house prices in London and the Home Counties relative to the North of England. The explanation is likely to lie in the effect of attack by flying bombs (V1) and rocket (V2) on London from June and September 1944, from which the North was out of range. This relative reduction in London house prices was reversed after the war. No significant changes in the regional pattern can definitely be discerned in the rest of the 1950's, though there is some suggestion that the North may have escaped much of the fall in nominal house prices that the national indexes show in the early 1950's. The boom in house prices in the early 1960's was much stronger in London and the South East than in the rest of the country, as Table B.4 and B.5 showed. Table B.6 shows the difference between London and the South East and the national average having doubled, at least, between the later 1950's and the mid-1960's. As compared with the North the differential widened from 30-35% to 75%. The differentials narrowed in the later 1960's, but not by enough to reverse more than a small fraction of the widening that occurred.

14. The housing boom, including the house price increase, between the late 1950's and the mid-1960's was not continuous: it was interrupted by credit restriction and shortage of mortgage money in 1961 and 1962, and again in 1965 and 1966. There is just a hint in Table B6 of these being times when the dispersion of house prices did not widen. If so, there is a similarity with the well established pattern in 1969 to the mid-1980's, of inter-regional disparities widening in times when the rise in house prices is accelerating, and narrowing again when nationally the increase in house prices slows down. But this must be expressed more tentatively than the widening of the disparities in the period as a whole, which seems much more firmly established.

Table B.6 Regional Pattern of House Prices 1939 and 1953-70

	London and South-East as Percent of UK	North As Percent of UK	"North-to-South East Ratio"
1939	107	84	100 : 127
1953	113	85	100 : 133
1954	112	87	100 : 129
1955	113	86	100 : 131
1956	116	87	100 : 133
1957	114	86	100 : 133
1958	115	86	100 : 134
1959	115	84	100 : 137
1960	119	81	100 : 147
1961	125	78	100 : 160
1962	127	78	100 : 163
1963	126	80	100 : 158
1964	132	75	100 : 176
1965	133	75	100 : 177
1966	133	76	100 : 175
1967	129	76	100 : 170
1969	127	77	100 : 165
1970	129	77	100 : 168

Source: Calculated from Appendix Table B.

12. In view of the amount of averaging described in the previous paragraph, precision cannot be claimed for the calculations summarised in Table B.6 but they are of interest none the less. Comparison between the Co-op Permanent/Nationwide's national index with the index compiled by DoE from Valuation Office data shows broad agreement/^(see Annex A) which increases confidence in the Co-op Permanent's regional price indexes being trustworthy enough for present purposes. Comparison with the information about the average prices of new houses (see Appendix, Table C) also suggests that the absolute price averages derived from the Co-op Permanent's indexes look reasonable.

15. No information is thus far to hand about any changes in inter-regional differences in house prices during the inter-war years. But it is possible to look at the geographical pattern of rents before World War I by reference to the information collected in 1912 by the Labour Department of the Board of Trade about rents of "working class" housing in the principal cities and towns. The index numbers (based on the "middle zone" of London, the form in which the information was originally published) were grouped together regionally and averaged with the 1911 Census totals of dwellings in each town as weights.

Table B.7 Urban Rents 1912

	Number of Towns	Index (London Inner Zone = 100)
Northern	9	68
Yorkshire and Humberside	11	58
North West	17	61
East Midlands	6	53
West Midlands	8	57
Greater London	(a)	97
West of South East incl East Anglia (b)	10	58
South West	5	61

Notes: (a) The three zones of London plus Croydon
 (b) The only towns in East Anglia included were Ipswich and Norwich

Source: Index figures for rents from Report of Enquiry by the Board of Trade into Working Class Rents and Retail Prices, Parliamentary Papers 1913 Vol LXVI, pages xxii and xxvi. Numbers of dwellings from Census of England and Wales 1911 Vol VI, Table 2.

16. The contrast between London and the rest of the country stands out clearly; but there is no sign of a North/South contrast excluding London. It might be possible to obtain a more broadly based measure of differences in rents from House Dutyrecords, if these survive, or from Schedule A valuations. But that would be a major piece of research.

Table B. Projected Average Prices

<u>Base Year</u>	1970 Base			1969 Base		
	UK	London and SE	North	UK	London and SE	North
	4,946	6,358	3,820	4,598	5,840	3,550
1939	692	747	583	683	726	572
1953	2,015	2,302	1,730	1,998	2,237	1,698
1954	1,978	2,246	1,731	1,962	2,183	1,699
1955	2,072	2,370	1,782	2,055	2,303	1,749
1956	2,130	2,489	1,855	2,112	2,419	1,821
1957	2,166	2,500	1,873	2,149	2,430	1,838
1958	2,202	2,549	1,911	2,184	2,477	1,875
1959	2,311	2,680	1,947	2,292	2,604	1,911
1960	2,484	2,994	2,011	2,463	2,909	1,974
1961	2,722	3,450	2,126	2,700	3,352	2,087
1962	2,860	3,663	2,253	2,836	3,559	2,211
1963	3,170	4,044	2,406	3,144	3,930	2,361
1964	3,415	4,556	2,564	3,388	4,427	2,516
1965	3,675	4,956	2,753	3,645	4,816	2,702
1966	3,820	5,128	2,924	3,789	4,963	2,869
1967	4,116	5,367	3,128	4,082	5,215	3,069

APPENDIX

PROJECTION BACK OF REGIONAL HOUSE PRICESTable A. Index Numbers For Regions: Second Hand Houses

1939 = 100

	London and South Modern	East Older Houses	North Western Modern	Older Houses	North Eastern Modern	Older Houses
1953	326	290	320	287	304	276
1954	316	285	322	291	304	271
1955	334	300	325	292	314	292
1956	355	311	341	307	324	301
1957	350	319	341	311	329	304
1958	358	324	347	315	332	317
1959	368	349	354	319	342	321
1960	412	389	362	332	354	332
1961	473	450	384	348	374	353
1962	501	479	406	376	394	370
1963	555	527	442	397	417	375
1964	624	595	475	427	441	416
1965	687	639	515	453	475	446
1966	705	667	556	495	498	457
1967	739	697	600	526	523	497
1968	783	651	650	575	570	555
1969	806	802	692	615	600	575
1970	861	840	721	681	619	600

Table C. Projected Average Prices of Second-Hand Houses Compared With Average Prices of New Houses

	Projected Price of Second-Hand Houses		Average price of New Houses
	1969 Base	1970 Base	
1956	2,112	2,130	2,300
1957	2,149	2,166	2,364
1958	2,184	2,202	2,428
1959	2,292	2,311	2,428
1960	2,463	2,484	2,556
1961	2,700	2,722	2,812
1962	2,836	2,860	<u>3,003</u>
1963	3,144	3,170	3,195
1964	3,388	3,415	3,433
1965	3,645	3,675	3,768
1966	3,789	3,820	4,030
1967	4,082	4,116	4,283

Note: Average prices of new houses (mortgaged with building societies) was published in index number form before 1963, in absolute terms for 1963 and later

Source Housing Statistics No.24, Table 50

Table C.1 Average Price of Second Hand Houses First Quarter 1988

(prices in £)

North

Cleveland	28,213	Carlisle	33,600
Cumbria	34,885	Darlington	33,750
Durham	30,783	Durham	30,300
Northumberland	33,310	Gateshead	30,050
Tyne and Wear	32,006	Hartlepool	28,100
<u>Whole region</u>	<u>31,059</u>	Middlesbrough	30,400
		Newcastle	33,100
		Stockton	26,250
		Sunderland	33,350

Yorkshire and Humberside

Humberside (North)	31,261	Bradford	27,900
Humberside (South)	28,354	Doncaster	23,000
North Yorkshire	37,755	Grimsby	28,600
South Yorkshire	25,557	Halifax	29,050
West Yorkshire	30,793	Harrogate	40,600
<u>Whole region</u>	<u>29,620</u>	Hull	30,550
		Leeds	33,150
		Rotherham	24,200
		Sheffield	28,400
		York	39,250

North West

Cheshire	38,463	Blackpool	33,400
Lancashire	30,505	Bolton	27,850
Merseyside	30,251	Chester	37,250
<u>Whole region</u>	<u>32,792</u>	Lancaster	31,800
		Liverpool	31,100
		Manchester	31,150
		Preston	32,300
		Stockport	39,000
		Warrington	34,100
		Wigan	26,400

HOUSE PRICES AT SUB-REGIONAL LEVEL

House price information at sub-regional level has only recently become available in the form of average prices. Building societies have increasingly organised their records in such a way as to enable house prices to be calculated for specified sub-sets of the transactions they financed in a particular period. The volume of business handled by the larger societies means that very large sets of data are accessible, so that meaningful average prices can be calculated for individual areas and house types. Previously the information generally available was in the form of ranges of typical prices. That was the form in which the once widely quoted Parker's Guide (now no longer published) gave information about house prices in a large number of towns. In the 1970's the Department of the Environment worked with the Inland Revenue Valuation Office to devise a means of sampling the 'particulars deposited', with a sufficiently large sample (1 in 5) to permit average prices to be calculated for counties and large Districts. A number of problems were met with, and they had not all been solved by the beginning of the 1980's when the work was abandoned as part of the cuts in the Department of the Environment's statistical work. New developments in computerising Valuation Office records may bring back the possibility of local average house prices being calculated from particulars deposited. But at the time of writing the building societies' data are the source that is available.

2. In this Annex, the building society information is looked at for the evidence it provides about two questions raised in current discussion of house prices. One is whether regional boundaries have been made misleading by developments in the housing market and in transport. The other is whether there is genuinely a difference in house prices between North and South or whether the difference that there appears to be is the consequence of a divide between the old industrial areas and the rest of the country.

3. The information on house prices used for this purpose is that published by the Halifax Building Society for the first quarter of 1988. It is the most up-to-date source at the time of writing, applying to the whole country at the same date, with a large enough sample to provide a degree of standardisation by being calculated for semi-detached houses only. Average prices are shown for all counties, and the selected towns in each region included in the Halifax Building Society's County Supplement No.2

South East

Bedfordshire	63,547	Bedford	63,850
Berkshire	77,702	Chelmsford	75,900
Buckinghamshire	73,030	Colchester	67,450
East Sussex	71,067	High Wycombe	73,600
Essex	73,479	Luton	61,900
Hampshire	60,974	Maidstone	74,000
Hertfordshire	89,656	Milton Keynes	54,250
Isle of Wight	50,285	Oxford	71,300
Kent	69,281	Portsmouth	58,200
Oxfordshire	69,455	Reading	74,400
Surrey	89,573	Southampton	56,000
West Sussex	77,759		
<u>Whole region</u>	<u>73,041</u>		

Greater London

Whole area	101,448
------------	---------

South West

Avon	58,858	Bath	58,650
Cornwall	42,050	Bournemouth	59,350
Devonshire	49,504	Bristol	60,800
Dorsetshire	60,091	Cheltenham	63,200
Gloucestershire	55,389	Exeter	61,450
Somerset	51,171	Gloucester	51,250
Wiltshire	58,769	Plymouth	43,650
<u>Whole region</u>	<u>54,133</u>	Poole	61,300
		Swindon	59,900
		Weston-super-Mare	51,150

National Average46,274

Source: Halifax Building Society, House Price County Supplement No.2
and Regional Bulletin No.17 (April 1988)

4. Inspection of the county and town averages show that the regional boundaries are not arbitrary in terms of house prices. If the very special case of the Isle

East Midlands

Derbyshire	29,321	Chesterfield	26,300
Leicestershire	39,235	Derby	28,800
Lincolnshire	37,809	Grantham	43,050
Nottinghamshire	29,125	Kettering	45,550
Northamptonshire	48,073	Leicester	39,000
<u>Whole region</u>	<u>34,656</u>	Lincoln	38,150
		Loughborough	36,400
		Mansfield	25,350
		Northampton	50,300
		Nottingham	29,700

West Midlands

Herefordshire	44,298	Birmingham	37,100
Shropshire	34,012	Coventry	36,500
Staffordshire	30,662	Hereford	44,000
Warwickshire	47,900	Shrewsbury	38,900
West Midlands	36,371	Solihull	54,650
Worcestershire	44,170	Stoke-on-Trent	29,350
<u>Whole region</u>	<u>36,933</u>	Tamworth	35,750
		Walsall	30,150
		Wolverhampton	31,550
		Worcester	44,750

East Anglia

Cambridgeshire	55,911	Bury St Edmonds	62,400
Norfolk	51,636	Cambridge	75,900
Suffolk	58,056	Great Yarmouth	46,000
<u>Whole region</u>	<u>54,989</u>	Huntingdon	55,450
		Ipswich	61,650
		Kings Lynn	50,850
		Lowestoft	45,700
		Norwich	54,300
		Peterborough	49,400
		Thetford	50,150

so much detail. The average for Cheshire is only a little less in relation to the national average than was the average for the 'rural' part of the North West in 1966-68. The average for the conurbations was thus 85% of the national average; in the first quarter of 1988 the average for Merseyside was only 65% of the national average, and for Manchester 67%. In the North region, in contrast, there are only fairly small differences in average prices between counties and between towns.

7. The average prices for counties and towns in Table C.1 show that the difference in house prices between the South East and North of England is a reality. When like is compared as far as possible with like, for instance North Yorkshire and Harrogate, Cheshire, Warwickshire and Worcestershire with the Home Counties the contrast is sharp. If the average prices for these four counties are combined, a figure of £42,000 is given. When compared with the figure for the South East excluding London it gives a ratio of 1.7:1 between Midlands and North and South East; this is less than the 2.2:1 given by combining the averages for the five regions of the North and Midlands.

8. An analysis may also be made of the geographical pattern of house prices within London, from data published by the Nationwide Anglia Building Society. Its most recent data are for the year to September 1987; but it also published similar data for the year to June 1985 so that changes can be studied. Unlike the figure in Table C.1, those in Table C.2 are calculated from prices paid for all dwelling types.

of Wight is excluded, there is no overlap of county average house prices between the South East region and the four regions that adjoin it (South West, West Midlands, East Midlands, and East Anglia). It is however true that in each of the four regions the counties that adjoin the South East have distinctly higher average house prices than do the rest of the regions. The "economic" as distinct from geographic South East would appear to include Dorsetshire, Gloucestershire and Wiltshire; Warwickshire (possibly); Northamptonshire; Cambridgeshire, and much of Suffolk. The city of Cambridge is very much a special case in terms of house prices, and the contrast between its average price, £75,900 for the house type in which Table C.1 is based and (e.g.) Great Yarmouth at £46,000 over-states the effect of distance from London and the so-called 'ripple' effect on prices as demand and prices in the South East rise. The contrast between the prices given for Bury St Edmunds and Ipswich as against Great Yarmouth and Lowestoft are a better measure of these effects. Lowestoft is in Suffolk, which illustrates the way in which having to classify whole counties can cause difficulties. The average house prices in Northampton, Grantham, and Kettering, all with good rail services to London, merit note in this context. A more sensitive analysis of the way in which house prices outside the statistical South East have been pulled up as demand in the South East proper has pressed harder against supply would require a time series.

5. It is possible to be rather more specific in answering the second question, whether the North/South contrast is the consequence of industrial depression or whether it is systematic of geographical terms. The intra-regional house price information for 1966-68 summarised in Table B.3 of Annex B provides an approximate basis for comparison. In the West Midlands, for instance, the average price of 3 bedroom semi-detached houses in the conurbation was 95% of the national average, compared with 86% for other urban areas, 86% for rural areas, and 92% for the region as a whole. In Table C.1, though, the average for the West Midlands metropolitan county (rather larger than the former conurbation, including Coventry is shown as only 79% of the national average, and Staffordshire lower still. In the West Midlands it was the slump in the industrial areas that pulled down average house prices in the region as a whole such a long way down in the 1980's (see Table B.1 of Annex B).

6. In Yorkshire and Humberside much the same seems to have happened, notably in South Yorkshire (not a conurbation in 1966-68, but a large component of the urban area). The contrast in house prices between South Yorkshire and Sheffield and North Yorkshire and York suggests a relative fall in house prices in the 'heavy industry' area rather than everywhere in the region. A somewhat similar comment can be made about the North West, though much more tentatively owing to lack of

Table C.2 (Continued)

Waltham Forest	82	85	+57
Wandsworth	100	102	+55
Westminster	112	124	+69
Greater London	100	100	+52

Source: Nationwide Building Society, Local Housing Statistics No.10 London Boroughs
Sept. 1985
Nationwide-Anglia Building Society, Local Housing Statistics No.16 London
December 1987

9. Averages like those tabulated in Table C.2 must be interpreted very warily. The mix of dwelling types was not necessarily the same in both years, and the business done by an individual society may be in different parts of the market. It is not wholly certain, therefore, whether house prices really did rise faster in inner than in outer London, though at face value this is what the average prices in Table C.2 show. A faster increase in house values in inner London than in outer London would be highly relevant, if it were firmly established, to interpreting what is happening in the London housing system. But to establish it firmly probably requires information from more than one building society and preferably from a source independent of lenders and so not at risk to the changing market shares in the housing finance market.

Table C.2 Average Prices Paid For Houses In London in 1984/85 and 1986/87

	Year to June 1985 (Greater London = 100)	Year to september 1987 (Greater London = 100)	Increase (percent)
Barking and Dagenham	66	70	+63
Barnet	118	108	+39
Bexley	95	93	+49
Brent	96	103	+63
Bromley	111	100	+37
Camden	118	126	+62
Croydon	100	95	+44
Ealing	99	101	+56
Enfield	98	108	+67
Greenwich	92	99	+64
Hackney	81	89	+66
Hammersmith and Fulham	113	125	+69
Haringey	87	95	+66
Harrow	113	109	+46
Havering	103	98	+45
Hillingdon	101	97	+47
Hounslow	100	95	+43
Islington	98	104	+62
Kensington and Chelsea	128	148	+75
Kingston	110	118	+63
Lambeth	84	93	+68
Lewisham	82	83	+53
Merton	98	95	+47
Newham/Tower Hamlets	72	75	+58
Redbridge	103	102	+50
Richmond	126	130	+57
Southwark	85	93	+66
Sutton	107	106	+51

precision cannot therefore be claimed for the measures of cost, but a useful starting point is the cost indexes implicit in estimates in the national income accounts of gross fixed capital formation in dwellings at current and constant prices. These indexes are compared in Table D.1 with house prices. As elsewhere in this paper, the general price level is measured by reference to the Retail Price Index.

Table D.1 Index Number of Cost of New House Building Compared With House Prices

	Building costs Implied Index (Private Sector) (1970 = 100)	Building Cost Index in Real Terms (Private Sector)	Building Cost Index (Public Sector) In Real Terms	"Real" House Prices
1934-39	17.5	72	72	50
1948	48.2	104	104	91
1949	48.5	102	102	87
1950	49.4	101	101	87
1951	57.4	107	107	84
1952	63.3	112	112	78
1953	62.5	108	108	71
1954	62.0	105	105	67
1955	66.2	109	109	67
1956	68.7	111	111	73
1957	69.4	108	108	72
1958	69.7	105	105	71
1959	67.8	102	102	74
1960	67.9	101	101	74
1961	<u>69.7</u>	<u>100</u>	<u>100</u>	79
1962	72.9	101	106	80
1963	76.3	103	109	84
1964	78.4	103	107	87
1965	80.8	101	104	91
1966	84.0	101	104	94
1967	83.9	98	101	98
1968	88.9	100	101	97
1969	92.5	98	100	100
1970	100.0	100	100	100
1971	109.4	100	99	100
1972	123.2	105	103	118

HOUSE PRICES, BUILDING COSTS, AND LAND PRICES:
THE HISTORICAL RECORD

Two lines of explanation might be suggested for the tendency for house prices to rise faster than the general price level. The first is that building industry costs might rise relative to the general level of prices and costs owing to a slower rise in productivity in house building than in the economy as a whole. House building by so-called "traditional" methods is a hand-craft industry, impossible to mechanise; so the increase in productivity in the building industry might well be slower than for the rest of the economy. The second line of explanation, not mutually exclusive from the first, is in terms of growing demand pressing against an insufficiently responsive supply leading to increases in house prices relative to building costs. If the building industry is fairly competitive and without higher barriers to entry, so that profits greater than earned elsewhere in the economy for comparable risk attract new entrants, the surplus could not in the medium to long term accrue to house builders in greater than normal profits, nor could it accrue to workers in the industry in the form of higher pay. The surplus in consequence would appear in land values, if the supply of land is not very responsive to increases in demand. The theory behind this proposition is basically that put forward in respect of land rent during the Napoleonic Wars: that rents and land values were higher because the price of corn was high, and not vice versa. As applied to housing, the argument is that land values have risen because the market prices of houses have risen, and not vice versa.

2. In this Annex an attempt is made to give content to the arguments outlined in the previous paragraph by juxtaposing the national and regional house price information with information on building costs and land prices. Building costs are taken back to pre-war; but land prices can be taken back only to 1963, when the land price index begins. House builders' profits are an important part of an account of prices and costs, but the information about them is fragmentary.

Building Costs

3. The price of building materials can be measured in a reasonably straightforward way, but total costs are much more difficult. Labour costs pose difficulties because lack of a standard product makes it difficult to measure output independently of the estimated price change. Labour input is hard to measure because self employment has been common in house building for much of the time; and although there is information about earnings of employees, the pay of self-employed workers in the construction industry is a matter about which little is known. Great

D.2 (price of house building materials) and D.3 (construction industry employees' pay) shows that the explanation was not that pay in the building industry rose faster than pay elsewhere, and that the steep increase in building material costs, especially for timber were only part of the explanation. Productivity had clearly fallen. From the later 1940's to the beginning of the 1970's there appears to have been no long term upward trend in building costs, only short-term fluctuations. This does not necessarily tell against the hypothesis advanced at the beginning of this Annex, that there could be a long term tendency of building costs to rise owing to limited scope for productivity gains. Recovering the fall in productivity over the war years, the reasons for which are still far from clear, could have provided the scope for productivity improvements.

5. The construction and house price boom in the early 1970's took building costs with it, and the increase was never more than partially reversed, notwithstanding the severity of the slump in private house building. In reading the history of building costs in this period and subsequently it is necessary to note that the public sector and private sector indexes are partly independent, in that the private sector index is calculated partly from house prices net of land prices and so is likely to contain changes in profit margins. This is commented on subsequently with regard to what has happened in the boom of the 1980's. But here one may note that both indexes agree on there having been a sharp rise in building costs, relative to the general price level, which was only partly reversed. Both indexes agree on there having been another increase in costs, relative to the general price level, at the end of the 1970's. It is in 1983 and afterwards that Table D.1 shows a sharp difference between private and public sector house building costs. To interpret this difference it is helpful to look in more detail at building material prices and building industry pay separately.

6. Table D.2 shows the course of building material prices, through combining together in sequence the official indexes

Table D.1 (Continued)

1973	155.1	121	117	148
1974	192.1	129	137	144
1975	229.2	124	135	123
1976	261.8	122	129	117
1977	289.2	116	121	108
1978	321.1	119	121	116
1979	380.2	124	120	128
1980	465.8	129	126	134
1981	527.5	131	128	128
1982	548.7	120	117	123
1983	577.2	126	114	129
1984	643.3	134	115	133
1985	704.8	138	113	135
1986	749.0	142	112	151
1987	809.1	147	113	168

Note: The link from 1934-39 to 1948 was calculated by reference to the cost index for all construction work; the index from 1948 to 1961 for all gross fixed investment in dwellings public and private; and from 1963 onwards for private dwellings only

Source: 1934-39 from Table 61 of C. H Feinstein, National Income Expenditure and Output; 1948 to 1980 from Economic Trends Annual Supplement 1986 Edition, pages 48 and 51;

Monthly Digest of Statistics April 1988, Table 1.7. House prices from Annex A, Table A.5 (year 1981 and after)

4. In the history of the house building costs there is no doubt that during the war years there was a much faster increase in building costs than in the general level of costs and prices. The Girdwood Committee (Committee of Inquiry into the Cost of House Building, First Report, published by the Ministry of Health in 1948) estimated that the cost of building a council house to 1947 standards was 140% higher in 1947 than in 1938, which implied an increase in real terms of about 35% (relative to consumer prices). That is fully consistent with the 'real' increase of 40-45% between 1934-39 and 1948 that Table D.1 shows. It is of interest that there was an increase in 'real' building costs between 1913 and 1920 (though smaller than between 1938 and 1947), but which had been reversed by the mid-1920's. The post-war slump that began in 1920 was no doubt the reason; the absence of such a slump after World War II may well be the reason why the rise in building costs during the war was never reversed. Comparison with Tables

Table D.3 Pay in the Construction Industry Compared With Other Industries

(£ a week)

	Average Earnings in Construction Industry	Average Earnings All Industries	Ratio
1938	3.30	3.45	96
1948	6.40	6.70	96
1950	7.00	7.29	96
1952	8.54	8.68	98
1960	13.40	14.10	95
1965	19.12	18.91	101
1970	26.9	26.8	100
1974	45.0	43.6	103
1977	71.2	71.5	100
1981	120.9	121.9	99
1982	131.4	133.8	98
1983	139.8	143.6	97
1984	149.4	152.7	98
1985	156.8	163.6	96
1986	167.2	174.4	96
1987	180.5	185.5	97

Source: Up to 1965 from Department of Employment British Labour Statistics Historical Abstract Tables 40,41,42. 1970 and later from New Earnings Survey, published in Housing and Construction Statistics 1969-1979 Table 24; and 1976 - 1986, Table 2.7 (1987 from New Earnings Survey 1987 Part E, Table 118)

9. Table D.3 shows no long term tendency for building industry pay to rise or fall relative to pay generally. It rose in relative terms in the booms of the mid-1960's and the early 1970's, and then fell back as demand for building industry workers slackened. Of particular interest is the absence of any sign of an increase in building industry pay relative to the general level of pay during the spurts in house prices in the later 1970's or in the 1980's. The boom of the 1980's had not brought up building industry pay in relative terms as far as 1987. The depth of the slump and high general unemployment may be part of the explanation.

Table D.2 Index Numbers of Price of House Building Materials

	(1970 = 100)	
	Index of Prices	Index of Prices of Building Materials in Real Terms
1938	19	77
1948	48	103
1950	50	102
1952	60	106
1960	71	105
1965	81	101
1970	100	100
1974	197	120
1977	302	121
1981	479	119
1982	518	118
1983	555	121
1984	594	123
1985	630	123
1986	649	123
1987	689	125

Source: Indexes published by the Department of Trade and Industry (and predecessors-in-title)

7. Building material costs rose steeply in real terms in the war years, and then moved with no clear trend until the early 1970's. There was then an increase to a level about 20% higher, which has persisted with only fairly small fluctuation. The boom of the 1980's brought the cost of house building materials upwards, but only by 6% in real terms in the five years between 1982 and 1987.

8. Construction industry pay is next compared with pay in industry as a whole. For convenience the same years are shown as in Table D.2. The comparisons in Table D.3 are for adult men employed full time in manual work, whose pay was not affected by absence in the survey week.

Table D.4 Changes in House Building Costs Compared with Prices of Building Materials and Construction Industry Pay 1981-1987

(percentage change in real terms)

Building costs - private house building	+12
- building for public sector	-12
Price of house building materials	+5
Construction industry average earnings	+10

12. Labour and materials account for approximately equal shares of costs, so a weighted average cost of inputs would be about 7 or 8 percent, much less than the 12 percent increase in private house building costs that is shown in Table D.1. The implication is that the index for private sector house building costs contains a considerable amount of increase in profits. "Press cutting intelligence" (see Appendix A to this Annex) is fully consistent with there having been a substantial increase in profits per house built. To discuss profits more rigorously a long time series would be needed for profits from house building, both in absolute terms and in proportion to turnover and capital employed. That would show whether there has been any long-term tendency for profit margins to widen, abstracting cyclical fluctuations in what has long been a cyclically volatile industry. Such a series would be difficult to construct, because many of the largest house building firms are active in other branches of the construction industry. At present the evidence is rather impressionistic. Building industry profits will be considered further in the light of evidence about land values, house prices, and building costs. The view is commonly put forward that the profit from building houses for sale comes not from the building but from the increase in the value of the site between when it is bought and when it is sold with a house on it. To test how plausible this view is requires a review of land prices.

Land Prices: National Trends

13. The historical record of national average prices per plot for land with planning permission for house building is in Table D.5, together with new house prices repeated for convenience from Annex A. The source is 'particulars deposited' with the Inland Revenue Valuation Office as part of the procedure for administering stamp duty. The series begins with 1963: no earlier information has yet come to hand though it may well exist.

10. Absence of any tendency for building industry pay to rise relative to the general level of pay does not, of course, provide grounds for rejecting the contention that labour costs are part of the explanation for the long run tendency of house prices to rise in real terms. A slower growth in output per man than in the economy as a whole while pay kept pace would have this result. Owing to self-employment which is not counted in totals of "employees", it is not possible to measure labour input into house building for private owners accurately enough to assess the trend of labour input per unit of output, and hence of labour costs (including employers' contributions of various kinds as well as pay) per unit of output. But it is unlikely that labour costs could explain a large proportion of the increase of 1% or so in house prices in real terms. Labour costs are considered to be about 40% of construction costs, and hence about 30-35% of total costs including land; with pay in real terms in the economy as a whole (and hence, from the argument above, in building) at about 2% a year, then if productivity in house building rose only half as fast as in the economy as a whole, labour costs would rise by about 1% a year, which would explain a 0.3 to 0.4 percent a year rise in prices. This a priori argument suggests that slower productivity growth is not capable of explaining anything like the full extent of the observed increase in house prices in real terms. An explanation, if not "the" explanation must be sought elsewhere.

11. If the cost of building materials (Table D.2) and building industry pay (Table D.3) cannot as a matter of arithmetic account for the increase in house prices in real terms, then by elimination there remain house builders' profits and land prices. Discussion of the theory has concentrated on land prices, to the neglect of building industry profits. There are two places to look for changes in profit margins: within the building cost index (Table D.1); and in the differences between the movement of building costs and of new house prices net of land prices. In comparison of index numbers, the choice of base year often causes problems. The index of house building costs is shown in Table D.1 as having fallen in real terms by some 8% between 1981 and 1982, both for private sector and public sector building work. There was a fall of only 1 percent in real terms in building material prices and no change in construction industry employees' earnings in real terms. The implication is that there was a sharp fall in house builders' profits. 1982 is thus an unsuitable year from which to start, so 1981 is taken as the starting point for a comparison of house building costs with the price of building materials and building industry pay. Table D.1 shows 1981 to have been a 'peak' year. Table D.4 shows changes (in real terms) between 1981 and 1987.

14. Since 1963 prices for housing land have had a stronger upward trend than have prices of new houses, and have been much more unstable relative to trend. The increases in land prices between 1970 and 1973, 1977 and 1980, and 1982 and 1987 were substantially sharper than the increases in house prices; and between 1974 and 1975 land prices fell heavily in nominal terms, not simply in comparison with the general price level. In interpreting shorter term swings in land prices, it is necessary to recall that land price information relates to the time the 'particulars deposited' are received by the Valuation Office, which is 2 to 3 months after the legal completion date, whereas the house prices refer to date of legal completion. As a consequence of this lag, Table D.5 conveys the impression of a levelling-out of land prices between 1973 and 1974, whereas in terms of transactions legally completed there would almost certainly have been a considerable fall. The table shows that land prices levelled off in 1966-67, and again in 1969-1970 when private house building activity slowed down, and that there was a similar check to land prices in 1980-81, again when activity fell; and that when house building activity accelerated, land prices rose substantially faster than house prices. This description suggests a ratchet effect, of land prices rising rapidly in booms, and then levelling off in nominal terms, the slump of 1973-75 alone excepted. Such a ratchet could be explained by sellers' expectations: if the prices offered were not in line with what sellers expect to get, they would decline to trade in the expectation that they would receive better offers if they waited. Only a slump as severe as in 1974 when private sector starts halved within a year and major building firms went bankrupt could break the ratchet. Even then, some of the sales of land at falling prices may well have been distress sales by builders trying to stave off bankruptcy, or by liquidators.

15. A somewhat more stringent test of land prices being determined as a residual and hence absorbing much of the increase in house values in a boom is provided in Table D.6 which compares the average new house price with the average plot price for building land, and compares the difference with building costs.

Table D.5 Land Prices and Price of New Houses

(1970 = 100)

	Land Price Per Plot	"Real" Land Price Per Plot	"Real" Price of New Houses
1963	49	66	84
1964	56	74	87
1965	63	79	91
1966	67	81	92
1967	68	80	98
1968	79	89	97
1969	98	104	100
1970	100	100	100
1971	114	105	100
1972	192	164	118
1973	298	233	146
1974	296	199	144
1975	204	110	123
1976	204	95	117
1977	216	87	108
1978	263	97	116
1979	373	122	128
1980	492	136	134
1981	512	127	128
1982	576	131	123
1983	649	142	129
1984	733	152	133
1985	925	181	135
1986	1,176	223	151
1987	1,525	277	168

Source: Land prices from Housing Statistics No.23 (November 1971) Table V: 1970 to 1980 from Housing and Construction Statistics 1970-1980 Table 3; 1981 to 1986 from Housing and Construction Statistics 1976-1986, Table 10.1 (all converted to base 1970 = 100). For general price level see Annex A, Table A.1 New house prices from Annex A, Table A.5

16. The comparison in Table D.6 is necessarily tentative, owing not only to the time lag but also to the possibility that the geographical mix of plots of land sold may not always be exactly the same as the mix of dwellings sold. The comparison of price of new houses, land prices, and building costs offers qualified support to land prices being determined as a residual between house prices and building costs. Between 1971 and 1973, in particular, between 1977 and 1980, and between 1982 and 1987, the "residue" increased distinctly less than did the price of new houses. The relationship was different, though, in 1982-87 from what it was in the two earlier periods. In 1971-73 the "residue" increased in real terms by 40% and the index of private sector building costs by 21%; and in 1977-80 the residue increased in real terms by 18% and the index of private sector building costs by 11%. But in 1982-87, the increase in the residue in real terms was 21% and the increase in the index of private sector building costs was 23%. That the "residue" of new house prices minus land prices increased no faster in real terms than did the index of building costs in 1982/87, in contrast to the two previous booms, does not prove that sellers of land secured a higher proportion of the development gain at the expense of builders' profits. In the first place there is the increased proportion of transactions financed by banks distorts a calculation like that in Table D.6 that is based on house prices calculated from building societies data. In Annex A, Table A.2, it was shown that the average price of houses in 1987 would be put at about 6% higher if calculated from 1983 onwards from bank and building society data than if calculated from building society data alone. A 6% up-lift to the average house price in 1987 in Table D.6 would bring it to about £52,700. The "residue" after deducting the average price per plot of building land would be about £37,600 in cash terms, equal to £6,840 at 1970 money values. On that basis the increase in the "residue" in real terms would be 31%, as against a 23% increase in the building cost index. That would be a very similar relationship between the increase in the "residue" and the increase in building costs in 1971-73 and 1977-80. The impression of builders having gained a smaller share of the development profit in the boom of the 1980's is probably an optical illusion caused by average prices paid for houses being bought with a building society mortgage being a less accurate measure of average prices in the entire market than they used to be.

17. If that argument is accepted, then an implication is that builders have done even better. For reasons discussed in the previous section, it is highly likely that the index with which the growth of the 'residue' is compared contains a considerable element that represents a growth of profits in the 1980's, in contrast to what happened in the two previous booms.

18. The comparison of the increase in the price of new houses and land prices

Table D.6 New House Prices, Land Prices and Building Cost.

	(1)	(2)	(3)	(4)	(5)	(6)
	Price of New Houses	Price Per Plot for Land	Residue (1) minus (2)	Residue at Constant Prices	(4) In Index Form	Index of Building Costs
1963	3,195	(380)	2,820	3,810	89	103
1964	3,433	(430)	3,010	3,940	92	103
1965	3,768	(480)	3,290	4,110	96	101
1966	4,030	(510)	3,520	4,230	99	101
1967	4,283	(510)	3,770	4,420	103	98
1968	4,499	(610)	3,890	4,360	102	100
1969	4,819	752	4,067	4,320	101	98
1970	<u>5128</u> 5,051	847	<u>4,281</u> 4,204	<u>4,280</u> 4,200	100	100
1971	5,609	929	4,680	4,280	102	100
1972	6,988	1,450	5,538	4,720	112	105
1973	9,683	1,977	7,706	6,020	143	121
1974	11,114	2,020	9,054	6,100	145	129
1975	12,013	1,590	10,423	5,650	135	124
1976	13,084	1,613	11,471	5,340	127	122
1977	14,324	1,904	12,420	4,990	119	116
1978	16,923	2,483	14,440	5,350	127	119
1979	21,114	3,037	18,077	5,910	140	124
1980	26,245	4,466	21,779	6,030	144	129
1981	28,119	4,838	23,281	5,760	137	131
1982	28,205	5,338	22,867	5,210	124	120
1983	30,817	5,746	25,071	5,470	130	126
1984	33,080	6,061	27,019	5,600	134	134
1985	36,103	8,315	27,788	5,440	130	138
1986	43,562	11,437	32,125	6,080	145	142
1987	49,673	15,100	34,570	6,290	150	147

Note: Prices per plot of land are simple averages, whereas the index in Table D.5 is of weighted averages standardised for plot size

Source: As Table D.5 with building cost index from Table D.1 Average price per plot begins in 1969, projected back to earlier years by reference to the index in Table D.5

Land Prices: The Regional Picture

20. For reasons of the information available, most of the analysis has to start with 1969 and 1970, with events in 1963-1970 treated somewhat cursorily. Index numbers for years before 1969 were published only for groups of regions. These indexes were used to calculate the 1963 figures in Table D.8. The regional figures in 1970 were weighted together in proportion to the number of plots from which the average prices were calculated.

Table D.8 Average Prices of Building Land By Region 1963 and 1970

	Estimated Average Prices 1963	Average Prices 1970	Indexes 1963 (England and Wales = 100)	Indexes 1970 (England and Wales = 100)
North	240	497	57	59
Midlands and Wales	280	727	67	86
South of England excl. Greater London	510	1,041	121	123
Greater London	1,360	2,125	324	251
England and Wales	420	847	100	100

Note: England and Wales figures for 1963 differs from that in Table C.5, which was derived by indexing to 1969 instead of to 1970

Source: Land prices in 1970 from Housing and Construction Statistics 1969-1979 Table 100; indexes for 1963 from Housing Statistics No.21 (1971), Table XVI.

21. From Table D.8 the most that can be said owing to the high degree of aggregation of regions is that land prices in the Midlands plus Wales rose distinctly faster than in the rest of the country, and in London more slowly.

22. From 1970 onwards a more detailed analysis can be made, as regional indexes of price per plot are available on the same basis as the national index shown in Table D.5. The regional indexes are shown in Table D.9 for selected years, in real terms.

is shown in a different way in Table D.7. New house prices, land prices, and the residue are shown in terms of 1970 value of money to exclude the effect of general inflation. Two sets of figures are shown for 1982-87 the first taken from Table D.6 as it stands and (shown in the Table as 1982-87 (A)) the second with the house price raised 6% to allow for the distorting effect of transactions financed by banks, shown as 1982-87 (B).

Table D.7 Increases in House Prices and Land Prices In The Booms

	(£ at 1970 value of money)				
	(1)	(2)	(3)	(4)	(5)
	Increase in House Prices	Increase in Land Prices	Residue	(3) as Percent of (1)	(2) as Percent of (1)
1970-73	2,515	700	1,815	72	28
1977-80	1,520	475	1,045	69	31
1982-87(A)	2,600	1,530	1,070	41	59
1982-87(B)	3,150	1,530	1,620	51	49

19. The difference between 1970-73 and 1977-80 is probably within the margins of uncertainty in the calculation, but that is hardly likely to be so of the difference between those two booms and 1982-87. Considerably more of the rise in house prices in the 1980's appears to have fed through into land values than in the previous booms. A possible reason for this is the boom of the 1980's being more concentrated in the South East, where land supply is more difficult than in the rest of the country. This argument is fully consistent with the conclusion advanced about the share of the development gain, because much more of the "residue" has accrued to builders as profit instead of to building material producers and to building industry workers.

23. At regional level the movement of land prices is very erratic from year to year, so caution is in order in making comparisons. It is of interest, nonetheless, to see whether the geographical pattern of increases in land prices in the boom of the 1980's was similar to that in the earlier booms. To do this the three regions of the north of England, the two Midland regions, and the South are combined together, weighted by the number of plots from which the index values were calculated.

Table D.10 Comparison of Increases in Land Prices in Real Terms

	North	Midlands	South	England and Wales
1970-73	+120	+119	+175	+137
1977-80	+40	+40	+61	+56
1981-87	+37	+135	+135	+118

Source: Calculated on Table D. 9, weighted by number of plots in data used to calculate the index.

24. The increase in house prices in real terms was rather less in 1981-87 than in 1970-73 and spread over a longer period. The contrast between the north and the south was much greater in percentage terms in 1981-87 than in 1970-73, and started from a higher base. Even if Greater London is excluded from the comparison as a very special case the average price per plot in the South of England (i.e. South East excluding London, East Anglia, and South West in 1987 was £18,200, over three times the figure for the three regions of the north of England (£6,000). In 1970 the corresponding figures were £1,050 in the South and £500 in the North. In land prices, as in house prices, the difference has widened.

25. The hypothesis that land values are determined as a residual would predict that the average price of new houses less the average price per plot of land would vary much less than the price of new houses considered by itself. The cost of building materials is unlikely to vary by much between regions; and average earnings of adult men employees in the construction in 1987 were only 10% higher in the South east (including London) than in the North. Table D.11 shows "residues" calculated regionally for 1987, using the same concepts as in Table D.6. Two versions are shown, one with average prices of new houses as taken from the Building Society Mortgage Survey, the other with those averages raised by 6% to allow for understatement due to banks financing purchase of dwellings with higher average prices than those financed by building society loans. Applying the same percentage in each region is rather crude, and may over-state the "residue" in the Midlands and North and under-state it in the South.

Table D.9

Regional Index Numbers of Price per Plot in Real Terms

	<u>1970</u>	<u>1973</u>	<u>1977</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
Northern	100	267	190	205	246	176	152	129	171	266	282
Yorkshire and Humberside	100	200	107	156	134	148	188	136	183	201	195
North West	100	225	93	133	139	123	131	126	139	119	212
East Midlands	100	245	98	150	132	144	141	141	146	197	264
West Midlands	100	182	65	99	85	69	87	117	124	126	199
East Anglia	100	355	111	183	144	119	104	116	211	189	286
Greater London	100	242	75	117	86	117	108	135	146	220	328
Rest of South East	100	229	77	126	121	126	125	157	193	255	286
South East	100	280	92	170	161	164	174	220	230	261	349
England and Wales	100	233	87	136	127	131	142	152	181	223	277

Source: Housing and Construction Statistics 1970-1980 Table 110; 1976-1986, Table 10.1; and DoE

Table D.12 Comparison of House and Land Prices in 1970-73 and 1982-87

	South East Excl. London	North of England
<u>A. 1970-73</u>		
1970 - Price of new houses	6,327	4,265
- Price per plot	1,346	497
- Residue	4,981	3,768
1973 - Price of new houses	13,696	7,959
- Price per plot	4,197	1,381
- Residue	9,499	6,578
<u>B. 1982-87</u>		
1982 - Price of new houses	33,184	26,361
- Price per plot	7,707	3,091
- Residue	25,477	23,270
1987 - Price of new houses	69,700	43,100
- Price per plot	23,300	6,000
- Residue	46,400	37,100
<u>C. Comparisons</u>		
<u>1970-73</u>		
Increase in house prices in real terms	4,373	1,953
Increase in residue	2,440	1,371
Increase in residue as percent of house price increase	56	70
<u>1982-86</u>		
Increase in house prices in real terms	5,100	1,800
Increase in residue	2,600	1,400
Increase in residue as percent of house price increase	51	78

Note: 'real terms' means 1970 value of money.

29. Table D.12 shows that in both booms the 'residue' increased substantially faster in the South East than in the north of England, which again argues against all of the increase in the selling price of new houses being absorbed in higher land prices.

Table D.11 "Residues" Between House Prices and Land Prices in 1987:
Regional Analysis

	(1) House Price from Survey	(2) House Prices Adjus- ted	(3) Land Price	(4) Residing BSM	(5) Residue Adjusted	(6) (4)As Index	(7) (5) As Index
Northern	41,216	43,700	8,100	33,100	35,600	92	91
Yorkshire and Humberside	39,264	41,600	4,700	34,550	96	95	
North West	41,754	44,300	7,200	34,550	37,100	96	95
East Midlands	42,619	45,200	7,800	34,800	37,400	97	96
West Midlands	48,654	51,600	12,800	35,850	38,800	100	99
East Anglia	50,110	53,100	8,700	41,400	44,400	115	114
Greater London	60,800	64,400	32,100	28,700	32,300	80	83
Rest of South East	65,739	69,700	23,300	42,450	46,400	118	119
South West	52,293	55,400	14,000	38,300	41,400	107	106
England and Wales	51,054	54,100	15,100	35,950	39,000	100	100

Source: Calculated from Building Society Mortgage Survey and DoE data in land prices

26. Apart from London, where the figure for the price of new dwellings appears to be distorted by the mix of dwellings sold and not properly comparable with the land price, the geographical pattern of house prices, land prices, and residences is coherent. The variation in residues is far less than in new house prices, which lends support to the hypothesis of land prices being determined as a residual. But it is only qualified support, because the residues are highest in regions where house prices are highest, and the differences are greater than any difference in costs of materials and labour.

27. To conclude this account of the regional movement of prices of building land and new houses, it is useful to compare the booms of the early 1970's and the 1980's. This has to be done by comparing individual years, and so is more at risk to chance variation. The South east (excluding London) is compared with the three regions of the North of England weighted together. This procedure is preferred to comparisons with the average for England and Wales or England because the South East excluding London is so substantial a share of the total. London is excluded because Table D.11 suggests that the figure for average price of new dwellings in London is not comparable with the land price. The house prices for 1987 included the 6% uplift for exclusion of transactions financed by banks.

Costain profits falter as Trafalgar House stake grows

By Peter Cooper

COSTAIN'S unwanted shareholder, Trafalgar House, was back in the market last week buying enough stock to take its holding to 6.9%. The £1.7bn-a-year conglomerate's bid intentions have become a teaser, mystifying observers.

In the same week Costain declared a lacklustre 3% improvement in pre-tax profits for 1987 to £66.2m. Turnover rose from £866m to £970m.

Chief executive Peter Costain says he has had no contact with Trafalgar House and has "no idea" what its £40m investment in his company means. "It is very unsettling for the staff," he adds.

The City is also puzzled. Tad Phillips of brokers Smith New Court points out that Trafalgar has a record of acquiring stakes and then selling them on – it bought into French Kier and later sold its stake to Beazer.

There is a hesitant consensus in the City which believes a bid is unlikely. Trafalgar House does not have the cash required and its shares are less highly rated than Costain's, which would make a paper deal difficult.

Phillips says that apart from a full bid or stake sale, there is a third possible motive for Trafalgar's interest. "Earnings at Costain are presently depressed, and capital appreciation on an investment could be good in two to four years."

This would support Trafalgar's claim that its stake is an investment.

But another school of thought says that Trafalgar House may try to emulate Beazer's "innovative" takeover of Koppers, and try a full bid through some novel leverage technique. However, nothing more than analysts' imaginations support this view.

Meanwhile, Costain seems to have impressed the City with its results. Superficially, reporting a 3% increase in profits in a week when Taylor Woodrow could trumpet 35% was hardly good news.

But analysts had expected worse. They also feel that Costain brokers took its losses up front. Hence better things might be expected next time.

The body blow to profits had come in engineering and contracting. Despite turnover up £74m to £575.6m, profits were down a third to £14.3m.

"On the UK side, contracting suffered from losses on the



Peter Costain: Trafalgar stake "very unsettling".

Royal Docks sewerage scheme and the settlement of an old claim on a Glasgow hospital finished in 1969," says Peter Costain.

"Abroad there was a continued downturn across the board, with particular problems in the Middle East – traditionally one of our best markets."

For the future, Costain is apprehensive about overseas business, but confident about the UK. The firm is investigating the application of private finance for various infrastructure projects.

Following in the wake of Taylor Woodrow and Balfour Beatty, Costain has also declared its intention to build private power stations with an as yet unnamed US partner.

In housing – where profits rose from £9.8m to £12.5m in

Profits slow to rise

	Turnover	Profits
1983	£545.9m	£46.4m
1984	£649.4m	£51.2m
1985	£805m	£55.6m
1986	£739.6m	£55.6m
1987	£970m	£64.3m

1987 on turnover up 19% to £148.5m – Costain is set to cut back units built from 2200 to 2050 this year. The aim is to boost margins from 11% to 13% and reduce land buying.

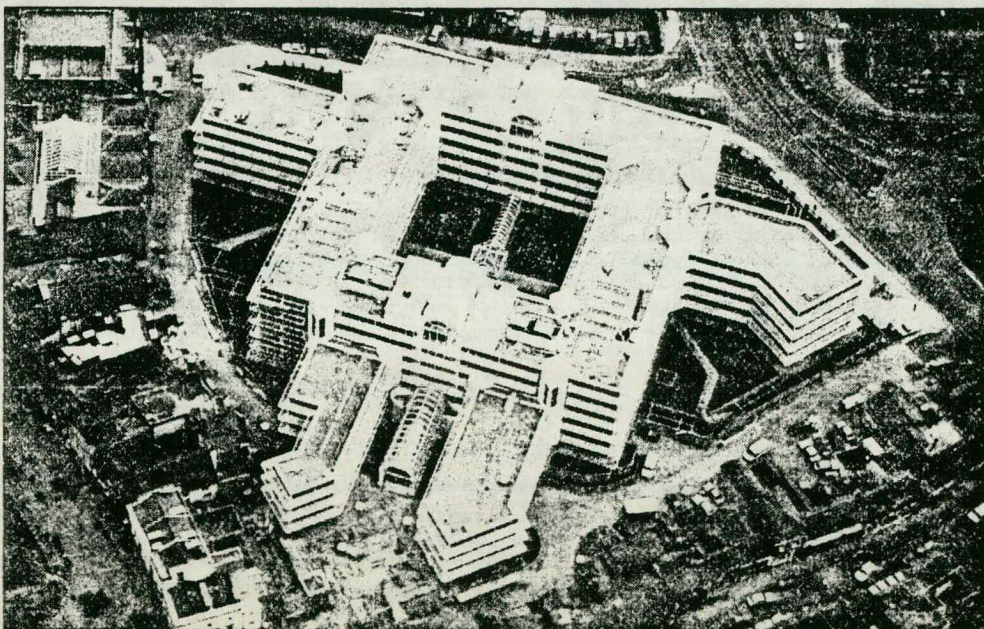
The average house selling price rose from £47 500 to £58 000 in 1987, with completion numbers virtually the same as the year before. Start-up costs of £1.5m for a housing operation in California were fully paid up, and work began on Costain's Spanish resort.

On a personal level, Peter Costain has never been particularly bullish on housebuilding. He was talking about the dangers of overheating in Docklands long before Black Monday.

The company has already pulled out of Docklands and high land costs clearly concern Costain. Its two-year land bank leaves it more exposed than most in the housing market should house price inflation fall off.

But Peter Costain was especially pleased with the property division. Here, a near standstill in profits at £18.8m masked the fact that Australia made no contribution this time.

Nonetheless, mining emerges as by far the largest contributor to Costain profits. Gold mining boosted profits to £33.2m from £26.2m, although coal prices remained low.

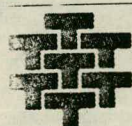


Sun Alliance Insurance Group's headquarters in Uxbridge, just completed by Costain.

"PRESS CUTTING INTELLIGENCE" ON
HOUSE-BUILDERS PROFIT MARGINS

BUILDING 29 APRIL 1988

Tarmac hits all-time record for housebuilding profits



TARMAC this week returned the largest profit ever for a UK housebuilder. Its £102.8m contribution was well ahead of Barratt's all time high.

And the Tarmac Group announced the biggest rise in profits of all the construction majors reporting this spring. Pre-tax profits improved 56% to £265.4m for 1987. Turnover rose 27% to £2.2bn.

Over two-thirds of the growth came from organic business development. But the year also included for the first time a contribution from USA

aggregates division Tarmac-LoneStar, acquired in December 1986 for \$225m.

Group chairman Sir Eric Pountain said: "Our great underlying strength is our ability to extract organic growth from all parts of the group."

In housing, Tarmac boosted output by 1000 units to 11 236 at an average price of £48 500 compared with £35 000. Margins were up to 18.4% from 14.5%, which meant a profit of £8924 per unit in 1987 against £5075 the year before.

The construction division made a 52% increase in operating profits.

Tarmac: 1987 results

	Turnover		Profit	
	1987 £m	1986 £m	1987 £m	1986 £m
Quarry products	418.3	382.7	72.1	63.1
Housing	558.0	424.8	102.8	61.6
Construction	532.8	412.0	19.2	12.6
Building materials	102.2	82.2	16.3	10.4
Industrial products	295.9	254.2	25.4	21.0
Properties	35.7	21.2	6.6	4.4
Tarmac America	258.0	157.9	46.9	22.0
Central costs	-	-	(4.0)	(3.7)
Total	2200.9	1735.0	285.3	191.4
Interest payable			19.9	20.9
Group profit before taxation			265.4	

Prouting listing to raise £20m

By Alexandra Jackson

TIMES 17 MAY 1988

Prouting, the Middlesex housebuilder seeking a stock market listing this month, is expected to raise about £20 million of new money and will be valued at about £100 million.

None of the existing shareholders will be selling shares, so all the money raised will be for the benefit of the company. Group borrowings of £18.2 million will be eliminated, leaving Prouting with a modest net amount of cash.

In a novel share structure, designed to accommodate the Prouting family's inheritance tax circumstances after

changes to the 1987 Finance Act, all the existing shares, to be known as "A" ordinary shares, will remain unlisted until October 1994. These and the new ordinary shares will, however, have identical rights in every other respect.

The price of the shares in the offering will be released on Thursday with application lists closing on Wednesday of next week. Broker to the issue is SCBI Savory Milln, with Lazard Brothers as the merchant bank adviser.

Prouting's pretax profits have risen sharply, from £2.8 million in 1985 to £13 million

in the year to end-February. The most dramatic progress, however, has been seen in the past two years.

This is partly attributable to the strength of the housing market, but also coincides with the appointment of Mr Terry Royden as managing director. Mr Royden has considerable experience in the industry, having been group managing director of Comben Homes and a past president of the Housebuilders' Federation.

Prouting concentrates on profits per unit rather than volume. Over the past four years it has increased its unit

sales only from 557 to 728. A long land bank, a quarter of which was acquired before 1980, is an additional strength.

The group operates from four regions in the South of England, but is best represented in the South-west.

City analysts expect the group to increase profits to at least £20 million this year. On this basis, the historic valuation will be just under 12 times earnings with a prospective p/e of under nine times.

Mr Royden said he was confident of continued strength in the housing market.

APPENDIX TABLE B NEW BUILDING OF DWELLINGS FOR PRIVATE OWNERS 1946-1987

(thousands)

Starts		Completions		Starts		Completions	
1946		27		1976	155		152
1947		32		1977	135		141
1948		22		1978	157		149
1949		22		1979	144		140
1950		26		1980	99		128
1951	27	23		1981	117		115
1952	52	34		1982	140		125
1953	83	63		1983	170		146
1954	107	91		1984	155		157
1955	128	113		1985	163		152
1956	120	124		1986	175		163
1957	126	126		1987	191		171
1958	137	128					
1959	169	151					
1960	183	169					
1961	189	178					
1962	186	175					
1963	199	175					
1964	247	218					
1965	211	214					
1966	193	205					
1967	234 (a)	200					
1968	200	222					
1969	167	182					
1970	165	170					
1971	207	192					
1972	228	196					
1973	216	187					
1974	106	141					
1975	149	151					

Notes: (a) Inflated by about 20,000 notional starts in the first quarter of the year to avoid liability to the Betterment Levy

Table E.1 Exchange Rates For Comparison Between Countries

	(£ sterling = 1.00)				
	France (francs)	Germany (DM)	Netherlands (guilders)	Sweden (Kronor)	USA (dollars)
<u>1981</u>					
Purchasing power parity	11.40	4.85	4.96	13.11	1.87
Market exchange rate	10.90	4.54	5.02	10.16	2.01
<u>1985</u>					
Purchasing power parity	12.80	4.37	4.48	14.41	1.76
Market exchange rate	11.54	3.77	4.26	11.04	1.28

Source: OECS, National Accounts 1970-1985 Vol I, Purchasing Power Parities Supplement

4. Table E.1 shows that in 1985 market exchange rates under-stated the purchasing power of sterling relative to all five other countries' currencies; and that even in 1981 when sterling exchange rates were higher (by about 20% compared with 1985) this was so for three of the five countries. For present purposes what has to be compared is the relationship of house and land prices to other prices and real incomes in Britain and the other countries, for which the purchasing power parities are the relevant rates. The market exchange rates would govern what a UK resident would have to pay in sterling to buy a house in one of the five countries; but that is not in point here. Table E.2 therefore uses purchasing power parity rates.

HOUSE PRICES AND LAND PRICES IN OTHER COUNTRIES

This Annex brings together immediately available information about land prices and house prices in the USA, France, Germany, the Netherlands, and Sweden. The purpose is to enable comparisons to be made with Britain in order to show how far levels of house prices and land prices in Britain are broadly in line with those in other countries, and how the movement of house and land prices through time compares with what has happened in Britain. The same information is not available in all countries. The information presented is that which was ready to hand; an attempt was not made to use less accessible sources to study the history of house prices in these countries.

2. A comparison is first made of the levels of house prices in the other countries with the level in Britain. The information for the five countries is thus summarised.

I. Levels of House Prices in the Other Countries
Compared with Britain

3. A comparison of levels of new house prices is shown in Table E.2 for Britain and four of the five countries; for Sweden a figure for the price of new houses is not available and an overall average must therefore be used instead. International comparison of prices require conversions from other countries' currencies to sterling equivalents, so it is convenient to show first the exchange rates used for the purpose. Market exchange rates frequently do not reflect the relationship between the purchasing power of currencies over goods and services internally, since they are affected by capital flows and by expectations in foreign exchange markets about future changes in exchange rates. The exchange rates used here are those based on the comparative study of price levels in 1985 in the European Community countries by the Statistical office of the European Community (EUROSTAT), extended to other countries by the Organisation for Economic Co-Operation and Development (OECD). Table E.1 shows calculated purchasing power parity exchange rates for 1981 and 1985 for the countries included in the comparisons. Market exchange rates are given as well, to show the difference made by using purchasing power parities.

Table E.3 Average Price of New Houses in Comparison with GDP per Head

	(1)	(2)	(3)
	House Price (£ sterling equivalent)	GDP per head (£, sterling equivalent)	(1) as multiple of (2)
United Kingdom	28,700	4,500	6.4
United States	44,000	7,000	6.3
France	38,000	5,000	7.6
Germany	53,000	5,200	10.2
Netherlands	32,000	5,000	6.4
Sweden	25,000	5,300	4.7

Source for GDP per head: OECD National Accounts Statistics 1970-1985 Vol. I,
see citation of source for Table E.1

6. How much of the difference in house prices is due to quality differences and how much to building costs is a highly complex subject that cannot be gone into here. It is very likely, though, that the German system of building to individual contract and specification, with speculative building by developers very rare in the market for owner-occupied housing (in contrast to building flats with a view to selling them to investors), is more expensive than the practice in Britain and the USA of builder/developers buying land, putting up houses, and offering them for sale. The figure for Sweden cannot be regarded as fully comparable with the other five countries.

II. House Prices in the USA

7. In the USA information about the price of new houses is collected by the Department of Commerce (Bureau of the Census) and used to construct a price index with a standard geographical mix of dwellings sold, and standardised with respect to physical characteristics (now 10, formerly 8). It is in concept a "mix-adjusted" index in British terms. The price information is collected directly from a sample of developers with houses for sale, and hence does not depend on financial institutions that finance house purchase. Most new house building in the USA is carried out by developers who acquire sites, do the building (or sub-contract it) and offer the finished product for sale.

8. Information about the price of second-hand houses, in contrast, is produced by the real estate brokers' organisation, the National Association of Realtors. Real estate broking in the USA is much more highly organised than is estate agency

Table. E.2 Average Prices of Houses in Britain and Five Other Countries in 1981

	National Currency	Sterling Equivalent (£)
United Kingdom (a) (pounds)	28.700	28,700
United States (b) (dollars)	83,000	44,000
France (c) (francs)	430,000	38,000
Germany (d) (DM)	255,000	53,000
Netherlands (e) (guilders)	157,000	32,000
Sweden (f) (kronor)	331,000	25,000

- Sources:
- (a) Average price of new houses sold with building society mortgages; flats taken out of the average price of all new dwellings by reference to information in Tables 10.10 and 10.12 of Housing and Construction Statistics 1973-1983
 - (b) Department of Commerce, Construction reports, Price of New one Family Houses Sold, 1st Quarter 1984
 - (c) Figure refers to first half of 1981, taken from Ministère de l'Urbanisme et du Logement Statistiques et Etudes Générales No. 82 (1982), page 16
 - (d) Average cost, excluding land, for detached and semi-detached houses given building control approval in 1981 was 201,000 DM (Bundesbaublatt December 1982, page 835); the cost of the site was derived from an average plot size of 517 sq metres per dwelling and an average price of 105 DM per sq metre for building land in areas consisting solely of housing (Statistisches Jahrbuch der Bundesrepublik Deutschland, 1983, Tables 10.5 and 22.10). The calculated plot price was 54,000 DM
 - (e) Average price of all new one-family dwellings. Maandstatistiek Bouwnijverheid May and December 1983, Table 12.9
 - (f) Statistik Arsbok 1984, Table 242

5. In Table E.3 the house prices shown in Table E.2 are compared with gross domestic product per head. This is perhaps not ideal for the purpose, but the immediately available alternative, net income of households and unincorporated businesses, is made misleading by the differing sizes of the unincorporated business sector from country to country.

Table E.4 (Continued)

1980	287	258.5	121.8
1981	312	282.7	120.7
1982	315	292.4	117.6
1983	338	301.2	117.4
1984	367	312.3	116.7
1985	379	321.6	116.1
1986	421	332.2	117.6

Source: US Department of Commerce, Bureau of Census, 'Price Index of New One-Family Houses Sold First Quarter 1987

10. A comparison is shown in Table E.5 between the price of new and second hand houses. From the information available, the comparison must be in terms of medians, not means.

Table E.5 Median Price of New and Second-Hand One Family Houses

(in dollars)

	New	Second-Hand
1970	23,400	23,000
1971	25,200	24,800
1972	27,600	26,700
1973	32,500	28,900
1974	35,900	32,000
1975	39,300	35,300
1976	44,200	38,100
1977	48,800	42,900
1978	55,700	48,700
1979	62,900	55,700
1980	64,600	62,200
1981	68,900	66,400
1982	69,300	67,800
1983	75,300	70,300
1984	80,000	72,300
1985	83,400	75,000
1986	92,200	80,300
1987	104,400	84,900

Source: Statistical Abstract of the United States 1986, Table 1302 and 1304; Federal Reserve Bulletin April 1988 page A49

in Britain, and much more expensive, with a commission of 6% to 7% being usually charged. "Realtors" in the USA handle a larger proportion of total house sales than do estate agents in Britain. They are able to have knowledge of the prices of all houses sold in the areas in which they do business through registration of title to land being a function of local government (usually the county) with the registers open to public inspection.

9. Table E.4 shows the index of the price of new houses described in paragraph 5, both as published and deflated by the consumer price index. The consumer price index is customarily used in the USA to measure changes in the purchasing power of the dollar. The index of the prices of new houses as published is on base 1982=100, and the consumer price index on base 1967 = 100. For ease of comparison with the British figures in Annex A and Annex C the US indexes are re-calculated to base 1970 = 100. Simple average prices (i.e. not adjusted for mix or physical characteristics) are shown in index number form for comparison.

Table E.4 Index of Price of New Houses in USA

	Simple Average Price of New Houses	Price Index For New Houses	Price Index For New Houses De- flated by Con- sumer Price Index
1963	73	78.9	100.0
1964	77	78.9	98.7
1965	81	80.7	99.3
1966	88	83.9	100.4
1967	92	86.0	100.0
1968	100	90.4	100.9
1969	105	96.8	102.5
1970	100	100.0	100.0
1971	106	106.1	101.7
1972	115	113.5	105.4
1973	133	123.1	110.5
1974	146	134.8	106.1
1975	160	148.8	107.4
1976	180	160.2	109.3
1977	204	176.4	114.3
1978	235	203.2	121.0
1979	270	232.5	124.4

14. Given the size and diversity of the USA, it would be expected that there would be wide differences in house prices between different local housing markets. If it were true that there is no national housing market but only an aggregation of local markets, the USA would be expected to show very diverse changes in house prices as well as levels. This is not, though, what is seen: the USA is one economy and one credit market, and all regions experience the swings in activity due to tightening credit and higher interest rates, and then relaxation. Regional variations in the rate of rise of house prices are however, seen. The constant standards index of the price of new houses showed an increase of 94% between 1976 and 1981 in the West compared with 64%, 67%, and 72% respectively in the North East, Midwest, and South. More remarkable still, between 1982 and 1986 the same index shows an increase of 57% in the North East compared with 8-9% for the other three regions (see Table E.4 for citation of source).

15. Dividing so large a country into four regions cannot show much about geographical diversity of house prices. For more local information, reference must be made to the median price of second hand houses published by the National Association of Realtors. The figures refer to detached houses, the standard suburban house type in the USA, in urban areas (generally standard metropolitan statistical areas). Information is not available about prices in 1985 in all areas; where only information about 1984 is available, the figures are put in brackets.

11. The price of new houses of constant standard ran approximately level relative to the general price level in the 1960's, but in the 1970's had a marked but uneven upward trend. The slump in the housing market that began in 1980 due to restrictive monetary policies brought house prices down by about 7% relative to the general price level, and this reduction was not reversed when house building recovered. Comparison of the movement of simple average prices of new houses with the constant standards index (Table E.4 shows sharp short run variation in the mix of dwellings sold, but with a long term upward trend in "quality" (as measured by the difference between the rise in simple average prices and the constant standards index). Between 1970 and 1986 this measure shows an increase of 27% in average quality of new houses; between 1969 and 1985, however, the same calculation would show only a 12% rise in quality. That there was a rise in the average quality of new houses is reasonably firmly established but its extent is hard to measure reliably.

12. The average (median) price of second-hand houses has risen more slowly than the price of new houses. The rate of rise in the price of second hand houses was however only modestly greater than ^{the rise in} the constant standards price index for new houses, which suggests that the rise in average quality of new houses has not been matched by a corresponding up-grading of the existing housing stock. In this context it is relevant to note that whereas in Britain in recent years gross fixed investment in the existing privately owned housing stock is estimated (by the Central Statistical Office for the national accounts) to have been approximately equal to investment in new privately owned dwellings, in the USA investment in new dwellings is between two-and-a-half and three times as great as investment in the existing housing stock.

13. The movement of house prices may also be related to the movement of real incomes. Table E.4 shows an increase in 'real' prices of new houses of about 54% between 1970 and 1986 including the effect of the rise in standards, and 18% excluding this effect. The price of second hand houses rose by about 30% in real terms over the same period. Real personal disposable income per head rose by about 40% between 1970 and 1986; so house prices, excluding quality changes as far as possible, can be seen to have risen distinctly less than in line with real incomes, taking one year with another, even though they rose distinctly faster than the general price level.

16. As might be expected, Table E.6 shows a great deal of diversity, both in levels and rates of change. Average prices in Boston and in California were twice as high as in the mid-west industrial cities like Cleveland and Detroit. In the period the table covers, the boom in house prices in California had halted, but had left its mark in the very high house prices there. The boom in house prices in the North East of the US is shown in the price increases for Boston and New York. Since the price increase is for one family homes it refers less to New York city itself, most of which consists of flats, than to the suburban area including north-east New Jersey and Western Connecticut. House prices in the Mid-West industrial areas are much lower. Worthy of note is the variation the table shows between the movement of house prices that are not far distant: contrast the negligible increase shown for Houston with the sizeable increases shown for the other two Texan areas in the table (Dallas and San Antonio). Although incomes vary between different parts of the USA, for instance average personal income in Massachusetts (the state in which Boston is located) is about 15% above the US average and in Ohio (Cincinnati and Cleveland) about 3% lower, the difference in house prices are far greater than the difference in income.

17. Some evidence of the movement of prices of building land in the USA is provided by the estimates of the site values of dwellings where the mortgage is insured by the Federal Housing Administration (FHA). The FHA's procedures require that a valuation of the site should be among the particulars provided with an application for FHA to insure the mortgage. Table E.7 shows the average site value in comparison with the property price.

Table E.7 Site Values For Second Hand One-Family Houses Sold With FHA Mortgages

	(amounts in \$)			
	House Price	Value of Site	Value of Site As Percent of House Price	Site Value At Constant (1980) Value of Money
1975	26,900	5,500	20	8,400
1979	39,400	8,100	21	9,200
1980	45,000	10,100	22	10,100
1981	47,700	11,400	24	10,300
1982	51,100	11,700	23	10,000
1983	56,300	12,800	23	10,600
1984	54,700	12,200	22	9,700

Source: Statistical Abstract of the United States 1986, Table 1328

Table E.6 Median Sale Prices Of Existing One-Family Homes in Selected Areas of USA

	1985 Median Price In Dollars	US Median = 100	Percent Change 1982-85
<u>California</u>			
Los Angeles	(115,300)	(159)	(+2)
San Francisco - Oakland	(129,900)	(179)	(+4)
Santa Ana - Anaheim	136,200	180	+2
<u>Eastern Coast Cities</u>			
Boston	134,200	178	+67
New York	134,900	177	+90
Philadelphia	70,000	94	+13
Washington	97,100	129	+11
<u>Up-State New York</u>			
Albany-Schenectady-Troy	60,300	80	+28
Rochester	64,200	85	+30
<u>Mid West</u>			
Chicago	81,100	107	+11
Cincinnati	60,200	80	n.a
Cleveland	64,400	85	n.a
Detroit	51,700	68	+9
Indianapolis	55,000	73	+9
Milwaukee	67,500	84	+3
Minneapolis	75,200	100	+4
St Louis	65,700	87	+15
<u>South and Mountain States</u>			
Atlanta	(66,200)	(91)	(+20)
Dallas	87,700	116	+19
Denver	84,300	112	+11
Houston	78,600	104	+2
Salt Lake City	66,700	88	+3
San Antonio	67,700	90	+16

Note: Figures in brackets refer to 1984 or the change between 1982 and 1984

Source: Statistical Abstract of the United States 1987, Table 1298

Table E.8 Representative House Prices for Main Cities 1984

(prices in thousand DM)

	Medium Standard Detached	Basic Terrace House	Medium Terrace House	Average of Three Types as Percent of Base
<u>North</u>				
Hamburg	340	200	340	101
Cologne	300	200	230	81
Essen	390	230	310	103
Düsseldorf	425	245	350	113
Dortmund	350	200	280	92
Bremen	250	170	200	69
Hannover	220	170	240	70
Duisburg	390	200	240	92
Bochum	420	300	350	119
Gelsenkirchen	425	300	350	119
Hamm	265	200	240	78
Bonn	315	200	300	91
Kiel	285	185	225	77
Hildesheim	300	170	250	80
Münster	320	260	305	98
Lübeck	300	180	210	77
Bremerhaven	185	120	170	53
Wuppertal	300	170	220	77
Flensburg	225	150	175	61
Bielefeld	325	200	250	86
Aachen	320	200	280	89
Brunswick	450	220	230	104
Mönchen Gladbach	230	165	190	65
Krefeld	230	150	210	70
Celle	240	110	150	56
Saarbrücken	320	180	285	87
Nienburg/Weser	180	130	170	53
Oldenburg	230	140	160	59
Bad Pyrmont	300	160	300	84
Neumunster	230	120	150	56
Bad Harzburg	300	180	220	78
Gifhorn	250	160	220	70
Hagen	400	215	290	101

18. During the boom of the later 1970's site value rose considerably in real terms, by some 20-25%. The halt to the boom halted rise in 'real' land prices, but did not appear to cause house prices to cease to rise in nominal terms. The fall in average site values between 1983 and 1984 appear to be a 'mix' effect.

III Germany

19. In Germany there are no national data on house prices, as distinct from building costs and land prices. The only information immediately available is the "price table" (preis-spiegel) prepared annually by the German real estate brokers' organisation, the Verband (formerly Ring) deutscher Makler. In 1984 and earlier this table consisted of a price (or range) for each of the six representative house categories in each of the towns included. Three of the house categories are free-standing one-family dwellings: 'basic', with a floor area of about 100 square metres; "medium", with a floor area of about 125 sq metres; and "high standard" with an area of about 150sq metres; the other three terrace houses of basic, medium, and high standard. The 1986 table has the same types of house, but two quality classes only, hence there are four categories altogether. The prices are frequently quoted in the form of wide ranges, with the result that it is not possible to use them to measure changes over time at national level. In 1984 the table included 53 cities and towns, and there is no satisfactory information with which to weight them. The number of owner-occupied dwellings in each town will not be known until the results of the 1987 Census are available.

20. The price-table is probably more useful as evidence about inter-regional diversity. In Germany there is considerable concern about the contrast in prosperity between North and South, and there are frequent references to the "gulf between North and South" (Nord - Sud Gefälle) that arises from industries like coal, steel, and ship-building being concentrated in the north whereas the electrical engineering and electronics are concentrated in the South. Table E.8 therefore groups the towns into North and South. "North" comprises the provinces of North Rhine - Westphalia, Lower Saxony, Schleswig-Holstein, Bremen, Hamburg, and Saar; and "South" Hesse, Rhine-Palatinate, Baden Württemberg, and Bavaria. Saar is geographically south but economically 'north' as its main industries are coal and steel. The quoted prices, or mid-point of the range, are shown for medium standard detached houses and "basic" and "medium" terrace houses. Calculations were made for the other three types, but the geographic pattern as calculated from them was not sufficiently different to be worth showing separately. As there is no national figure to provide the index base, the figures for the twelve largest cities were averaged to serve as base.

more extreme contrasts. At one extreme are economically very depressed areas like Bremen and Bremerhaven; at the other extreme Munich and Stuttgart where demand for labour is strong and housing pressure high.

22. In contrast to house prices, land prices in Germany are much better documented. Table E.9 shows prices per square metre of land ready for building (baureifes land). The average prices shown there are compared with the general price level, as given by the gross domestic product deflator. The number of new dwellings for which building plans were approved is also shown as a more timely indication of the state of the housing market than completions.

Table. E.9 Average Prices of Building Land

	Average Price (DM/sq.metre)	Index (1986 = 100)	Index Relative to General Price Level (1980 = 100)	House Building Approvals ('000)
1970	30.74	37.5	63	609
1971	33.56	40.9	64	705
1972	40.23	49.1	72	769
1973	40.77	49.7	69	659
1974	40.34	49.2	64	418
1975	44.08	53.7	66	369
1976	48.80	59.5	70	380
1977	53.98	65.8	75	352
1978	59.91	73.1	80	426
1979	69.17	84.3	88	384
1980	82.01	100.0	100	381
1981	96.07	117.1	113	356
1982	111.51	136.0	125	335
1983	119.91	146.2	130	420
1984	121.95	148.7	130	336
1985	116.09	141.6	121	252
1986	121.07	147.6	123	219

Source: Average price for building land from Statistisches Bundesamt, tabulated in Wohnungswirtschaftliches Jahrbuch 1987/88 page 176, GDP deflator calculated from Volkswirtschaftliche Gesamtrechnungen, Konten und Tabellen 1986, Table 2.1. Approvals from Bundesbaublatt December 1981, and Wohnungswirtschaftliches Jahrbuch 1987/88, page 173

Table D.7 (Continued)

Cuxhaven	220	150	180	61
8 large cities	330	200	270	89
26 other cities and towns	290	180	230	78

South

Munich	610	350	395	151
Frankfurt	410	320	360	121
Stuttgart	450	350	400	133
Nuremberg	450	260	280	110
Wiesbaden	500	300	380	131
Karlsruhe	380	250	300	103
Kassel	325	190	265	87
Mannheim	360	250	300	101
Augsburg	380	250	300	103
Freiburg	275	250	280	89
Regensburg	380	280	380	116
Mainz	350	270	320	104
Wurzburg	350	220	280	94
Kaiserslautern	200	130	170	56
Heidelberg	370	280	310	107
Ludwigshafen	275	215	250	60
Koblenz	265	150	230	72
Landau/Pfalz	260	130	210	67
4 Large cities	480	320	360	129
14 other cities and towns	330	230	280	93

Source: Ring deutscher Makler. English spellings have been substituted where standard anglicised versions of place-names exist

21. The original information is in very broad terms and the method used to analyse it is crude. Nevertheless, it does point to the existence of a north/south contrast. If the large cities are weighted double (as a crude form of allowance for differences in the relative importance of the different cities) the average index value for the cities and towns in the north would be 82, and for the cities and towns in the south 106, a difference of about 30%. Between individual cities there are

Table E.10 Indexes of House Prices in France 1976 - 1983

	Indexes		Relative to Value of Money	
	New Dwellings	Second-Hand Dwellings	New Dwellings	Second-hand Dwellings
1976	100.0	100.0	100	100
1977	110.9	107.6	101	98
1978	120.9	118.8	101	99
1979	133.2	130.5	101	99
1980	147.6	148.0	98	98
1981	163.6	163.7	96	96
1982	178.1	178.4	93	93
1983	192.9	186.3	93	89

Source: Economie et Statistique, September 1987, page 48, Table A.

26. The same source can be used for an estimate of the spread of house prices by class of area.

Table E.11 House Prices (Per Square Metre) By Type of Area

(Average for France = 100)

	New	Second Hand
Rural communes not in "zones with industrial or urban population" (a)	81	64
Rural communes in "zones with industrial or urban population"	91	70
Urban areas with population below 100,000	95	89
Urban areas with populations above 100,000 Central area	112	108
Remainder	105	92
Paris conurbation, excluding Paris	140	142
Paris	250	217
France	100	100

Note: (a) "Zones de peuplement industriel ou urbain", ZIPU

Source: Economie et Statistique September 1987, page 49, Table C.

23. Over a fifteen year period, the price of building land in Germany doubled relative to the general level of prices. In the shorter term, an association with house building activity can be discerned. The breaking of the boom after 1972 was accompanied by a halt to the rise in house prices in nominal terms and by a fall of about 10 percent in real terms. The slump in house building (including of course flat building) produced a fall of about 5% in nominal terms and about 7% in real terms.

24. The average price of DM 121.07 per square metre that Table E.9 shows for 1986 is equivalent to £277,000 per hectare when converted by the purchasing power parity shown in Table E.1. The corresponding figure for England and Wales in 1986 was £261,000. An indication of the importance of land prices relative to other costs can be obtained from figures published by the Gesamtverband Gemeinnütziger Wohnungsunternehmen (Wohnungswirtschaftliches Jahrbuch 1987/88, calculated from number of units pages 144 and 145, and cost information on page 147). The average cost of houses (as distinct from flats in 1986 was DM 185,000, of which DM 59,000 (21%) was attributable to the cost of the site.

IV France

25. France does not have a national index of house prices. From 1979 onwards there are weighted average prices of flats in Paris sold with vacant possession, calculated by the Chambre Interdépartementale des Notaires de Paris; but for France as a whole, and for geographical differences within the country, recourse must be had to the information collected by the 1984 housing survey. This may be discussed first. In the surveys, households that had purchased their dwelling since the date of the previous survey were asked to state the price they had paid. Table E.10 below shows index numbers of average prices of new and second hand houses derived from this source, standardised for geographic mix and approximately for quality. The published table from which they were calculated was in terms of price per square metre, so the indexes are in effect standardised for size as well.

Table E.12 Prices of Flats Sold With Vacant Possession in Paris

		Price Per sq: metre (francs)	Index (1979 1st Half = 100)	Index Relative to Value of Money (1979 1st Half = 100)
1979	1st half	4,570	100	100
	2nd half	5,069	111	106
1980	1st half	5,559	122	108
	2nd half	6,249	137	115
1981	1st half	6,550	143	113
	2nd half	6,915	151	112
1982	1st half	6,926	152	106
	2nd half	7,026	154	102
1983	1st half	7,558	165	104
	2nd half	7,605	166	101
1984	1st half	8,074	177	103
	2nd half	8,253	181	102
1985	1st half	8,911	195	107
	2nd half	9,350	205	109
1986	1st half	9,792	214	113
	2nd half	10,669	233	122

Source: Chambre Interdepartmental de Paris, Le Marche Immobilier Parisien, 2eme semestre 1986, page 24.

30. Comparison with Table E.10 shows some similarity in that in both a fall in prices is shown in 1982 and 1983. But with the limited geographical coverage and short time period nothing very specific can be said.

27. The average prices from which Table D.11 was calculated are simple average prices per square metre. That the average price of second hand houses is much lower than that of new houses, relative to the national average, in rural areas is due in part at least to more of the owner-occupied existing housing stock in rural areas being old and lacking basic amenities. The most striking feature of the pattern of house prices that the table shows, though, are how high are house prices in Paris compared with the rest of France. There is the same contrast in levels of rents.

28. From the information available it is not possible to see whether there are inter-regional differences in house prices as distinct from differences associated with size of city or town. France appears not to have such large concentrations of high unemployment and low prosperity as do Britain and Germany. There are areas with major problems like the steel-industry district of Lorraine, and the coal mining areas of the North East. But the scale is smaller than of (e.g.) Merseyside and Tyneside, or the Ruhr.

29. The information for Paris is summarised in Table E.12. The information is half yearly, and the actual prices are re-valued to constant prices by reference to INSEE's cost of living index for the Paris area.

Note: Fall in value of money measured by the deflator for net national income at market prices, taken from Nationale Rekening, 1985, Table 59

Source of house price indexes: Maandstatistiek Bouwnijverheid December 1983 Table 14. 2H; and June 1986, Table 14.13H

32. During the period covered by Table E.13 nominal house prices tripled in six years; and then fell sharply. In year-on-year terms nominal house prices fell by 28% between 1978 and 1982; in terms of half years, there was a fall of 30% between the second half of 1978 and the first half of 1982.

33. Although the Netherlands is a small country, the geographical variations in house prices may usefully be shown. Table shows the average price of one-family houses sold with vacant possession in 1965 and 1984

Table E.14 Average Prices of One Family Houses By Provinces and Major Cities

	Average prices (guilders)		Index (Netherlands Average = 100)	
	1965	1984	1965	1985
Groningen	23,700	105,300	70	75
Friesland	17,300	105,500	51	76
Drenthe	28,000	134,300	82	96
Overijssel	32,300	125,600	95	90
Gelderland	39,800	140,500	117	101
Utrecht (a)	45,200	169,400	133	121
Noord-Holland (b)	42,600	145,400	125	104
Zuid-Holland (c)	42,600	152,000	125	109
Zeeland	24,700	110,600	73	79
Noord-Brabant	31,000	141,900	91	102
Limburg	28,800	133,800	85	96
Utrecht municipality	36,600	119,400	108	86
Amsterdam "	77,100	147,600	227	106
The Hague "	88,900	198,100	261	142
Rotterdam "	40,000	148,700	118	107
Netherlands	34,000	139,500	100	100

Note: (a) Excluding municipality of Utrecht
 (b) Excluding Amsterdam
 (c) Excluding The Hague and Rotterdam

Source: Maandstatistiek Bouwnijverheid April 1988 Table 14.1. H

V. Netherlands

31. Detailed house price information was collected in the Netherlands from the land registration system, which serves both to record ownership and to ensure payment of the tax on house purchase transactions. The past tense must be used, because the following note appeared (in translation) in the April 1988 issue of Maandstatistiek Bouwnijverheid (at page 46): 'statistics of the selling prices of houses have been brought to an end with effect from the beginning of the fiscal year 1986 as part of the economies in central government administration. This publication concerning 1985 is therefore the last on this subject.' Index numbers were calculated from this information about the prices of one-family houses sold with vacant possession. The new index that began with 1980 has been joined onto the earlier index at 1980. The index is weighted geographically, but is not standardised for quality difference; it is, though, restricted to houses as distinct from flats. For comparison with the figures for other countries the Dutch index has been re-calculated to 1970 = 100.

Table E.13 Index of House Prices 1965-1985

	House Prices	House Prices Less change in value of money
1965	75	98
1966	75	93
1967	78	91
1968	87	99
1969	90	96
1970	100	100
1971	111	102
1972	125	107
1973	146	114
1976	236	137
1977	310	169
1978	361	187
1979	358	177
1980	340	157
1981	293	128
1982	260	109
1983	266	109
1984	267	107
1985	271	107

Table E.16 Average House Prices in Counties of Sweden 1980 and 1985

	Prices (thousand Kr.)		Indexes (Swedish average = 100)	
	1984	1985	1984	1985
Stockholm	502	558	154	155
Uppsala	378	393	116	109
Sodermanland	331	359	101	99
Ostergotland	343	361	105	100
Jonkopung	300	299	92	83
Kronoberg	286	290	87	80
Kalvar	257	271	79	75
Gotland	275	312	84	86
Blekinge	272	280	83	78
Kristianstad	243	252	74	70
Malmohus	333	363	102	101
Halland	303	356	93	99
Goteborg	390	457	119	127
Alvsborg	296	353	91	98
Skaraborg	251	279	77	77
Varmland	261	274	80	76
Orebo	287	306	88	85
Vastmanland	308	335	94	93
Kapporberg	288	316	88	88
Gavleborg	273	293	83	81
Vasternorrland	258	284	79	79
Jamtland	297	311	91	86
Vasterbotten	317	322	97	89
Norrbotten	251	285	77	79
<u>Sweden</u>	<u>327</u>	<u>361</u>	<u>100</u>	<u>100</u>

Source: Statistick Arsbok 1985, Table 242; 1988, Table 235

37. There is a strongly marked contrast between Stockholm and Goteborg and the rest of the country. Stockholm is the capital, and Goteborg is the next largest city. There is a 2:1 difference in house prices between Stockholm and the counties where house prices are lowest

38. Prices of building land are shown in Table E.17, in nominal terms and real terms.

34. The spread of house prices in the mid-1980's after the slump was much narrower than it had been in 1965. The fall in house prices in real terms was particularly sharp in Amsterdam and The Hague, about 40% in the former and 30-35 in the latter. Nevertheless, even in 1985 there was still a contrast of between 1.5:1 and 1.6:1 between The Hague-Amsterdam-Rotterdam-Utrecht and the concomitantly depressed north-eastern provinces of Groningen and Friesland.

VI. Sweden

35. In Sweden information is collected about sales of houses and sales of land from which can be calculated levels and changes in house and land prices, and the geographical pattern. Table E.14 shows index numbers of house prices in the country as a whole and in Stockholm, both in nominal terms and relative to the GDP deflator.

Table E.15 Index Numbers of House Prices 1975-1985

	(1981 = 100)			
	Nominal Terms		Real Terms	
	Sweden	Stockholm	Sweden	Stockholm
1975	59	53	106	95
1978	89	83	118	110
1981	100	100	100	100
1982	101	101	93	93
1983	101	103	85	86
1984	105	106	82	82
1985	109	111	80	82

Source: Statistik Arsbok 1988, Table 230

36. After a rise in real terms in the late 1970's, prices of houses in Sweden rose only slowly in nominal terms, not enough to keep up with the quite rapid rise in the general price level. The geographical pattern of house prices in Sweden is looked at next. Table E.16 shows average prices for permanent houses (i.e. as distinct from flats and holiday residences in the twenty four counties of Sweden).

DIFFERENCES BETWEEN REGIONS IN CIRCUMSTANCES
OF HOUSE PURCHASERS WITH BUILDING SOCIETY MORTGAGES

This Annex brings together information from the Building Society Mortgage Survey about differences between regions in the circumstances of house purchase. The purpose is to see how far such differences can contribute to understanding how the housing market can generate inter-regional differences in house prices far greater than the corresponding differences in regional average earnings. The differences have to be studied from building society survey data even though information about all purchasers would be relevant. Only building society data are available at the time of writing.

2. The starting point is the regional variation in the proportion of the dwelling stock owner-occupied, and in the changes in the number of purchases by first-time buyers and moving owner-occupiers separately. The number of purchases is compared in 1983 and 1987, to see what relationship there is, if any, between the differential increase in house prices (see Annex B) and the pattern of increases in the number of transactions. A comparison between 1982 and 1987 might be more appropriate, but 1983 is the first year in which loans to local authority sitting tenants can be separated out. To exclude them is necessary as they are not relevant to the balance between supply and demand in the ordinary market. 1983 and 1987 are therefore compared. Information is not available about the regional distribution of transactions financed by banks. To make no reference to them, though, could be misleading since the number of advances approved by banks rose from 179,000 in 1983 to 286,000 in 1987. Building Societies advances totalled 950,000 and 1,049,000 respectively. From the Building Society Mortgage Survey the number of advances (UK) to first-time purchasers (excluding LA sitting tenants) and moving owner-occupiers is estimated at 407,000 and 448,000 respectively in 1983, and 438,000 and 543,000 in 1987. The number of advances completed (as distinct from approved) by banks in 1983 is estimated at 60,000 to first-time purchasers and 112,000 to households already owner-occupiers (see Annex B of Government Economic Service Working Paper No.92, "Flows of Funds Associated With House Purchase..."). The same assumption about lags and drop-out rates would give 80,000 advances to first-time purchasers and 174,000 advances to households already owner-occupiers. Table F.1 brings the totals together. There is insufficient information with which to estimate the amount of internal duplication through some of the bank loans to households already owner-occupiers replacing building society loans without any house purchase taking place. In 1987 that may have applied to building societies as well.

Table E.17 Prices of Building Land

	Price per plot (Kroner)	Index (1981 = 100)	Index Relative to general price level
1978	39,000	66	87
1979	42,000	71	87
1980	44,000	75	82
1981	59,000	100	100
1982	73,000	124	114
1983	79,000	134	112
1984	87,000	147	114
1985	96,000	163	120

Source: Statistik Arsbok 1985, Table 238; 1988, Table 231.

39. Building land prices rose in real terms, which is not readily explainable in view of the movement of house prices. Comparison with Table E.15 suggests that land prices per plot were equal to about one-quarter of house prices, on average, 96,000 kronor are equivalent to £6,700 if converted at purchasing power parity (see Table E.1), compared with the average plot price of £8,315 in 1985 in England and Wales.

Table F.2 Regional Pattern of Owner-Occupation and House Purchase on Mortgage

	(thousands)				
	Proportion of Dwelling Stock Owner-Occupied in 1986 (%)	First-Time Purchasers		Purchasers Already Owner-Occupiers	
		1983	1987	1983	1987
Northern	55.9	24	34	28	50
Yorkshire and Humberside	62.6	46	58	55	78
North West	65.8	51	61	59	81
East Midlands	67.5	40	44	47	60
West Midlands	64.2	44	48	52	69
East Anglia	66.9	16	21	22	31
Greater London	55.8	54	50	41	45
Rest of South East	71.1	90	106	142	179
South West	70.4	41	42	60	78
England	65.0	<u>407</u>	<u>465</u>	<u>505</u>	<u>670</u>

Source: See text for method of calculation

5. Between 1983 and 1987 the increase in the number of first time purchasers was greatest in the North of England, 32,000 out of a total of 58,000; in the Midlands 8,000; and in the South 18,000 only, with an outright fall in London. Among households that were already owner-occupiers the increases were 67,000 in the North, 30,000 in the Midlands, and 68,000 in the South. Even among former owner-occupiers the increase was proportionally greater in the North. When read alongside the house price increases, these figures point to demand pressing harder against supply in the South than in the Midlands and North, but without purchasers actually being priced out in significant numbers apart from first-time buyers in London.

6. The circumstances of first-time purchasers in 1987 are examined in the tables that follow. To make the amount of detail more manageable, the three regions of the North of England are grouped together, as are the two Midland regions and East Anglia and the South West. London must be shown separately owing to the uniquely high house prices there. Table F.3 shows the detailed previous tenure, of first-time purchasers, and their ages.

Table F.1 Number of House Purchase Advances in UK in 1983 and 1987

(thousands)

	1983		1987	
	First-Time Purchasers	Already Owner-Occupiers	First-Time Purchasers	Already Owner-Occupiers
Building Societies	407	448	438	543
Banks	60	112	80	174
Insurance companies	6	12	17	33
Local authorities	3	1	-	-
<u>Total identified</u>	<u>476</u>	<u>573</u>	<u>535</u>	<u>750</u>

3. Replacing an existing loan with a new loan without a move of house or purchase or sale may have inflated the number of advances to households that are already owner-occupiers, but the number of advances to first-time purchasers should be free of this problem. They may be slightly over-stated on account of loans by banks to local authority sitting tenant purchasers.

4. Table F.2 shows the regional estimates. They apply the regional sample proportions for the Building Society Mortgage Survey pro-rata, which assumes that the distribution between regions is the same for banks as for building societies. For reasons referred to in Annex B that may well not be wholly valid, but given that building societies' loans are so high a proportion of the total, 72% or more in all four columns of Table F.1, the scope for error is not great.

borrowers. Joint ownership is now very much the rule rather than the exception; so few of the purchasers classified as 'one male' are likely to be married couple households.

Table F.4 First-Time Purchasers (Excluding LA Sitting Tenants) Analysed According to Number and Sex of Borrowers: England 1987

	(percent)					
	North	Midlands	East Anglia and South West	Greater London	South-East excl London	England
One male	23.5	23.1	25.5	26.3	25.0	24.3
One Female	14.5	12.0	13.1	16.0	10.1	13.0
One Male and One female	60.6	63.3	58.8	46.6	59.6	59.1
Two Males	0.7	0.9	1.8	7.3	3.8	2.3
Two Females	0.6	0.4	0.3	2.6	1.2	0.9
Three or more	0.2	0.3	0.5	1.1	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
(Sample Number)	(4,479)	(2,781)	(1,875)	(1,498)	(3,182)	(13,913)

Source: Building Society Mortgage Survey

9. Greater London is distinctive in the comparatively high proportion of instances where there was only one named borrower; and also in the proportion where there were two named borrowers of the same sex or three borrowers or more. Such clubbing together to buy or mortgage has often been commented on, and is shown by the survey results summarised in Table F.4 to exist. But the numbers are small. If the percentages in Table F.4 are applied to the estimates of first-time purchasers in Table F.2, the estimated number of first-time purchasers in 1987 where there were two borrowers of the same sex or three purchasers or more was between 5,000 and 6,000 in London, between 5,000 and 6,000 in the rest of the South East, and another 5,000 in the rest of England. From the survey information it is not possible to say how many of these purchasers are 'singles' clubbing together in order to pay prices that are out of reach individually, or whether they are unorthodox households that happen to be thicker on the ground in London and the South East for reasons unconnected with house prices.

10. An analysis of the ages of purchasers is next made to provide evidence about the influence of house prices. As noted in connection with previous tenure, earnings rise with age on the average, and age influences the time in paid employment when there is an opportunity to save for a deposit. Table F.5 summarises the ages

Table F.3 Previous Tenure of First-Time Purchasers:
England 1987 (Local Authority Sitting Tenants Excluded)

	North	Midlands	East Anglia and South West	Greater London	Rest of South East	England
<u>Percentage Distribution</u>						
Rent from private landlord	23.6	23.6	33.3	35.2	25.4	27
Rent from local authority	10.6	8.8	4.7	5.9	5.8	8
Living with relatives, etc (a)	60.8	61.8	54.8	52.5	62.8	60
Other accommodation (b)	5.0	5.8	7.3	6.4	5.9	6
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100</u>

Median age in years

Rent from private landlord	28	28	28	29	28	29
Rent from local authority	33	30	34	33	34	32
Living with relatives, etc	24	25	25	26	25	25
Other accommodation	31	31	31	29	32	31
Total	26	26	26	28	26	26

Note: (a) Includes all who were not living as separate households. Where there is more than one borrower, the tenure is that of the first-named borrower.

(b) Mainly rented from employer, or with business premises

Source: Building Society Mortgage Survey

7. The differences between regions are not great. Apart from London there is no evident tendency for first-time purchasers to be older in the areas where house prices are high. Such a tendency might be expected as a consequence of having to save longer for the deposit; but there is no sign of it, except in London.

8. The information about first-time purchasers was next studied for evidence about whether more of the first-time purchasers in the high price areas had two earners (or more). The number of earners is not shown directly by the survey data, but the number of borrowers provides some pointers. Where husband and wife own their house or flat jointly they will normally be recorded as both being

the ages of the different types of household were fairly similar apart from London, it is reasonable to reckon on comparison of incomes for each type of household not being distorted by differences in age structure. Table F.6 shows mean income by category of household.

Table F.6 Mean Recorded Income of First-Time Purchasers by Type of Household in 1987.

	(£)					
	North	Midlands	East Anglia and South West	Greater London	South East excluding London	England
One male	9,292	9,839	11,363	18,294	13,866	11,808
One Female	7,822	8,120	9,132	14,264	11,545	9,565
One Male, one Female	11,505	11,999	13,813	21,067	16,920	13,976
Two Males	13,471	14,797	17,251	23,858	21,032	20,441
Two Females	10,741	11,826	16,726	22,003	18,220	17,235
Three persons or more	.....	.....	.....	23,143	17,289	16,831
<u>All types</u>	<u>10,460</u>	<u>11,052</u>	<u>12,668</u>	<u>19,510</u>	<u>15,798</u>	<u>13,068</u>
	<u>Index Numbers</u> (England = 100)					
One Male	79	83	96	165	117	100
One Female	82	85	95	149	121	100
One Male and One Female	82	56	99	151	121	100
All types	80	85	97	149	121	100

Source: Building Society Mortgage Survey

13. The inter-regional variation in mean recorded income was very similar for each of three household types where sample numbers in all the regions were large enough for the comparisons to be fully meaningful. The households where there was only one borrower are most unlikely to have included more than one earner, but the households with one male and one female borrower could obviously have contained two earners and no doubt frequently did so. Nevertheless, the inter-regional differences were virtually the same.

14. In all regions the average recorded incomes of the 'one female' purchasers were about 20% lower than the average recorded incomes of the 'one male' purchasers. That is a considerably smaller difference than there is between the average weekly earnings of women in full-time work as recorded by the New Earnings Survey in 1987 were only 66% of the average for men.

of purchasers, classified by number and sex of borrowers.

Table F.5 Regional Analysis of Age and Composition of First-Time Purchaser Households in 1987

	(percent)					
	North	Midlands	East Anglia and South West	Greater London	South East excl. London	England
<u>One Male</u>						
Under 25	33.5	32.8	36.7	23.6	31.7	32.2
25-34	45.4	46.8	47.2	52.3	49.6	47.7
35 or over	21.1	20.4	16.1	24.1	18.6	20.0
<u>One FEmale</u>						
Under 25	29.5	34.6	32.2	23.8	28.4	28.6
25-34	43.4	44.2	43.9	53.8	41.9	44.7
35 and over	27.1	21.2	32.9	22.5	29.7	26.6
<u>One Male and One Female</u>						
Under 25	41.8	41.6	39.4	30.5	41.5	40.4
25-34	39.0	39.9	39.0	49.0	39.4	40.2
35 and over	19.1	18.5	21.6	20.5	19.1	19.4
<u>Two Males, Two Females or three or More</u>						
Under 25	(27)	(21)	(46)	32.5	39.0	34.4
25-34	(42)	(55)	(33)	49.4	44.2	45.5
35 and over	(30)	(24)	(21)	18.1	16.9	20.0

Source: Building Society Mortgage Survey

11. In both London and the rest of the South East a higher proportion of the two male, two female, etc., households than of the one male or one female households were young, which is consistent with part of the reason for there being more households with two buyers of the same sex in London and the South East being clubbing together by 'singles' to buy. In general, though, the regional analysis by age and type of household shows the same conclusion as did the regional analysis by age and previous tenure in Table F.3, that London is distinctive in having proportionally fewer young first-time purchasers, but that otherwise there are no pronounced inter-regional differences.

12. The incomes of the different categories of first-time purchaser household may next be considered. Income is related to age; but since Table F.5 shows that

15. A further analysis of inter-regional differences in the circumstances of first-time purchasers would require more detailed information than the Building Society Mortgage Survey collects about household composition, marital status, and number of earners.

Table G.1 Migration Inwards to and Outwards From South East England 1980-81

<u>Origin or Destination</u>	(thousands)		Rest of South East	
	Greater London Inwards	Greater London Outwards	Inwards	Outwards
Greater London	.....	.....	94.4	53.4
Rest of South East	53.4	94.4	.....	.....
East Anglia	5.0	8.6	11.7	16.0
South West	10.2	13.6	27.8	34.9
Midlands	11.6	11.4	24.5	23.9
North	17.5	11.3	29.5	21.0
Wales and Scotland	9.7	7.6	18.2	15.0
Ireland (and Channel Islands and Isle of Man)	4.2	(a)	4.5	(a)
Overseas	61.4	(a)	61.5	(a)
<u>Total within GB</u>	<u>107.4</u>	<u>146.9</u>	<u>206.1</u>	<u>164.2</u>

Note: (a) Cannot be ascertained from British Censuses

Source: Census 1981 England and Wales, Regional Migration South East, Tables 1 and 2

4. The South East as a whole, i.e. London and the rest of the South East taken together, is shown as receiving 166,000 inward movers from the rest of Britain, with 163,000 residents of the South East moving to the rest of Britain. This balance of 3,000 inwards comprised balances of 18,000 outwards to East Anglia and South west, and 21,000 inwards from the Midlands and North of England and Wales and Scotland.

5. Employment status of migrants to and from South East England is shown in Table G.2. Employment status is as enumerated, that is to say at Census date; employment status at the time of the move was not necessarily the same.

INTER-REGIONAL MIGRATION

The most detailed information about inter-regional migration is that collected by the decennial Census, which asks for the present usual residence of all persons enumerated, and for the usual residence one year previously. From the answers to these questions a detailed analysis can be prepared of migration in the year prior to the Census. Information about internal migration in other years is sparse. Britain does not have a system of registration of addresses such as is found in several of the European countries. Such a system was introduced in 1939 as a wartime measure but ended in 1952; while in existence the National Register was used to study migration. The source of information used to estimate internal migration is the National Health Service Central Register, which records transfers of registration from one doctor (general practitioner) to another when the doctors are in different Family Practitioner Committee areas. An adjustment is made, based on survey evidence, for the time-lag between change of address and registering with a different doctor. Annual information from this source goes back to 1971.

2. The geographical pattern of migration is very complex, and to attempt to describe it would go far beyond the scope of a study of house prices. Since it is the effect of house prices or migration to and from South East England that is the focus of interest at the time of writing, an outline is given of migration to and from South East England in 1980-81, the year before the Census. The estimates of migration in other years from the National Health Service Central Register are then used to present a longer term picture.

3. Table G.1 shows migration into and out of London and the rest of the South East, according to area of origin or destination.

Table G.3 Housing Circumstances of Migrants in 1980/81

(thousands)

	Wholly moving households			Total	Persons in Wholly Moving Households	Persons Not in Wholly Moving Households
	Owner- Occupiers	Local Authority Tenants	Other Tenants			
Migrants to London from rest of Great Britain	8.3	2.4	10.5	21.2	43.1	49.0
Migrants to London from outside Great Britain	2.7	0.7	9.7	13.1	30.9	25.6
Migrants from London to rest of South East region	20.0	3.1	4.3	27.3	64.5	24.3
Migrants from London to rest of GB outside the South East	8.6	1.9	4.1	14.8	32.6	15.6
Migrants from rest of GB excluding London to rest of South East	13.8	2.3	9.0	25.1	67.5	27.6
Migrants from rest of South East to rest of GB excluding London	18.1	2.4	8.3	28.7	75.4	24.6

Source: Census 1981, Regional migration South East, Tables 5A and 5B.

7. For years other than the year prior to the Census, the information available is from the National Health Service Central Register, as described in paragraph 1. Annual information from this source goes back to 1971. For 1971 to 1976 information is available about migration to and from the South East, but not between London and the rest of the South East, and vice versa. From 1977 separate figures are available for London and the rest of the South East. From 1971 to 1979 the figures are from unpublished tabulations provided by OPCS. The figures from 1980 to 1985 were published in the MN series of OPCS Monitors. The 1986 figures were published in Population Trends No.50 (Table 4 on page 38)

Table G.2 Employment Status of Migrants to and from South -East England Aged 16 or Over at Census Date: 1980/81

	(thousands)		
	Inward from Rest of Great Britain	Inward from Outside Great Britain	Outward to rest of Great Britain
In employment	91.7	55.9	67.2
Unemployed	11.2	10.4	17.0
Students	7.8	14.0	7.5
Others not economically active and below retirement age: male	1.3	1.9	3.3
Others not economically active and below retirement age: female	16.0	18.9	20.7
Not economically active and above retirement age	9.1	2.9	16.1
<u>Total</u>	<u>137.0</u>	<u>104.1</u>	<u>131.8</u>

Source: Census 1981, Regional Migration South East, Table 4

6. The Census migration tables distinguish between persons in wholly moving households, that is to say where all persons in the household had the same previous usual address; and other movers. Table G.3 shows the housing tenure of wholly moving households, the number of persons comprising these households, and the number of migrants not in wholly moving households.

TABLE G.4

Migration to and from London 1977 to 1986

(thousands)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	
<u>Inward from:</u>											
Scotland, Wales, Northern Ireland	15	15	15	15	14	15	17	17	15	20	
North of England	24	25	24	27	27	26	28	28	27	34	
Midlands	19	18	18	20	18	20	20	20	19	24	
East Anglia and South-West	22	22	21	23	23	22	21	22	20	25	
Rest of South East	76	74	66	71	73	75	72	70	64	79	
<u>Total</u>	<u>156</u>	<u>155</u>	<u>144</u>	<u>155</u>	<u>154</u>	<u>157</u>	<u>157</u>	<u>156</u>	<u>145</u>	<u>183</u>	
<u>Outward to:</u>											
Scotland, Wales, Northern Ireland	14	13	13	11	11	11	11	12	12	13	
North of England	19	20	18	19	18	17	18	19	19	20	
Midlands	19	18	17	17	16	15	15	16	17	20	
East Anglia and South-West	36	34	33	31	28	27	29	28	32	36	
Rest of South East	138	138	121	122	115	119	118	116	120	143	
<u>Total</u>	<u>224</u>	<u>223</u>	<u>201</u>	<u>201</u>	<u>186</u>	<u>191</u>	<u>191</u>	<u>189</u>	<u>201</u>	<u>232</u>	

Note: Detail does not always add to totals owing to rounding

TABLE G.4

Migration to and from the South East 1971-76

(thousands)

	1971	1972	1973	1974	1975	1976			
<u>Inwards from</u>									
Scotland, Wales, Northern Ireland	52	49	42	46	40	38			
North of England	79	72	64	67	65	60			
Midlands	58	54	49	55	57	52			
East Anglia and South-West	80	74	69	77	78	72			
<u>Total</u>	<u>269</u>	<u>248</u>	<u>224</u>	<u>245</u>	<u>240</u>	222			
<u>Outwards to</u>									
Scotland, Wales, Northern Ireland	41	42	43	43	43	36			
North of England	64	69	70	66	64	57			
Midlands	60	68	63	66	58	51			
East Anglia and South-West	121	130	118	114	119	105			
<u>Total</u>	<u>285</u>	<u>311</u>	<u>293</u>	<u>289</u>	<u>284</u>	249			

Note: Detail does not always add to totals owing to rounding

TABLE G.4

Migration to and from South East excluding London 1977-1986

(thousands)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	
<u>Inward from:</u>											
Scotland, Wales, Northern Ireland	23	26	23	23	20	22	21	23	23	26	
North of England	38	42	39	40	37	38	38	38	41	46	
Midlands	36	36	32	32	31	33	34	33	35	38	
East Anglia and South-West	53	54	48	51	49	49	50	48	48	56	
London	138	138	121	122	115	119	118	116	120	143	
<u>Total</u>	<u>288</u>	<u>295</u>	<u>263</u>	<u>268</u>	<u>252</u>	<u>260</u>	<u>261</u>	<u>258</u>	<u>267</u>	<u>310</u>	
<u>Outward to:</u>											
Scotland, Wales, Northern Ireland	20	21	20	19	19	19	21	19	22	23	
North of England	34	32	30	31	29	30	29	30	32	34	
Midlands	33	34	33	33	29	32	33	33	37	44	
East Anglia and South-West	69	70	68	66	61	65	70	67	74	83	
London	76	74	66	71	73	75	72	70	64	79	
<u>Total</u>	<u>233</u>	<u>232</u>	<u>218</u>	<u>221</u>	<u>211</u>	<u>222</u>	<u>224</u>	<u>219</u>	<u>228</u>	<u>264</u>	

Note: Detail does not always add to totals owing to rounding

Table H.1 Densities of Occupation: England and Wales 1911

	London (a)	County Boroughs	Urban Districts	Rural Districts	England and Wales
<u>All households ('000)</u>	<u>1,024</u>	<u>2,368</u>	<u>2,782</u>	<u>1,770</u>	<u>7,943</u>
Households living at densities above 1½ persons per room:					
In one room or two:					
Number ('000)	157	104	77	31	369
Percent of all households	15.3	4.4	2.8	1.8	4.6
In three rooms:					
Number ('000)	79	127	108	69	383
Percent of all households	5.5	7.4	7.1	6.4	6.8
Total above 1½ persons per room					
Number ('000)	292	406	382	213	1,294
Percent of all households	28.2	17.2	13.7	12.0	16.3

Note: (a) The administrative county plus the City.

3. Over 15 percent of households in London lived in crowded conditions in one room or two, compared with 3% in the rest of the county. Nearly all were probably sharing. Nearly 8 percent of households in London lived in crowded conditions in three rooms, compared with 4½ percent in the rest of the country. Crowded conditions among households living in four rooms or more, in contrast, was no more common in London than elsewhere. That crowding was much more severe in London than in the rest of the country was thus the consequence of sharing being far more common. Competition for space in London obliged families to share who had they lived elsewhere could have afforded and obtained a separate house.

CROWDING AND SHARING IN 1911

Sharing of dwellings, in the sense of two or more households living in the same dwelling, was not recorded in the Census until 1921. Housing conditions in that year were affected by the virtual halt to new building during the 1914-18 war, and so cannot be taken as evidence about how a free market in housing worked. In 1911, in contrast, there was the Census that followed the tailing off of the strongest housing boom thus far on record. The conditions enumerated in 1911 were therefore little if at all affected by lagged adjustment of supply to changes in demand. What they showed was probably as close as could be got to observing market equilibrium. Sharing and crowding in 1911 were therefore in most instances the outcome of the interaction between the cost of separate accommodation and the amounts households could afford to pay.

2. Shared dwellings and sharing households were not enumerated in 1911. But from the numbers of households and occupied dwellings, and the 1921 and 1931 Census information about sharing, the number of sharing households in 1911 can be estimated at about 1,150,000 out of a total of 7,943,000 households (England and Wales). The 1911 Census collected full information about the number of rooms, the first Census to do so. Households can therefore be classified according to numbers of persons per room, and number of rooms. Most households living in one room or two were sharing; and many of those living in three rooms were sharing, as the 1931 Census showed. Crowded households with four rooms or more are likely to have been large families in ordinary sized houses. Table F.1 shows the number of households living at densities of more than $1\frac{1}{2}$ persons per room, according to number of rooms and type of area.

(Muellbauer)

pp

Non-technical summary

Much has been written on why wage inflation responds so little to high rates of unemployment both in Britain and elsewhere in Europe. Blanchard and Summers have attributed this to hysteresis effects, while Lindbeck and Snower have emphasized the differing roles of insiders and outsiders in the labour force. In the United Kingdom economists have also pointed to the characteristics of UK housing markets as a factor in explaining why wages do not respond to high unemployment. Rates of labour migration are much lower in Britain than in the United States, it is argued, and low labour mobility allows high wage inflation in the South-East to co-exist with high unemployment in other regions. Cross section evidence reveals an association of low migration rates with the regulation of rents and tenure and with the institution of council housing. Hughes and McCormick (1987) and Minford et al (1987) have used this evidence to argue that unemployment and wage pressure in Britain are higher than they would be with different housing institutions.

This paper examines the interaction between the labour and housing markets in Britain, integrating the owner-occupied sector more fully than in previous research. We explore the effects of this interaction on the behaviour of aggregate wages and for the relationship between aggregate unemployment and unfilled vacancies, which reflects mismatch between jobs and people. Our analysis confirms the importance of housing markets in labour market behaviour.

Our analysis emphasizes the importance of "sectoral" or segmented labour markets between which labour is slow to move, possibly as a result of the operation of the housing market. As a result, one segment of the national labour market may experience unemployment while there are at the same time unfilled vacancies or excess demand in another sector. Economic theory suggests that in such segmented markets, wage behaviour is influenced not only by aggregate excess demand, but its sectoral dispersion or "mismatch".

We take as our starting point the wage equations developed in recent work by Layard and Nickell. Their work explains employment, wages and the price level for the UK economy, based on theoretical framework in which monopolistic competition prevails in product markets and at least some firms use normal cost mark-up pricing. In labour markets, the approach gives explicit treatment to bargaining between employers and unions: the level of both the cost of living and of product prices is relevant for wage determination and "wage push" factors play an important role.

We use annual data from 1958-86 to first estimate an equation explaining the behaviour of aggregate wages. The explanatory variables in this equation (whose dependent variable is the real product wage, adjusted for the trend in productivity) include the level and the change in unemployment, a measure of union power, and a variable capturing mismatch changes (the absolute change in the employment share of industry and construction). We measure the effects of house prices by

means of an index of UK house prices relative to the average wage and adjusted for the proportion of owner-occupiers. We find that this variable enters as a two-year moving average with a two-year lag, suggesting that the cost of living effects of house prices take a long time to feed through. We also define a "regional difference" variable which is a measure of the gap between the house price/earnings ratio in the South East and the UK average. This operates as a moving average with an average lag of two years. The effects of variations in mobility which arise from changes in housing tenure structure and change in the Rent Acts are captured through a mobility index derived from previous work by Hughes and McCormick.

One of the consequences of restricted labour mobility is increased mismatch in the labour market and this should be reflected in a higher level of aggregate vacancies for a given level of aggregate unemployment. We therefore use annual data from 1958 to 1986 to estimate an equation in which unemployment depends on vacancies as well the benefit/wage ratio (reflecting "search" unemployment) and on the proportion of new entrants in the labour force. We introduce housing market influences through the same lagged moving average of the regional difference in the house price/earning ratio and the index of mobility used in the wage equation.

The joint evidence from the two equations is consistent with our theoretical interpretations. The wage equation fits particularly well compared to previous estimates and both equations pass a battery of specification tests and tests of alternative hypotheses with flying colours. It is also clear that the importance of the house price variables is robust to the specification of the final wage equation.

Our incorporation of the effects of house prices and housing tenure suggests very different conclusions concerning the determinants of wage behaviour from those reached by Layard and Nickell, although like Nickell, we find evidence of the importance of hysteresis in unemployment. In particular, we find that it is the changes in unemployment and sectoral mismatch, not the levels of these variables, which have the strongest influence on the level of real wages. This is consistent with interpretations of unemployment based on hysteresis or on insider-outsider behaviour. Such interpretations imply that wage pressure is affected by the sectoral dispersion of excess demand changes, for the same reasons that changes in (more than levels of) excess demand determine wage behaviour.

We find that union power has an important and strongly significant effect on wage pressure, although in our estimates, union density out-performs the theoretically more appropriate union/non-union mark-up. We suspect that this is the result of deficiencies in estimates of the latter for the 1980s.

Our estimates of the unemployment/vacancies relationship reveal strong evidence of the role played by the regional house price/earnings difference and our calculated measure of

mobility. We also find that the proportion of young entrants in the labour market and the benefit/wage ratio tend to increase the level of unemployment for any given level of vacancies.

We estimate the contributions of these factors to movements in the wage during the sample period. The level of unemployment and to an even greater extent its rate of change had a major effect on the real wage, though the increase in mismatch in the early 1980s offset the downward pressure on wages to a remarkable degree. The net result was only a very modest downward pressure on the real product wage. Union density also had a major influence on the real manual wage: the increase from the early 1960s to the peak at 1979 accounts for a 3.6% increase in the real wage. This is large relatively to the 2.5% increase in the productivity trend adjusted real manual wage over this period. The recent increases in the house price/earnings ratio and its regional difference imply a 4.4% increase in the real manual wage over the period 1984-8, while the effect on price inflation is even greater, given the feedbacks from wages to prices. The decline in union density and persistent high unemployment have offset much of the upward pressure from house prices on wages adjusted for the productivity trend in this period so that up to 1987, at any rate, there was little change.

In the long run, relatively high house prices in the South East benefit the unemployed elsewhere in the UK. These higher prices not only create an incentive to expand the supply of housing in the South East, but give firms an incentive to locate elsewhere. Our research suggests, however, that the institutional distortions associated with owner-occupation introduce important dynamic distortions into the housing market. There are major tax incentives which favour owner occupation relative to other financial assets or rented accommodation, including mortgage interest tax relief and the absence of capital gains tax on principal residences. These distortions, which the abolition of domestic rates will intensify, artificially raise the portfolio returns on owner occupation relative to other assets, with profound implications in economic upswings, especially when these are accompanied by rapid growth in financial liquidity. In such upswings the response of house prices to the growth of income and liquidity results in high own rates of return on owner occupied housing, which further stimulate demand. Even if other factors did not lead to faster economic growth in the South East, higher national housing demand tends not only to raise the national house price/earnings ratio but also to widen the South East's ratio relative to the rest of the UK, because housing supply is less elastic in the South East. As a result, the house/price earnings ratio in the South East rises relatively in upswings, especially those where financial liquidity is a major factor, as in the early 1970s and in the 1980s.

This leads to a "mobility trap". As the relative appreciation of house prices takes place, households in the South East are initially more reluctant to move to other areas: they would miss out on the further relative appreciation and may therefore be unable to move back to the South East at a later

date. Thus, few housing slots are freed for potential migrants to the South East, tending to increase still further the relative appreciation. Households outside the South East become increasingly unable to bridge the gap in house prices and so are less inclined to migrate.

As the house price/earnings differential approaches a peak, outward migration from the South East increases. At the same time, the credit constraint for potential migrants to the South East reaches a maximum. Also by this time additional new housing in the South East will have been built. This situation cannot persist and speculative expectations are eventually reversed: the result is a rapid fall, as in 1973-5, of the South East's premium in the house price/earnings differential. The rapidity of the fall is likely to be influenced by the initial reluctance of households outside the South East to invest in an expensive asset with a lower or negative prospective rate of return compared with their present housing. The peak and early part of this post-peak phase is likely to be a particularly uncomfortable one for firms in the South East trying to hold on to or to hire workers and, unless labour demand in the South East is slackening, is likely to be associated with strong wage pressure there. 1973, for example, saw the largest ever recorded net outflow of people from the South East, with further large outflows in 1974 and 1975.

This process eventually leads firms to locate outside the South East and so relieve unemployment in other regions. In the short run, however, this process can impose significant costs. Wage increases in the South East, quickly followed by even larger house price increases there, can give workers in the South East an incentive to leave and, given credit rationing, be relatively ineffective in attracting new workers. Firms may therefore have to bear the brunt of the resource reallocation shifts engendered by this interaction of housing and labour markets.

The fiscal bias in favour of owner occupation greatly raises the portfolio return to housing relative to that which would prevail in a neutral tax system. Consumer expenditure is influenced by house price increases through wealth effects and the increase in collateral available for borrowing. This tends not only to increase aggregate consumer expenditure and imports but also to increase regional disparities. The greater increase in consumer expenditure in the South East has regional multiplier effects which feed back through household demand into South East housing prices. This adds to the overshooting tendencies which have been discussed above. These tendencies have been exacerbated by the liberalization of credit markets in the 1980s and would be reduced by a more neutral tax treatment of owner-occupied housing. Our results emphasize the hazards of liberalizing financial markets while enormous fiscal distortions remain in place.

ABSTRACT

Housing, Wages and U.K. Labour Markets

There is a considerable literature on the effects of imperfections in U.K. rented housing markets in restricting labour mobility, see the 1987 book by Minford et al and several articles by Hughes and McCormick.

This paper examines the interaction of labour and housing markets, including the owner-occupied sector, more generally. Implications are drawn for the behaviour of aggregate wages in the U.K. and for the relationship between aggregate unemployment and unfilled vacancies, which in part reflects mismatch between jobs and people. Our empirical evidence reveals that lagged regional house price/earnings differentials play an important role in both wage and unemployment/vacancies equations and that lagged average house prices have a significant cost-of-living effect on wages. Our evidence is also consistent with cross-section evidence on the effect of tenure structure on mobility and finds some effects from the 1965 and 1974 Rent Acts. Altogether, a rather different view of the process of wage determination emerges from our work compared with Layard and Nickell (1986). Our evidence suggests that changes in unemployment and in sectoral mismatch are more important for wage pressure than are levels. This would appear to be consistent with arguments about the roles of insiders and outsiders in wage determination given by Blanchard and Summers (1986) and Lindbeck and Snower (1985, 1987).

Journal of Economic Literature Classification: 820, 932.

Key Words: wage determination, unemployment-vacancies trade off, labour mobility, housing tenure, house prices, sectoral labour markets.

Olympia Bover, John Muellbauer and Anthony Murphy
Nuffield College, Oxford. Tel: 0865-278583.

Housing, Wages and U.K. Labour Markets*

Olympia Bover, John Muellbauer, Anthony Murphy
Nuffield College, Oxford

June 1988

* This research was financed under ESRC grant B00220012. We are most grateful to Stephen Nickell and Paul Kong for access to their data and programmes and their helpful advice. Earlier versions of this paper were discussed at seminars in Oxford, LSE, Cambridge, CORE, an Academic Panel meeting at the Bank of England and at a conference, "Recent Developments in Wage Determination" in Mannheim. We must single out at least the following for their useful comments: Katherine Abraham, Manuel Arellano, Juan Dolado, John Flemming, Chris Gilbert, David Hendry, Alan Holmans, Gordon Hughes, Richard Layard, Barry McCormick, Patrick Minford, David Newbury, Andrew Oswald, David Reid, Maurice Scott, Peter Spencer, Konrad Stahl, Larry Summers, John Vickers and Martin Weale. Of these, John Flemming and Alan Holmans deserve special thanks for their continual helpfulness and the sustained thoroughness of their critique. However, responsibility for remaining errors is ours. We are also grateful for data or advice thereupon to Barry Bissett, Forrest Capie, Andrew Evans, Richard Harris and David Taylor and for additional assistance to V. Bhaskar, Kevin Denny and Guiseppe Mazzarino.

1. Introduction

Much has been written on why wage inflation is curiously unresponsive to high rates of unemployment, see for example Lindbeck and Snower (1985) and Blanchard and Summers (1986). For the U.K., Layard and Nickell (1985, 1986) have developed a model for wages, prices and employment that develops the mechanisms at work. In the latest version of this model in Nickell (1987), the relative ineffectiveness of high unemployment in curbing real wages is particularly clearly expressed. First, it is the logarithm of unemployment that affects the real wage. This means that an extra 100,000 unemployed are less effective in holding down wage increases the higher is the unemployment rate. Second, the negative effect on wages is substantially offset by the opposite effect of the proportion of those unemployed for over one year. In common with Layard-Nickell, the latest Nickell (1987) version of the model includes in the (real) wage equation a number of other factors: the productivity trend, a measure of change in the sectoral structure of employment, the ratio of benefits to earnings, the union-non union wage mark-up, employer taxes and the ratio of import prices to domestic prices.

Some caution was expressed in Muellbauer (1986) about the possibility of some elements omitted from the Layard-Nickell story. In particular, it was hypothesized there, but without the benefit of any new empirical evidence, that the housing

market may have important effects on the labour market. There is a considerable literature on the effects of the imperfections of U.K. rented housing markets in restricting labour mobility (see Hughes and McCormick (1981, 1985) and the review in Minford et al (1987)) and hence in raising unemployment (see Hughes and McCormick (1987), and Minford et al (1987) for a comprehensive model).

This paper examines the interaction of labour and housing markets, including the owner-occupied sector, more generally. Implications are drawn for the behaviour of aggregate wages in the U.K. and for the relationship between aggregate unemployment and unfilled vacancies, which in part reflects mismatch between jobs and people. Our empirical evidence reveals that lagged regional house price/earnings differentials play an important role in both wage and unemployment/vacancies equations and that lagged average house prices have a significant cost-of-living effect on wages. Our evidence is also consistent with cross-section evidence on the effect of tenure structure on mobility and suggests that changes in tenure structure and the 1965 and 1974 Rent Acts have had important implications for labour markets. Altogether, a radically different view of the process of wage determination emerges from our work compared with Layard and Nickell (1986). Our evidence suggests that changes in unemployment and in sectoral mismatch are more important for wage pressure than are levels. This would appear to be consistent with arguments about the roles of insiders and outsiders in wage determination given by Blanchard and Summers (1986) and Lindbeck and Snower (1985, 1987).

Section 2 reviews the theoretical background on aggregate wage determination in sectoral labour markets. Section 3 provides empirical evidence on wages in the U.K. Section 4 estimates the corresponding unemployment/vacancies trade-off. Section 5 summarizes our empirical results, discusses their interpretation and draws conclusions.

2. Aggregate Wages and Sectoral Labour Markets

(a) The relation between wages, excess demands and the dispersion of excess demands

Hansen (1970) discussed the nature of wage adjustments when there are sectorally distinct labour markets. He concentrated on the response of the proportional rate of change of nominal wages to excess demands, given other determinants such as the rate of change of prices and productivity. Layard and Nickell (1985, 1986) find that for annual data a better formulation of the dependent variable is the deviation of the log real wage from the productivity trend. Let us call this variable w^* and apply Hansen's analysis to it.

Suppose that in the i th market

$$w_i^* = \alpha z_i + \beta x_i \quad (2.1)$$

where z_i is excess demand and x_i a combination of other factors such as the wedge between producer and consumer prices and proxies for union pushfulness. Then in aggregate

$$w^* = \alpha z + \beta x \quad (2.2)$$

By aggregation over a sectoral distribution of excess labour demands, one can show, like Hansen, that there exists a relationship between the aggregate z and aggregate unemployment u and σ , the sectoral dispersion of excess demands. This is illustrated in Figure 1 which also shows a similar relationship for aggregate unfilled vacancies v defined as the sum of positive excess demands. Since $z = z(u, \sigma)$ can be written as a decreasing concave function of u and an increasing function of σ , the aggregate wage equation (2.2) becomes

$$w^* = \alpha z(u, \sigma) + \beta x \quad (2.3)$$

However, it has long been suspected, see Hansen (1958) and Hansen (1970) footnote 8, that a given amount of positive excess demand exerts greater upward wage pressure than the same level of negative excess demand exerts downward wage pressure. This, indeed, is a major concern of the debate about unemployment hysteresis (see Blanchard and Summers (1986), Nickell (1987)) and is a basic feature of insider-outsider models of wage determination (see Lindbeck and Snower (1985, 1987)). Then the relationship of w^* to u will be:

$$w^* = F(u, \sigma) + \beta x \quad (2.4)$$

The wage response to unemployment will be even more concave than in (2.3) and the response to increases in sectoral dispersion or mismatch σ will be greater than in (2.3).

However, insider-outsider models and empirical evidence suggest that it is not only the levels but also changes in average excess demand z and mismatch σ which affect wage pressure. Then the arguments of (2.4) include $z(u, \sigma)$, $\Delta z(u, \sigma)$, σ , $\Delta \sigma$ which can be approximated by the set of arguments u , Δu , σ , $\Delta \sigma$.*

Economies differ, of course, in the degree to which they have sectorally distinct labour markets. Hughes and McCormick (1987), for example, have pointed out the remarkably higher level of regional mobility for manual workers in the U.S. compared with the U.K. and there are also likely to be mobility variations over time. Higher mobility levels should be associated with reduced wage pressure, other things being equal and one might also expect an interaction effect with the level and changes in regional mismatch so that the effect of regional elements of σ and $\Delta \sigma$ on wage pressure would be lower when mobility is higher.

(b) Measuring the dispersion of excess demands and of excess demand changes

Let us now consider the empirical implementation of these ideas. Layard and Nickell (1986) and Nickell (1987) suggest that, empirically, the concavity in the relationship between w^* , the deviation of the log real wage from the productivity trend, and the unemployment rate u is well represented by making w^* linear in $\ln u$, and $\Delta \ln u$ seems the natural way of representing the rate of change effect.

* Strictly speaking, $\Delta \sigma$ is not the change in mismatch but the sectoral dispersion of changes in excess demands.

Measuring σ which represents mismatch, i.e. the sectoral dispersion of excess demands, is difficult. If one knew the form of the unemployment/vacancies trade-off implied by Figure 1, for example $uv = h(\sigma)$ which Hansen (1970) regards as a good approximation, one could use it to obtain a proxy for σ , for example $(uv)^{1/2}$. But even with knowledge of the form of the trade-off, problems arise because of the well-known loops in the short run relationship between observed u and v for which there are various explanations, see for example Hansen (1970) and Holt and David (1966). Also, search theory suggests that vacancies respond to other factors such as unemployment benefit to wage ratios and our empirical evidence in Section 4 below supports this. Furthermore, observed vacancies are known to under-represent true vacancies although correction factors derived by Jackman, Layard and Pissarides (1984) and Roper (1986) can be applied.* These are all reasons why one may have doubts about whether an index such as $(uv)^{1/2}$ is an accurate measure of the level of mismatch.

Some of these doubts also apply to attempts by the researchers associated with the Centre for Labour Economics to construct indexes of mismatch from regional, sectoral and occupational data on vacancies and unemployment, see Jackman, Layard and Pissarides (1984), Layard and Nickell (1986),

* Nevertheless, even with such correction factors, observed official vacancies probably under-represent the upper ends of job markets where private advertising and job agencies play a bigger role. The evidence in the 1980's that higher earners have had above average rates of increases in earnings raises the suspicion that the under-representation of vacancies for higher paid workers in the official statistics on unfilled vacancies has increased.

Jackman and Roper (1987). Stock measures of mismatch, from the evidence in these sources appear to contain surprisingly little variation and to have little empirical success in contributing to the explanation of wage pressure.*

In some ways, measures of $\Delta\sigma$ or of shocks which increase mismatch, seem less problematic. Layard and Nickell (1985, 1986) and Nickell (1987) for example, call the absolute change in the proportions of workers in the industrial sector a proxy for mismatch, σ . Their measure or the standard deviation across industries of the change in each industry's employment percentage used by Bean and Gavasto (1988), make much more sense as measures of $\Delta\sigma$.

There is a persuasive theoretical case that a good proxy for the regional difference in demand shocks is the regional difference in the house price to wage ratio. This would be true even in a world of perfectly clearing markets. Suppose for example, in such a world that all housing were privately owned. A positive labour demand shock in one region, given an inelastic short run supply function of houses, drives up local house prices in the short run. It is likely that local house prices will increase relative to local earnings since housing demand is fuelled not only by the higher wages caused by the demand shock but by the new-comers potentially attracted to the locality and since house prices are close to being 'jump variables' like other asset prices. These house price increases also contribute to the regional multiplier effect of

* Though the latter could be in part because wage equations which lack changes in excess demand and changes in mismatch or more precisely, the sectoral dispersion of excess demand changes, are mis-specified.

the original demand shock. There is a wealth effect on local consumer expenditure and, perhaps even more important, a liquidity effect as consumer credit expands on the basis of higher house values as collateral.

With well functioning markets, housing supply eventually responds, partly because of new construction and partly because some residents, especially perhaps the retired, will be induced to realize capital gains and relocate to cheaper housing within the region or elsewhere. Also, with higher wages and housing costs in the locality, there will be a tendency for new jobs to be located and some existing ones relocated where workers and housing are cheaper, until a new equilibrium is reached. Thus, even if the original demand shock is not directly observed, this theory argues that it can be seen indirectly in an increase in the local house price/earnings ratio which, given the adjustment lags, could last for several years. It follows, given the original premise that increases in mismatch cause wage pressure, that even with well functioning housing markets, one would observe a positive association between wage pressure and the regional differential in house prices relative to earnings.

(c) The mobility interpretation of regional house price/earnings differences

However, models of interregional migration provide an alternative interpretation of such an association. Suppose again that there is a well functioning owner-occupied housing market. In a model of discrete choice of location by residents, see for example Greenwood (1975), Clark and van

Lierop (1986) and Harrigan, Jenkins and McGregor (1986), the probability of moves in each direction depends on utility comparisons in which higher earnings at a location encourage moves to that location while higher living costs, including higher house prices, discourage them. Since house prices are only part of the cost of living, such real earnings comparisons would give a higher weight to inter-regional log differences in nominal earnings relative to log differences in house prices.* However, in practice, many households are likely to be credit rationed with their mortgage ration a given proportion of their earnings. Since mortgage advances rarely cover the cost of a house fully, for such households, inter-regional log differences in nominal earnings would have a somewhat lower weight in comparing living standards in different locations than log differences in house prices.

There is some direct evidence on migration consistent with these ideas. Zabalza (1978) studied U.K. school teachers, who would have been less likely to be mortgage credit rationed than average households. For these, the coefficient on log differences in earnings exceeds that on house prices. For a time series of Scottish net migration, on the other hand, Harrigan, Jenkins and McGregor (1986) find the coefficients on log differences of earnings and house prices to be very similar to each other. In preliminary work on net migration for the South East we find a similar result and that the current log (house price/earnings ratio) is by far the most significant explanatory variable of the list of variables examined. This is consistent with a high proportion of

* More precisely, in the user cost of housing.

households being mortgage credit rationed. On p. 53-4 of the conclusions we spell out the mechanisms of 'the mobility trap' that arises when regional house price/earnings differences are high.

The kinds of equations for migration flows discussed above are, of course, structural equations in a larger system in which earnings and house prices are endogenous. In fact, on the earlier interpretation of regional house price/earnings differences as a proxy for relative regional labour demand shocks, one might well expect a positive association between net migration and the regional house price/earnings differences. This is so because, on this earlier view, the higher migration caused by the relative labour demand shock raises the house price/earnings difference. The finding in time series data, by Harrigan, Jenkins and McGregor (1986) for Scotland and by ourselves for the South East of a highly significant negative association and of no strong role for differences in rates of unemployment or of vacancies which, one might have thought, would be associated with relative labour demand shocks, is not encouraging for the view that regional differences in house price/earnings ratios are only proxies for regional differences in labour demand shocks.

In fact, we have evidence that changes in aggregate demand for housing in the UK alter regional differences in house price/earnings ratio. We suspect that because planning controls bite more fiercely in the South East, the supply elasticity of housing land is lower in the South East than elsewhere. Even a homogeneous increase in national housing

demand because of an increase in financial liquidity or the growth of real incomes will then raise house prices/earnings ratios by more in the South East than elsewhere.

(d) The cost of living interpretation of regional house price/earnings differences

So far, we have placed considerable weight on non-linearities in the response of the real wage to excess demand and changes in excess demand as an explanation for why σ and $\Delta\sigma$ are likely to be important determinants of wage pressure. It is rather plausible that a related phenomenon governs the role of the cost-of-living/producer price wedge which may interact with excess demand. The latter seems likely to take the form of a larger effect on wage pressure from an increase in the wedge in markets with greater excess demand for labour than in markets with smaller or negative excess demand. Regional variations in producer prices are likely to be small. Variations in housing costs are a major ingredient of regional variations in the cost of living. Also house prices are correlated with land prices more generally and the latter are likely to be an ingredient in the cost of locally provided retail and other services. Thus regional house price differences are likely to capture rather well regional differences in the cost-of-living/producer price wedge.

Thus, we have three interpretations of the regional difference in the house price/wage ratio in an aggregate wage equation. The first is as a proxy for regionally differentiated labour demand shocks. The second is as a negative incentive for interregional mobility. The third is

as a proxy for regional differences in the wedge. If the second and third interpretations are valid, we might also expect a positive interaction effect between this variable and a direct measure of the regional difference in labour demand shocks.

(e) Tenure structure, mobility and wages

Let us now turn to other aspects of housing. Minford et al (1987) review the very substantial body of research on housing tenure and labour mobility. These studies suggest that council house tenants are by far the least mobile and tenants in the private furnished sector, which is less subject to control by the 1965 and 1974 Rent Acts, are the most mobile. Hughes and McCormick (1981), studying the 1973 General Household Survey, find this to be confirmed even when controlling for socioeconomic characteristics of households. One can have some reservations about these findings. For example, 1972-3 experienced the pre-1988 peak of the house price/wage ratio in London and the South East. One imagines that pressure on council accommodation in London and the South East must have been intense and mobility particularly low. Indeed, their sample contains only seven migrant council tenants in all of Great Britain. These are rather few observations on which to estimate the effects of the socioeconomic variables. But even with a larger sample, as in the study of Scottish housing by Robertson (1979), one would expect sample selection bias to remain a problem resulting in an overestimate of the immobility caused by the institution of council housing. To the extent that council housing is

housing of last resort, for any measured socioeconomic characteristic, one would expect those with lower economic motivation, poorer health and those who have experienced more than their share of bad luck to be more likely to find themselves in council accommodation. Since such individuals are also less likely to be employable and mobile, part of the association of council house tenure with unemployment and immobility is probably due to this selection bias. However, we have little doubt that only a part is thus explainable*.

The greater the barriers to mobility, the greater the segmentation of labour markets and the greater is wage pressure, especially for unbalanced growth in labour demand. A mobility index can be derived from Hughes and McCormick's (1981) estimates (see their Table 7) of the predicted rates of migration associated with different tenure groups, weighted by the proportion of households in each group.** If we standardize on owner-occupiers,

MOB = (proportion of owner-occupiers + 0.31 proportion of council tenants + 3.20 proportion of furnished tenants + 1.23 proportion of private unfurnished tenants)

* There is evidence, see Minford et al (1987) p. 111-2, and Hughes and McCormick (1985) that, given the desire to migrate, frustrated migrants are particularly prevalent in the council house sector. Although self selection bias could still be a problem, it is likely to be smaller than in the context of the explanation of successful migration.

** However, instead of a relative migration rate of 0.16 associated with council house tenure, we have used double that figure. Preliminary work by Hughes and McCormick on Labour Force Survey data suggests that the 1973 GHS data did understate the regional mobility of council tenants, perhaps by a factor of 2.

This makes clear the respective migration rates of the different groups in 1973. This index would suggest that, in terms of mobility, roughly speaking, the decline in the private rented sector has been considerably offset by the rise in owner occupation (abstracting from variations in house price/wage ratios by region). The council housing sector has been the most stable, its share drifting up from about 27% in 1961 to around 32% in 1978 and drifting down since then. This mobility index reaches its low point around 1980 but with the declining share of council tenancy, has been increasing since then.

However, this mobility index suffers from major defects, the most serious of which is that it ignores the changes that resulted from the 1965 and 1974 Rent Acts. There had long been rent and tenure controls within the unfurnished sector. What the 1965 Rent Act did in this sector was to set up new machinery for rent and tenure regulation with 'fair rents' set by rent tribunals. The rent levels set were not as grossly far below market rents as were controlled rents. The 1974 Act aimed to extend this machinery of regulation to furnished accommodation, though property (whether furnished or not) with a resident landlord was largely relieved from regulation.

This suggests that a mobility index which takes tenure structure and the Rent Acts into account could be defined as follows:

$$\text{MOBR} = \text{MOB} + (\theta_1 \text{PCU} + \theta_2 \text{PRU} + \theta_3 \text{PUU} - \theta_4 \text{PUU} \times \text{pre 1965 dummy} - 1.23) \text{PU} - \theta_5 \times \text{post 1974 dummy} \times \text{PF}$$

where PCU = proportion of unfurnished tenants with controlled rents

PRU = proportion of unfurnished tenants with regulated rents

PUU = proportion of unfurnished tenants with unregulated, uncontrolled rents

PU = proportion of all households who are unfurnished tenants

PF = proportion of all households who are furnished tenants

and $\theta_i > 0$ all i . Also the inequalities $\theta_1 < \theta_2 < \theta_3$, where the θ_i are directly interpretable as migration rates, indicate that controlled tenants are less mobile than regulated tenants who are less mobile than unregulated, uncontrolled tenants.

However, it seems likely that the 1965 Rent Act reduced mobility even in the unregulated unfurnished sector because of the ever present threat of creeping regulation which would have reduced many unregulated rents below genuine free market levels. Thus, the pre-1965 migration rate in the uncontrolled unfurnished sector was $\theta_3 + \theta_4$ which fell to θ_3 as a result of the 1965 Act. The 1974 Rent Act would have had a similar effect on furnished accommodation so that the post-1974 migration rate for furnished tenants was $3.2 - \theta_5$. Indeed, in orders of magnitude one would expect θ_4 and θ_5 to be similar.

We also have a restriction on θ_1 , θ_2 and θ_3 . In 1973, $PCU = 0.295$, $PRU = 0.19$, $PUU = 0.515$ so that $0.295\theta_1 + 0.19\theta_2 + 0.515\theta_3 = 1.23$. Note that in 1973, $MOBR = MOB$ which is the Hughes and McCormick estimate. On p. 36-37 below we explain how the θ 's can be estimated.

Minford et al (1987) argue for what, in some respects, is a more sophisticated version of this mobility index. They attempt to estimate the gap between actual and free market rents in the different tenure groups and assume that relative migration rates are not merely proportional to but equal to the ratios of actual to free market rents in the different tenure sectors. Making a similar assumption for council tenants, they construct regional mobility indices for 1963-1979 based on this gap and on regional variations in council house tenancy. They try to explain regional unemployment rates with these indices together with regional unionization rates, measures of production relative to national production and the national unemployment rate in a time series/cross-section context. Though there is cross-section support for their theory, the effect of the mobility indices singularly fails to explain changes over time, see their Table 1, p. 19.*

The difficulties in measuring mobility are real enough. It may be, for example, that council mobility schemes, see Minford et al (1987), Appendix D, have had a varying impact

* One wonders whether the cross-section effect picks up mainly variations in the proportions of households in council houses. If so, there could be some reverse causation with the unemployed drifting into the available council accommodation. Alternatively, the old industrial areas where unemployment is now above average, may simply have inherited above average stocks of municipal housing.

over time. It is also possible that the major cuts in the council house building programme in the 1980's and lengthening council house waiting lists may have reduced mobility among council tenants. Also, there is some uncertainty over the impact of the 1980 Housing Act which introduced two new types of contracts, 'shorthold' and 'assured' tenancies with reduced security of tenure with the aim of revitalizing the private rented market. However, the evidence, see Minford et al (1987), Ch. 2, suggests that this aim has not, by the mid 1980's been achieved, though even before 1980 an increasing amount of new letting outside the Rent Acts under licence agreements or simply at 'black-market' rents seems to have been taking place, see Minford et al (1987), p. 102-5.

3. Empirical Evidence on Aggregate Wages

(a) The Layard-Nickell model

The basic structure to which we add our hypotheses about the effects of house prices and housing tenure is the Layard-Nickell model (1985, 1986) as further developed by Nickell (1987). This is a three equation system explaining employment, wages and the price level for the U.K. economy from the mid 1950s to 1983. It is based on a theoretical framework in which monopolistic competition prevails in product markets and at least some firms use normal cost mark-up pricing. In labour markets, explicit recognition is given to bargaining between employers and unions. This means that the level of both the cost of living and of product prices is relevant for wage determination and wage push factors play an important role.

We now summarise the latest version of the model for annual data expressed in logarithms. Labour demand, assumed equal to employment, is specified as a function of employment lagged one and two years, the capital stock, the lagged real product wage and of detrended aggregate demand which combines competitiveness, fiscal policy and world trade. The price equation specifies the GDP deflator relative to the wage as a function of the lagged dependent variable, wage surprises modelled as second differences of the current and lagged nominal log wage, the ratio of the capital stock to the aggregate labour force as a measure of productivity trends, the effective tax rate on profits and the lagged ratio of import prices to the final expenditure deflator. In the wage equation the dependent variable is the real product wage faced by firms. The measure of trend productivity is the same as in the price equation and its coefficient is subject to cross-equation restrictions. The other variables were summarized on p. 1 above.

There are two variants of the labour market activity variables which, according to Nickell (1987), yield satisfactory equations - see columns 2 and 3 in Table 1 of Nickell (1987). In his col. 2 a distributed lag of log unemployment appears with a maximum lag of 3 years. In his col. 3, current log unemployment is augmented by the proportion of unemployment over 52 weeks which, having a positive coefficient, offsets the negative effect of unemployment. Both equations represent the effect of unemployment hysteresis.

Our version of the latter equation estimated for 1958-1986 is shown in Table 1 column (i). The dependent variable w^* is the real product wage adjusted for a productivity trend.

$$w^* = [\ln W + \ln t - \ln \bar{P} + v \ln (P_m/\bar{P}) - 1.07 \ln (K/L)]$$

where W = male manual earnings corrected for overtime, \bar{P} = final expenditure deflator, v = import share, P_m = import price index, K = gross U.K. capital stock at mid-year, L = labour force. Thus, the first two terms measure the after tax labour cost, the next two measure the value added deflator, and the last term measures the productivity trend. The coefficient 1.07 is estimated as such by Layard and Nickell (1986) and Nickell (1987) and is mainly determined by the cross-equation restrictions in their full model. As they demonstrate, the estimate is robust to a wide range of specification changes in the wage equation. We imposed it primarily so as not to have to carry the burden of a three or four equation system with its cross-equation restrictions and an expanded list of instruments. t -tests of the restriction show it to be easily satisfied for each of the specifications of the wage equation we present.

The Nickell equation has a reasonably straightforward interpretation. The log transformation of the unemployment rate, $\ln u$, is consistent with the argument for concavity in the response of wages to unemployment discussed in the previous section. The ratio of long term unemployment,

u_{52}/u , suggests that high unemployment is less effective in holding down wages when much of it is long term. The real import price, $\ln(P_m/\bar{P})$, and labour tax, lt , terms are part of the wedge between producer prices relevant for firms and consumer prices relevant for workers. The rate of change of real import prices and the labour tax term are, however, not significant in this sample. Here, as elsewhere in Table 1, we have included a 1980 dummy. This represents the unprecedented increase in 1979-80 in indirect taxation, which ought to be part of a temporary wedge effect and is not explicitly modelled by Layard and Nickell. The benefit to wage ratio, BW , is relevant for wage bargaining or for labour supply as it represents alternative opportunities for the unemployed. Union power, $\ln Up$, needs no discussion. The change in mismatch as measured by the absolute change in the ratio of employment in industry and construction to total employment looks somewhat out of place, though Layard and Nickell call it 'mismatch'. It makes better sense in the framework sketched in the previous section where both levels and changes in excess demand and so in mismatch play a role. It is also more consistent with Nickell (1987), Table 1, column 2 which suggests that there are rate of change effects in the unemployment rate.

(b) Variations on the Nickell wage equation

Such effects are confirmed in our Table 1, column (ii) which incorporates the three year rate of change of unemployment and represents the levels effect as a two year moving average. The change in mismatch here is also a two

TABLE 1

Real product wage equations estimated by IV for 1958-1986

	(i)	(ii)	(iii)	(iv)
* $\ln u$	-0.092 (4.0)	-	-	-
* $M_2 \ln u$	-	-0.031 (1.4)	-0.029 (2.4)	-0.022 (3.1)
* $\Delta_3 \ln u$	-	-0.058 (5.7)	-0.058 (3.9)	-0.065 (7.3)
* u_{52}/u	0.161 (2.0)	0.008 (0.1)	-	-
* lt	0.157 (0.8)	0.129 (0.6)	-	-
$v \ln(Pm/\bar{P})$	0.612 (2.8)	0.444 (2.2)	0.357 (1.7)	0.076 (0.5)
$\Delta v \ln(Pm/\bar{P})$	0.090 (0.5)	-0.080 (0.4)	-0.074 (0.4)	0.079 (0.6)
* DMM	0.048 (3.3)	-	-	-
* M_2 DMM	-	0.065 (5.1)	0.064 (2.5)	0.054 (3.8)
* BW	0.265 (1.9)	-	-	-
$M_2^{BWA}_{-1}$	-	0.268 (2.2)	0.263 (2.5)	0.023 (0.3)
* $\ln Up$	0.038 (3.4)	-	-	-
$M_2 \ln UD_{-1}$	-	0.026 (0.4)	0.087 (1.8)	0.108 (3.8)
$\Delta_2 w^*_{-1}$	-	-	0.074 (0.5)	-0.110 (1.6)
DDW^*_{-1}	-	-	-0.142 (0.9)	-0.134 (1.4)
$\Delta \ln(P^*/\bar{P})_{-1}$	-	-	0.052 (0.9)	0.043 (1.3)
D80	0.007 (0.4)	0.001 (0.1)	0.001 (0.1)	0.014 (1.8)
$M_2^{HPW}_{-2}$	-	-	-	0.202 (3.1)
$M_3^{RD}_{-1}$	-	-	-	0.487 (3.1)
SE	0.0139	0.0104	0.0105	0.0056
\bar{R}^2	0.7283	0.8483	0.8486	0.9559
SSE x 100	0.3678	0.1965	0.1885	0.0473
DW	1.719	1.727	1.749	2.318
no. of observations	29	29	29	29
no. of instruments	17	18	17	18

Notes: M_3 indicates a 3 year moving average i.e.

$M_3 x_t \equiv \frac{1}{3}(x_t + x_{t-1} + x_{t-2})$, M_2 a 2 year moving average and

$\Delta_i x_t \equiv x_t - x_{t-i}$. u = male unemployment rate, u_{52}/u =

share of long term unemployment in total unemployment, lt =

labour tax rate, v = share of imports, P_m = import price

index, \bar{P} = final expenditure deflator, DMM = ' Δ mismatch' =

absolute change in employment share of industry and

construction, BW = benefit/wage ratio, BWA = adjusted

benefit/wage ratio, Up = union/non-union wage mark-up, UD =

union density, $DDW_{-1}^* = \Delta w_{-1}^*$ until 1979 and zero thereafter,

P^* = world price level so that P^*/\bar{P} measures competitiveness,

HPW = weighted, normalized $\ln(HP/W)$ where HP = index of

U.K. house prices, RD = weighted, normalized South East/U.K.

difference in $\ln(HP/WN)$ where WN = earnings of non-manual

males. Dependent variable

$w^* = \ln W - \ln \bar{P} + lt + v \ln(P_m/\bar{P}) - 1.07 \ln(K/L)$ where W =

male manual wage, K = mid year capital stock, L = labour

force.

year average. The joint effect of these changes is a considerable improvement in fit.

There are two more specification changes in column (ii) requiring comment. The Layard-Nickell measure of the benefit/wage ratio BW soars from 0.458 in 1980 to 0.544 in 1983, its all time peak, at a time when policy was not becoming notably more generous to the unemployed. It is very plausible that the increase in the male unemployment rate from 8.7% to 17.2% in these three years was associated with higher benefits because a larger fraction of the unemployed had contributions records or commitments which made them eligible for higher benefits. This can be demonstrated more formally by the very significant unemployment effect found when fitting by instrumental variables BW as a function of u , a dummy for the 1965-1970 period of Labour government and a post 1966 dummy to take account of the introduction of Supplementary Benefits (and, to a lesser extent, the earnings related supplement). Interestingly, replacing u by its lagged value gives a coefficient and t-statistic which are only marginally lower, confirming that causation is not running in reverse. The adjusted series is defined by $BWA = BW - 0.39 u$ which adjusts for this measurement error and we use its lagged two year moving average.

An analogous problem affects the Layard-Nickell measure of the union/non-union mark-up which experiences its largest one year jump in 30 years from 0.058 in 1979 to 0.128 in 1980 and to 0.147 in 1981. This is wildly implausible and is explainable by problems arising in the construction of the

mark-up.* Given these problems, we have used log union density, $\ln UD$, in its stead. This peaks in 1978 and then declines to about its 1970 level by 1986. It appears to us a less implausible proxy for union power and it enters the wage equation as a lagged two year average.

In column (iii), we have also dropped the long term unemployment ratio and the labour tax rate and have introduced three new variables. One is the two year rate of change in the lagged dependent variable, $\Delta_2 w_{-1}^*$. This has a negative feedback role which we interpret as follows. An upward shock to nominal wages results in a short run increase in the real wage but as prices adjust with a lag, the real wage then tends to drop back over the following two years, other things being equal. Similarly, an upward shock to the price level results in an initial fall in the real wage, followed by a recovery after nominal wages adjust. By the same token, we should expect to find negatively autocorrelated residuals to the extent that $\Delta_2 w_{-1}^*$ imperfectly measures these shocks.

An analogous variable we interpret as the incomes policy feedback term DDw_{-1}^* . This is defined as Δw_{-1}^* up to and including 1979 and zero thereafter. The logic behind it is that income policies, which have been pervasive in the post-war period until 1979 have a temporary negative feedback

* It is based on a union density coefficient in annual cross-sections of manual wages by SIC groups. However, the effects of differences in skill and age across these groups are measured from the 1971 Census which will have become increasingly unrepresentative, especially after the shake-out of 1980-82. With a widening earnings distribution in the 1980's, we suspect that union density may be picking up skill and experience effects thus biasing upward the estimated union mark-up.

effect. Thus, an increase of real wages substantially above the productivity trend, has typically been followed by income policies coming on and slowing real wage growth. Conversely, temporarily successful incomes policies have tended to be followed by bouts of more rapid growth. The third variable is $\Delta \ln(P^*/\bar{P})_{-1}$ which is a measure of last period's competitiveness shock. The argument here is that an improvement in international competitiveness because, for example, of Sterling's depreciation tends to directly reduce competitive pressure on firms to pay moderate wage increases. This is an effect which operates in addition to the unemployment reducing effect of such a competitive improvement.

(c) Wage equations with house price and mobility effects

In Table 1, column (iv) we have included our two house price/earnings ratios. The first of our house price/earnings ratios, HPW, has a conventional wedge interpretation.

$$HPW_t = p_{0t} (\ln(HP/W)_t - \ln(HP/W)_{61/2})$$

where p_0 is the proportion of households who are owner occupiers and HP is a mix adjusted index of U.K. house prices and the 61/2 subscript indicates the average value for 1961/2. We take this as the 'normal' value and thus normalize HPW. HPW enters as a 2 year moving average and at a 2 year lag, suggesting that the cost of living effects of house prices take a long time to feed through.

The second of these variables, RD, is defined as follows:

$$RD_t = \rho_t \left[(\ln(HP_{SE}/WN_{SE})_t - \ln(HP_{SE}/WN_{SE})_{61/2}) - (\ln(HP/WN)_t - \ln(HP/WN)_{61/2}) \right]$$

where the SE subscript refers to the South East and WN is average male non-manual earnings. WN is more representative of the upper part of the earnings distribution than its manual equivalent. The regional difference RD is thus a measure of the gap between the house price/earnings ratio in the SE and the U.K. average and is weighted and normalized like HPW. Figure 2 shows how the current values of HPW_t and RD_t have varied between 1955 and 1987. In column (iv), RD enters as a lagged three year moving average. The improvement in fit compared with column (iii) is dramatic.

So far, we have not incorporated the effects of variations in mobility that come from changes in the tenure structure and from the effects of the two Rent Acts. Section 2 explained how such a measure which we call MOBR was constructed. It also plays an important role in our equation relating unemployment to vacancies which is discussed in Section 4 where the estimation of the θ parameters in the mobility index is explained. Table 2 shows estimates for wage equations estimated jointly with an unemployment/vacancies equation by three stage least squares with the non-linear cross-equation restrictions on the θ parameters imposed.

The equation standard error, adjusted R-squared and the (absolute) t-statistics are adjusted for degrees of freedom to make them comparable with those in Table 1.

Column (a) of Table 2 shows the full sample estimates which show a negative mobility effect on wages with a t-ratio of 2.8. In this specification, the replacement ratio and the level of real import prices were insignificant and so omitted. The two house price/earnings effects with t-ratios of 7.0 and 6.2 are quite precisely determined. Of our explanatory variables, the least precisely estimated effect is that of the previous year's competitiveness shock with a t-ratio of 1.7.

Column (b), Table 2 shows the estimates when dummies for 1980-86 are included. The associated parameters measure the forecast residuals when the model is estimated up to 1979 and the t-ratios reveal any significant deviations. This specification performs well and the point estimates of the parameters are all within one standard error of those shown in column (a). This is so even for the unemployment levels effect whose pre-1979 range of variation is much lower than over the full sample.

Column (c) shows the results when, instead of dummies for 1981-86, dummies for 1973-5 are included. Note that the peak regional house price/earnings differential occurred in 1972. Given the effect of a three year moving average lagged one year, the dummies for 1973-5 thus remove the effect of this spike in the data. This was also the period of the first oil shock and so taking out these observations is a stringent test of the parameter stability of the model. The model survives this test extremely well: the 1973-75 dummies are quite

TABLE 2

Stability tests for selected real product wage equation

	(a)	(b)	(c)	(d)
* $M_2 \ln u$	-0.022 (6.7)	-0.023 (1.9)	-0.024 (4.0)	-0.024 (5.7)
* $\Delta_3 \ln u$	-0.074 (15.5)	-0.077 (10.6)	-0.075 (11.7)	-0.075 (12.2)
* $M_2 \text{DMM}$	0.056 (4.5)	0.065 (7.4)	0.058 (6.9)	0.056 (7.1)
$M_2 \ln \text{UD}_{-1}$	0.10 (6.1)	0.10 (2.1)	0.11 (4.4)	0.12 (5.6)
$\Delta_2 w_{-1}^*$	-0.14 (2.9)	-0.15 (2.1)	-0.13 (2.2)	-0.13 (2.1)
DDW_{-1}^*	-0.20 (3.5)	-0.23 (3.2)	-0.22 (3.1)	-0.22 (3.0)
$\Delta \ln(P_m/\bar{P})$	0.12 (2.1)	0.14 (1.9)	0.14 (1.0)	0.12 (1.6)
$\Delta \ln(P^*/P)_{-1}$	0.04 (1.7)	0.05 (1.3)	0.05 (1.5)	0.04 (1.4)
$M_2 \text{HPW}_{-2}$	0.23 (7.0)	0.22 (5.3)	0.23 (4.5)	0.23 (5.4)
$M_3 \text{RD}_{-1}$	0.60 (6.1)	0.50 (3.6)	0.58 (3.2)	0.60 (4.8)
$M_3 \text{MOBR}_{-1}$	-0.060 (2.8)	-0.057 (1.8)	-0.064 (1.7)	-0.052 (1.6)
$\frac{se}{R^2}$	0.004628	0.004887	0.005010	0.004071
SSEx100	0.9698	0.9662	0.9645	0.9702
DW	0.03427	0.03104	0.03264	0.02321
DW	2.53	2.66	2.54	2.04
no. of observations	29	29	29	27
no. of instruments	19	25	22	20
D73	-	-	0.003 (0.2)	-
D74	-	-	-0.004 (0.3)	-
D75	-	-	0.001 (0.0)	-
D80	0.015 (2.6)	0.014 (1.8)	0.015 (2.3)	0.012 (1.7)
D81	-	-0.006 (0.6)	-	-
D82	-	-0.006 (0.7)	-	-

(Table 2 continued)

	(a)	(b)	(c)	(d)
D83	-	-0.004 (0.3)	-	-
D84	-	-0.004 (0.3)	-	-
D85	-	0.001 (0.0)	-	-
D86	-	-0.003 (0.2)	-	-

Notes: see Table 1.

* indicates endogenous variable

insignificant and all the parameter estimates are easily within one standard error of the full sample estimates. It is worth noting that the international competitiveness effect, though not very precisely determined, is very stable across all three samples.

According to the theory sketched in section 2, there should also be interaction terms with regional differences in labour demand shocks. The best such measure that we have been able to discover is $\Delta^2 \ln(N_{SE}/N)$, the rate of acceleration of the log ratio of employment in the South East to U.K. employment. Experimenting with lags of this variable and in interaction with our two mobility related variables produced only the trace of an effect, not significantly different from zero.

Although parameter stability and theory consistency are excellent for the Table 2, column (a) to (c) specification of the wage equation, one might at first sight be concerned over the negative residual autocorrelation. While an LM test for first order autocorrelation is insignificant, combined first and second order negative autocorrelation are clearly present, with the partial second order autocorrelation coefficient somewhat larger than the first. Our interpretation is that we have a moving average error structure of the form $\epsilon_t - \frac{1}{2}(\epsilon_{t-1} + \epsilon_{t-2})$ where ϵ_t is a white noise disturbance. This corresponds to the idea that an unexplained nominal wage shock initially raises the real wage but that, over the following two years, prices adjust to eliminate the real effect. The effect of an initial nominal price shock is

parallel. The residual autocorrelation, strictly speaking, makes invalid our $t-1$ instruments used in computing the estimates in columns (a) to (c). However, in such a well fitting equation, the biases in the parameter estimates should be small. In column (d) we report the results of re-estimating the model for 1960-1986 using an iterative procedure. In this we subtract $\frac{1}{2}(e_{t-1}^{(i)} + e_{t-2}^{(i)})$, where $e^{(i)}$ is the residual at the i th iteration, from the right hand side of the wage equation at the $(i+1)$ th estimation of the system. One can show that this produces consistent estimates of the ϵ 's if one starts the iterations with a consistent estimate of the parameter vector. We do not, but as noted above, the bias is unlikely to be large. This conjecture is supported by the fact that this iterative procedure quickly converges, that no trace of residual autocorrelation remains in the transformed equation and by the similarity of the parameter estimates in column (d), based on the 10th iteration, and those in column (a), despite the fact that column (d) is based on a slightly shorter sample.

(d) Alternative hypotheses

We also examine a number of alternative hypotheses. One possibility which has been suggested to us is that a high regional difference in the house price/earnings ratio and a high average house price/wage ratio is merely a symptom of private sector liquidity and that it is this which drives up real wages. However, including lags at $t-1$, $t-2$ and $t-3$ of real PSL2 in the specifications in Table 1 and Table 2 including house price variables produced nothing significant

even with the most parsimonious form of a real PSL2 effect. However, the rate of change of real PSL2 has important effects on house prices. So it is not surprising that there are significant lagged real PSL2 effects on wages when house prices are omitted from the wage equation.

It can be argued that the house price/wage variables are a proxy for inflationary expectations which also drive wage demands. A sensitive indicator of inflationary expectations is the consols yield. Let us posit that the consols yield equals a constant real interest rate plus the expectation of inflation over an appropriate horizon plus a factor depending on the U.S. long bond yield. This generalizes the traditional 'Fisher equation'. If we enter lags at $t-1$, $t-2$ and $t-3$ of the U.K. consol yield and the U.S. long bond yield into the specifications in Table 1 which exclude house price/wage ratios, we find a strongly significant effect in the form $\Delta_2 \text{ consol yield}_{-1}$. However, this becomes totally insignificant in the context of Table 2.

Finally, Carruth and Oswald (1986) have suggested profits as 'the missing variable' in the Layard-Nickell model. Using a modified form of the Layard-Nickell model they find a significant positive coefficient on $\ln(\text{RP}/\text{K})_{t-2}$ where RP is real company profits and K is the capital stock. We could find no significant effects. Given the identification problem in separating productivity from profit rates, this does not surprise us greatly and does not mean that profits are irrelevant to wage bargaining.

4. Empirical Evidence on Unemployment and Job Vacancies

One of the consequences of restricted labour mobility is increased mismatch in the labour market and this should be reflected in a higher level of aggregate vacancies for a given level of aggregate unemployment. Before the mid 1960s there seems to have been a fairly stable trade-off in the U.K. between unemployment and vacancies: as unemployment fell so job vacancies generally rose, though anti-clockwise loops in the u-v relationship suggest the presence of some short-run dynamics. Beginning in the second half of the 1960s, it appears that major outward shifts in the u-v relationship took place, generating much controversy about the causes.

As far as the theory of the u-v relationship and shifts in it is concerned, there are two main strands in addition to Holt and David's (1966) clarification of how vacancies fit with stocks and flows more generally in the labour market. In one strand, discussed in section 2 above, the u-v relationship is a consequence of aggregation across sectoral labour markets in various states of excess demand and excess supply. Reduced labour mobility, an increase in the shocks to which individual sectors of the economy are exposed and shifts in demography are then all elements in increased mismatch and so in u-v shifts. In the other strand of the literature, associated with Phelps (1970) and finding a most systematic expression in Pissarides (1985), vacancies and unemployment are seen as a consequence of the imperfect information held by individual agents. Workers search for jobs and firms search for workers

to fill particular job slots. The longer that searching, unemployed workers hold out for a satisfactory offer of a job package embodying wages and other conditions, the larger the number of aggregate vacancies and unemployed workers which can co-exist. One possible cause of an outward shift in the u-v relationship would be an increase in the ratio of unemployed benefits to wages since this would enable an unemployed worker to search longer in the hope of finding a satisfactory offer.

No doubt there are elements of truth in both strands in the theoretical literature. As far as controversies about the behaviour of vacancies in the U.K. are concerned,* another important ingredient has been the question of systematic measurement errors in the vacancy and unemployment statistics. It is believed that officially recorded vacancies represent only about one third of total vacancies. Jackman, Layard and Pissarides (1984) have suggested a method of estimating the proportion by measuring the average of the ratios of vacancy inflows to separations (i.e. the number of workers leaving jobs) and vacancy outflows to engagements. As long as the ratio of durations of official and unofficial vacancies does not alter, the adjusted vacancies series that results is at least proportional to true total vacancies. Following Layard and Nickell (1986), we use an adjusted vacancies series. Similarly, we use their unemployment definition which refers to prime aged men and has been adjusted for the many definitional changes that have taken place since 1979.

* These controversies, as well as the basics of the theoretical background, are well reviewed by Roper (1986).

Chart 3 displays the empirical relationship between $\ln u$ and v for 1955-1986. We choose $\ln u$ since visually its relationship with v approximates linearity more closely than does the relationship of u and v .^{*} The graph suggests that the much discussed outward shift in the u - v curve around 1966-8 did indeed take place. There seem to have been further shifts in the mid 1970s and since 1981. Subject to these shifts, there is some evidence of anti-clockwise loops.

Estimates of our model are given in Table 3, whose columns are labelled similarly to those of Table 2. These are the 3SLS estimates corresponding to those in Table 2, and the equation standard errors and t -ratios have been corrected for degrees of freedom. The loops are reflected in the lagged values of v and $\ln u$. $M_3 Y0_t$ is a moving average of $Y0_t$, the change between t and $t+1$ in the number of people in the population aged 20-24 deflated by the labour force as defined by Layard and Nickell (1986). Somewhat analogous variables were used by Foster (1974) and Bewley (1979) on the hypothesis, clearly supported here, that increased flows of inexperienced and often unskilled young people into the labour force increase unemployment without reducing vacancies by very much. The moving average of the lagged adjusted benefit/wage ratio BWA is also significant, supporting the search hypothesis discussed above.

* Empirical evidence using the Box-Cox transformation tends to confirm this.

The housing variables enter in the form of the same lagged moving average of the regional difference in the house price/earnings ratio which appears in the wage equation and the same index of mobility MOBR based on the prevailing housing tenure structure and incorporating the effects of the Rents Acts. Let us examine the estimation of the parameters in MOBR in detail. As explained on p. 15-16 above, for the five θ_1 parameters we have one exact and one approximate equality restriction and a number of inequality restrictions. The parameters θ_4 and θ_5 are associated with pre-1965 and post-1974 dummies respectively and given the risk in aggregate time series of picking up spurious effects through dummies, we decided to impose the restriction $\theta_4 = \theta_5$. This means that the reduction in mobility in the unregulated, uncontrolled parts of the unfurnished and furnished sectors caused by the two Rent Acts is assumed to be the same in each sector. The point estimate is 1.5. This implies that the relative migration rate of 3.2 before the 1974 Rent Act in the furnished sector fell to 1.7 as a result of the Act.

It is highly implausible that in the uncontrolled, unregulated unfurnished sector, migration would have been greater than in the unregulated furnished sector i.e. $\theta_3 + \theta_4 \leq 3.2$. In the event, this restriction proved to be binding and so we imposed it. Since $\theta_4 = 1.5$, this gives $\theta_3 = 1.7$. We know that $0.295\theta_1 + 0.19\theta_2 + 0.515\theta_3 = 1.23$ in order to reproduce the 1973 estimate of a relative migration rate in the unfurnished sector of 1.23. The point estimate of θ_2 is 0.8 but is very imprecisely determined with a standard error of 0.6. $\theta_2 = 0.8$ implies $\theta_1 = 0.69$ which

seems to us a little high, implying little difference between the migration rates in the regulated (θ_2) and the controlled (θ_1) unfurnished sectors. A value of $\theta_2 = 1$ implies $\theta_1 = 0.55$ and that seems to us more plausible. Since $\theta_2 = 1$ is easily acceptable statistically, we imposed this restriction. Given all these restrictions, the effect of the mobility index as a whole on the u/v trade off is quite precisely determined with a coefficient of -2.02.

Figure 4 gives a visual impression of the contribution of this mobility index and of the other determinants of the position of the u/v curve using the Table 3, col. (d) estimates. The position of the u/v curve adjusted for loops can be defined as $\ln u + 27.8v + 8.3v_{-1} - 0.49 \ln u_{-2}$ and this is shown in panel (a). Panel (b) shows the contribution of the mobility index, $-2.02 M_3 \text{MOBR}_{-1}$. Note the declining effect (i.e. increasing mobility) from 1958-1965 as the controlled unfurnished sector shrank and owner occupation expanded, followed by a substantial reversal after the 1965 Rent Act. The slight increase in estimated mobility since 1983 seems to be the result of the declining share of the council house sector. Panel (c) shows the contribution of the regional house price/earnings difference $13.0 M_3 \text{RD}_{-1}$. In the early 1960's this offsets the mobility increases resulting from housing tenure changes. The expansion of owner occupation was then accompanied by substantial increases in RD. Panel (d) shows the effect of demographic change as measured by $26.6 M_3 \text{YO}$. Since the late 1960's, it and RD have dominated the position of the u/v curve, according to our estimates. Note the trough in 1972-3 in the entry of young

TABLE 3

The unemployment/vacancies trade-off for 1958-1986. Dependent variable is $\ln u$

	(a)	(b)	(c)	(d)
* v	-27.9 (35.1)	-26.6 (16.8)	-26.7 (20.4)	-27.8 (32.6)
v ₋₁	-8.1 (13.3)	-7.9 (9.6)	-8.1 (8.1)	-8.3 (10.1)
lnu ₋₂	0.48 (30.6)	0.42 (6.4)	0.48 (27.6)	0.49 (27.8)
M ₃ YO	26.9 (14.4)	22.9 (4.12)	23.8 (8.3)	26.6 (13.0)
M ₃ BWA ₋₁	0.69 (2.68)	0.47 (1.3)	0.31 (0.8)	0.70 (2.50)
M ₃ RD ₋₁	12.9 (20.0)	11.2 (6.5)	13.8 (15.7)	13.0 (17.9)
M ₃ MOBR ₋₁	-2.04 (17.4)	-2.01 (15.5)	-2.21 (13.0)	-2.02 (12.7)
θ ₄	1.50 (50.4)	1.42 (15.7)	1.48 (44.3)	1.51 (45.1)
se	0.02617	0.02590	0.02617	0.02784
R ²	0.9989	0.9989	0.9989	0.9989
SSE	0.01302	0.00872	0.01096	0.01318
DW	2.30	2.81	2.13	2.27
no. of observations	29	29	29	27
no. of instruments	19	25	22	20
D73	-	-	0.003 (0.2)	-
D74	-	-	-0.004 (0.3)	-
D75	-	-	0.001 (0.0)	-
D80	-0.10 (3.4)	-0.07 (1.7)	-0.09 (2.3)	-0.10 (3.1)
D81	-	0.05 (1.0)	-	-
D82	-	0.06 (0.9)	-	-
D83	-	0.05 (0.6)	-	-
D84	-	0.06 (0.7)	-	-
D85	-	0.10 (1.0)	-	-
D86	-	0.14 (1.3)	-	-

Notes: u = male unemployment rate, v = adjusted vacancy rate, YO = new labour market entrants/labour force, BWA = adjusted benefit/wage ratio, RD = weighted, normalized South East/U.K. differences in $\ln(\text{HP}/\text{WN})$ where WN = earnings of non-manual males, HP = house price index, MOBR = mobility index based on housing tenure and Rent Act provisions.

M_i denotes moving average of order i .

* indicates an endogenous variable

people into the labour market with peaks in the late 1960's and in the early 1980's. In 1987 and 1988 a further decline in the entry of young people will partly offset the strong upward shift in the u/v curve coming from RD. The variations in the benefit/wage ratio, also shown in panel (d), were a relatively minor influence.

One surprising feature of our results is the absence of a significant effect from the change in mismatch which was quite strong in the wage equation. We suspect that, in part, this may be a consequence of shocks in wages and in demand. Such shocks have a more immediate influence on vacancies than on unemployment so that an upward wage shock or a negative demand shock drives down vacancies faster than it pushes up unemployment, resulting in a temporary negative unemployment residual. Evidence for this view comes from the negative correlation of residuals from the u/v equation with residuals from the wage equation and with labour demand shocks such as the rate of acceleration of world trade. If such shocks also increase the change in mismatch, it would be hard to pick up a positive effect from the change in mismatch. The biggest of these shocks occurred in 1980 when the biggest increase in indirect taxation in the post war period, large public sector wage settlements, a tight monetary and so competitiveness squeeze and tight fiscal policy all coincided. We have included a 1980 dummy to pick up this effect in the u/v equation but even this is not sufficient to give a significantly positive effect from the change in mismatch. Nevertheless, the evidence from LM tests of residual autocorrelation and the stability tests shown in Table 3 are satisfactory.

5. Summary and Discussion

(a) A summary of the empirical findings

The account of wage determination which arises from our work is strikingly different from that in Layard and Nickell (1986) though it supports the emphasis on unemployment hysteresis in Nickell (1987). The main points can be summarized as follows.

- (1) The deviation of the real product wage from the productivity trend is more responsive to changes than to levels of unemployment, though there is a significant levels effect. This is consistent with hysteresis and most accounts of insider-outsider theory.
- (2) Given our sectoral labour markets framework, it follows that if changes in excess demand are important then so will be changes in mismatch, or more precisely, the sectoral dispersion of excess demand changes. This is precisely what our evidence indicates.
- (3) On mobility, we have evidence that wage pressure is related to an index of mobility based on the tenure structure of housing derived from Hughes and McCormick's (1981) cross section evidence and from the effects of the two Rent Acts. However, in the last 20 years, variations in the lagged regional house price/earnings difference have been quantitatively more important.

- (4) It is probable that the regional house price/earnings difference also represents the greater power of workers in areas of higher labour demand to obtain compensation for the higher local cost of living. It may also, in part, be a proxy for regional differences in labour demand shocks.
- (5) However, there are two strong pieces of evidence to suggest that this proxy role is unimportant and that the mobility factor is important. One is the decisive role of the regional house price/earnings difference in determining net regional migration. The other is the important role of macroeconomic variables such as income growth, liquidity growth, interest rates and demographics relative to regionally specific labour demand variations in determining the regional house price/earnings differences.
- (6) Average house prices in the U.K. appear to be a significant part of the 'wedge' between the cost-of-living and producer prices. However, our evidence suggests that Layard and Nickell (1986) and Nickell (1987) have overestimated the real raw material price and labour tax components of the wedge. The former we find has only a temporary effect and the latter none at all.
- (7) We find union power to have an important and strongly significant effect on wage pressure, though empirically union density out-performs the theoretically more

satisfying union/non-union mark-up. We suspect that this is because of deficiencies in estimates of the latter in the 1980s.

- (8) We find negative feedbacks from the lagged two year rate of change of the real wage and before 1980 from the lagged one year rate of change. We interpret the latter as an incomes policy effect, being consistent with the notion that incomes policy, abolished in 1979, only had transitory effects. The former, we argue reflects the lagged response of wages to price shocks and prices to wage shocks which also appears as a negative feedback to unexplained real wage shocks in the previous two years.
- (9) We find traces of a direct effect from international competitiveness on real wages.

A visual impression is given in Figure 5 of the quantitative contribution of the different terms, to the dependent variable, w^* shown in panel (a). w^* is the manual wage deflated by a price deflator for value added and is adjusted for trend productivity growth. Note that vertical distances in Figure 5 when multiplied by 100 give percentage deviations of w^* and that each panel is on the same scale. Panel (b) shows the combined effect of the level and rate of change of unemployment and of the change in mismatch weighted by their respective coefficients estimated in Table 2, column (d). Panel (c) illustrates the effect of union density and the mobility index and panel (d) that of the combined effect

of the two house price/earnings measures. The level of unemployment and, even more so its rate of change had a major effect on the real wage though the increase in mismatch in the early 1980s offset the downward pressure to a remarkable degree. The net result was only very modest downward pressure on the productivity trend adjusted real product wage.

Similarly, union density is a major influence on the real manual wage: the increase from the mid 1960's to the peak at 1979 implies a 3.6% increase in the real wage. The recent increases in the house price/earnings measures shown in Figure 2 imply a 4.4% increase in the real wage over the period 1984-1988. But the decline in union density and an unemployment level which still remains high, have offset much of this upward pressure. However, the speed of the decline in unemployment in 1987 and 1988 will negate some of this offset.

In the unemployment/vacancies trade-off we find supporting evidence on the role of the regional house price/earnings differential and the measure of mobility based on housing tenure. We also find positive effects from the proportion of young entrants in the labour market and from the benefit to wage ratio, as predicted by search theory. See Figure 4 above for a visual display of the main determinants of the position of the u/v curve. Since the late 1960's these have been the regional difference in the house price/earnings ratio and the rate of inflow of young people into the labour force.

The joint evidence from the two equations is consistent with our theoretical interpretations. We have also subjected these equations to a battery of specification tests and tests

of alternative hypotheses. They pass these tests remarkably well. This is so even for the wage equation which fits so well compared with earlier work in the field. It is also clear that the importance of the house price variables is robust to the removal of the various elaborations and sophistications embodied in the final wage equation.

(b) The validity of our interpretation

Let us turn now to the issue of the validity of our interpretation of these results. In our research on the determinants of UK house prices, see Muellbauer and Murphy (1988), we find that the house price/wage ratio in the steady state depends on real personal disposable income, the stock of owner occupied housing, on after tax real interest rates and on the steady state growth rates of per capita real disposable income and of real personal sector liquidity. In the dynamics we also find evidence for an increased liquidity response after 1981 and a response to the entry of the banks into the mortgage market which, after 1981, effectively ended mortgage rationing. There are also demographic and net external migration effects, and a negative response to past overshooting of house prices relative to nominal income. We also find evidence of extrapolative expectations in that the lagged real own rate of return (house price inflation minus the tax adjusted interest rate) has a positive effect on current house price increases.

There are similar factors at work on the difference between the South East and the U.K. in the house price/non-manual male earnings ratio. In the dynamics, similar

aggregate demographic and external net migration effects, a liquidity effect, a response to the entry of the banks into the mortgage market, a positive response to the aggregate current and lagged real own rate of return in housing and a negative response to past overshooting of aggregate house price relative to nominal income are present. There is also a differential labour demand shock effect but it explains only a small part of the variance, despite our searching long and hard for variables that would enhance the size of this effect.

These results amply demonstrate the role of aggregate housing demand variables in explaining regional differences in house price/earnings ratios. Direct evidence on migration by Zabalza (1978), the work on Scottish migration by Harrigan, Jenkins and McGregor (1986) and our own preliminary investigations of net migration for the South East further supports our mobility interpretation of the regional difference in the house price/earnings ratio. It is therefore very hard to accept the proposition that regional differences in house price/earnings ratios are merely symptoms of regionally differentiated labour demand shocks. This is not to say the latter play no role, however.

Some sceptics have suggested to us that recorded regional net migration flows are so small in relation to the mismatch between vacancies and unemployment that variations in mobility can have little impact on the unemployment - vacancies trade-off and on wage pressure. Such sceptics therefore doubt the mobility interpretation of the regional house price/earnings differential and of our mobility index which incorporates the changing tenure structure and the effects of the Rent Acts.

As far as the wage equation is concerned, we have already noted that theory is confirmed by empirical evidence suggesting that changes in both unemployment and mismatch are more important than stocks of these in generating wage pressure. This means that migration flows do not have to be huge to have important consequences. Since 1961, peak net migration occurred in 1973 when there was a net loss of 69,000 people from the South East. Given the tightness of the South East labour market at the time, it is plausible indeed that this outflow would have contributed significantly to short term wage pressure and regional mismatch.* Furthermore, it is plausible that the types of workers whose mobility is restricted by regional house price differentials are the more skilled and more highly paid. Not only do these have a bigger weight in the wage index but they may also be of greater strategic importance in determining the pattern of pay increases.

Another objection to the argument of the sceptics is the excessively homogeneous notion of labour and of jobs implicit in it. Efficient matches of people with jobs will often suggest the move of a particular person from the South East to a particular vacant job outside the South East even if, on the average, there is a higher job vacancy rate in the South East. In other words, the gross migration flows in each direction are also important and these are large relative to stocks of vacancies. Also we suspect that the house price differential between London and the South-East and the U.K. average is a

* Though, as noted below, part of it was surely due to jobs shifting outside the South East because of higher costs and labour shortages faced by firms there.

good proxy* for within region differentials between areas of more and less buoyant labour demand and therefore has a bearing on within as well as between region mobility.

However, let us consider some alternative explanations of our empirical results. We have already discussed one in detail and dismissed it as the dominant explanation: that the regional house price/earnings differential is merely a symptom of regional differences in labour demand shocks. Another was discussed in Section 3: that the regional house price/earnings differential is just a proxy for shocks to inflationary expectations. A measure of such expectations derived from consol yields contributes nothing significant relative to our equations. Also, if inflationary expectations are the driving force, it seems odd that shocks at an average lag of two years should drive up real wages: why are prices, which are often believed to be more flexible, not more responsive than wages to these changes in expectations?

A third alternative possibility is that London and the South East are a kind of leading sector in the process of wage settlements and that widening house price differentials are merely a proxy for widening wage differentials. This is immediately shot down by our finding a negative coefficient on the regional wage ratio both in the unemployment-vacancies relationship and in the real wage equation when we enter lags of it and of the regional house price ratio separately. This

* It can, in any case, be regarded as a proxy for a more general measure of regional house price dispersion. For 1968-1983, the standard deviation of log house prices across regions correlates very highly with the log difference of house prices in the South East relative to the U.K.

is consistent with our mobility interpretation. However, we have already argued for an alternative version of this line of thought based on the idea that house prices exert pressure on wages through a cost of living effect which operates first in London and the South East. The fact that average U.K. house prices appear to have a cost of living role gives credence to this as an element in the story.

A fourth alternative story not so far discussed goes like this. We know that house prices in London and the South East tend to lead the U.K. average. A widening differential signals more general house price inflation which, with a lag, is associated with an increase in house building activity nationally. The increased activity reduces unemployment among construction workers and drives up their earnings which are part of the over-time corrected measure of wages we are modelling. One could argue that this effect should operate fully through the unemployment rate which is already part of the model. But there is a counter argument. It seems plausible that a major part of the 'black economy' is linked to the construction and renovation of private housing. Thus, it might be argued, when this activity picks up, a larger proportion of the registered unemployed are in fact working, though illicitly. The unemployment statistics then overstate true unemployment. There could also be a related effect on wages more generally if one regards earnings in this part of the black economy as being an important part of the effective reservation wage of job seekers in the formal economy. On this interpretation, our empirical models and forecasts could be perfectly valid, though the policy conclusions would be different.

Almost by definition, this interpretation is difficult to follow up further since direct statistics on the black economy do not exist. The best hope of distinguishing this from the labour mobility hypothesis is in investigating the evidence on labour mobility directly.

(c) How housing and labour markets interact

Let us then try to summarize our views about the implications of the structure of U.K. housing markets for labour markets, mismatch and wage pressure. First, we agree with the case strongly argued by Hughes and McCormick, Minford and others that the absence of a rented sector ruled by freely undertaken contracts is a major explanation of the low rates of labour mobility in the U.K., especially among manual workers, in comparison for example with the U.S. We suspect, that the system of allocating council houses similarly restricts mobility though its role may sometimes have been overstated by neglecting the function of council housing as housing of last resort for households who are of little significance for the functioning of labour markets.

As far as the owner-occupied housing market is concerned, let us acknowledge at the outset the allocative role of house prices in the long run. Then, relatively higher house prices in the South East create an incentive for a greater housing supply to be forthcoming there and for households to locate elsewhere. Higher wages in the South East partly, according to our research, a (lagged) consequence of higher house prices, give firms an incentive to locate elsewhere. We agree

therefore with Patrick Minford* that, in the long run, high house prices and wages in the South East "are the Liverpool unemployed's best friend". However, we believe that there are important dynamic distortions with long lasting consequences akin to unemployment hysteresis, which are caused by the various institutional distortions surrounding owner occupied housing. There are major tax incentives which favour it compared with other financial assets and with supplying or buying rented accommodation. These include mortgage interest tax relief, the absence of capital gains tax on the household's main residence and the weak link of property taxes to market values, a link now to be broken altogether with the abolition of domestic rates. The other institutional distortion is planning or zoning controls, though these are present in virtually all countries and can be defended on other grounds.

Important implications follow from these institutional distortions. First, we agree with the authoritative assessment of Holmans (1987), that the decline of the rented sector owes as much or more to the institutional distortions favouring owner occupation than to the institutions of rent and tenure control in themselves. Second, these distortions artificially raise the portfolio returns on owner occupation relative to other assets with profound implications in economic upswings, especially when these are accompanied by rapid growth in real financial liquidity. Before 1982 and

* Personal communication.

outside the 'Barber Boom' or 'Competition and Credit Control' period in 1970-73, the aggregate supply of mortgages was effectively rationed, keeping some control on the often insatiable demand for these tax advantaged portfolio returns.

In economic upswings in which liquidity grows strongly, the response of U.K. house prices to growth of income and liquidity results in high own-rates of return in owner occupied housing which further stimulates demand. Even in the absence of exogenously more rapid economic growth in the South East, as undoubtedly experienced in much of the 1980's, a greater national housing demand tends not only to raise national house price/earnings ratios but to widen the South East's ratio relative to the rest of the U.K. We suggest this is because housing supply is less elastic in the South East than elsewhere. Both elements have cost of living implications for wage pressure but, we believe, also have mobility implications for labour market mismatch, for the level of unemployment at given vacancies and for wage pressure.

We see the 'mobility trap' caused by an upswing in aggregate housing demand and the resulting relative appreciation of house prices as follows. As the relative appreciation gathers pace, households in the South East initially will become more reluctant to move to other areas. This is because they would miss out on the further relative appreciation they expect and fear that they may not be able to bridge the house price gap should they subsequently wish to return to the South East. Thus, relatively few housing slots

are freed for potential migrants to the South East. This tends to increase the relative appreciation further. As it continues, households outside the South East become increasingly unable to bridge the gap between whatever equity stake they may already have in housing and the price of a house in the South East.

As the house price/earnings differential approaches a peak, outward migration from the South East increases. At the same time, the credit constraint for potential migrants to the South East reaches a maximum. Also, by this time, additional new housing in the South East will have been built. This situation cannot persist and it becomes increasingly vulnerable to adverse shocks to housing demand. In due course, a rapid fall, as in 1973-5, of the South East's premium in the house price/earnings differential takes place as speculative expectations reverse. The rapidity of the fall is likely to be influenced by the initial reluctance of households outside the South East to invest in an expensive asset with a lower or negative prospective rate of return compared with their present housing. The peak and the early part of this post-peak phase is likely to be a particularly uncomfortable one for firms in the South East trying to hold on to or to hire workers and, unless labour demand in the South East is slackening off, is likely to be associated with strong wage pressure there. We think it no coincidence that 1973 saw a 25 year peak net outflow from the South East of 69,000 and that large outflows also occurred in 1974 and 1975.

It would be quite wrong, however, to regard these outflows as entirely perverse. It seems likely that a substantial part of these moves was the result of firms altering the pattern of job location, reacting to high wages, labour shortages and the high cost of land in the South East. Whether the outflows are household led or firm led, eventually, the situation stabilizes at a more normal regional house price/earnings differential. However, we regard the cost in economic dislocation, job mismatch and inflationary pressure of this kind of dynamic process as large. In the short run, it can distort the allocative function of wage changes. Wage increases in the South East, quickly followed by even larger house price increases there, can, perversely, give labour in the South East an incentive to leave the South East and, given credit rationing, be relatively ineffective in attracting new workers. This suggests that firms have to bear the brunt of the resource allocation shifts engendered by this interaction of housing and labour markets. The way housing markets currently operate is likely to deny many of the incentive and flexibility benefits of the renewed trend to localized pay bargaining.

(d) Policy conclusions

To reiterate, the central problem, as we see it, is the fiscal bias in favour of owner occupation which greatly raises the portfolio return to housing compared with that which would prevail in a neutral tax system. The consequences reach beyond labour markets. It is hard to deny that consumer

expenditure is influenced by house prices, partly because of the wealth effect and partly, especially with the liberalization of consumer credit in the 1980's, because of the credit released by being able to borrow on the basis of housing collateral. There are therefore implications for aggregate consumer expenditure and imports which have their own inflationary implications. However, we suspect that these consumer expenditure effects also have implications for regional dynamics. We have argued that an increase in aggregate housing demand tends to result in greater short run house price increases in the South East. The greater increase in consumer expenditure which results there has, we suspect, a regional employment multiplier effect which feeds back, via a greater increase in housing demand in the South East, onto house prices in the South East.

These various tendencies to overshooting have been exacerbated by the liberalization of credit markets in the 1980's and would, we believe, be reduced by a more neutral tax system. We suspect, therefore, that part of the South East boom in the middle to late 1980's is a short term phenomenon made possible by tax distortions. This is not to deny, of course, such factors as the relative decline of manufacturing and the prospective increase in European economic integration as important factors in explaining relatively more rapid growth in the South East. There can be little doubt, however, that a more neutral tax system would ameliorate the economic pressures from these tendencies and result, especially in the short and medium run, in more balanced economic development.

References

Bean, C.R. and A. Gavasto (1988), "Outsiders, capacity shortages and unemployment in the U.K.", Centre for Labour Economics, working paper no. 1058, London School of Economics.

Bean, C.R., P.R.G. Layard and S.J. Nickell (1986), "The rise in unemployment: a multi-country study", Economica, 53, supp. p. S1-22.

Bewley, R.A. (1979), "The dynamic behaviour of unemployment and vacancies in Great Britain 1958-1971", Applied Economics, 77, 303-308.

Blanchard, O. and L. Summers (1986, "Hysteresis and the European unemployment problem", Cambridge, Mass: MIT Press, NBER Macroeconomics Annual.

Bruno, M. and J. Sachs (1985), The Economics of Worldwide Stagflation, Oxford: Basil Blackwell.

Carruth, A.A. and A.J. Oswald (1987), "Wage inflexibility in Britain", Oxford Bulletin of Economics and Statistics, 49, 59-78.

Clark, W.A. and W.F. Van Lierop (1986), "Residential mobility and household location modelling", in P. Nijkamp (ed.) Handbook of Regional and Urban Economics, vol. 1, Amsterdam: North Holland.

Foster, J.I. (1974), "The relationship between unemployment and vacancies in Great Britain (1958-72): Some further evidence", in Laidler, D. and Purdy, D.L. (eds.), Inflation and Labour Markets.

Greenwood, M. (1975) "Research on internal migration in the U.S.: a survey", Journal of Economic Literature, 13, 397-433.

Hansen, B. (1958), The Economic Theory of Fiscal Policy, London: Allen and Unwin.

Hansen, B., (1970), "Excess demand, unemployment, vacancies and wages", Quarterly Journal of Economics, 83, 1-23.

Harrigan, F.J., J. Jenkins and P.G. McGregor (1986), "A behavioural model of migration: an evaluation of neo-classical and Keynesian alternatives", Discussion Paper 42, Fraser of Allander Institute, University of Strathclyde.

Hendry, D.F., (1984), "Econometric modelling of house prices in the U.K." in D.F. Hendry and K.F. Wallis (ed.), Econometrics and Quantitative Economics, Oxford: Basil Blackwell.

Holmans, A.E. (1987), Housing Policy in Britain: A History, London: Croom Helm.

Holt, C.C., and M.H. David (1966), "The concept of job vacancies in a dynamic theory of the demand for labour" in Universities - NBER, The Measurement and Interpretation of Job Vacancies.

Hughes, G.A. and B. McCormick (1981), "Do council housing policies reduce migration between regions?", Economic Journal, 91, p. 919-39.

Hughes, G.A. and B. McCormick (1985), "Migration intentions in the U.K.", Economic Journal, 95, Conference Papers Supplement, p. 113-123.

Hughes, G.A. and B. McCormick (1987), "Housing markets, unemployment and labour market flexibility in the U.K.", European Economic Review, 31, 615-641.

Jackman, R., R. Layard and C. Pissarides (1984), "On vacancies", London School of Economics, Centre for Labour Economics, Discussion Paper 165, (revised).

Jackman, R. and S. Roper (1987), "Structural unemployment", Oxford Bulletin of Economics and Statistics, 49, 9-36.

Layard, P.R.G. and S.J. Nickell (1985), "The causes of British unemployment", National Institute Economic Review, 111, p. 62-85.

Layard, P.R.G. and S.J. Nickell (1986), "Unemployment in Britain", Economica, 33, supp. p. S121-170.

Lindbeck, A. and D. Snower (1985), "Explanations of unemployment", Oxford Review of Economic Policy, 1, Summer, p. 34-59.

Lindbeck, A. and D. Snower (1987), "Union activity, unemployment persistence and wage-employment ratchets", European Economic Review, 31, 157-167.

Minford, P., M. Peel and P. Ashton (1987), "The Housing Morass", Institute of Economic Affairs, London.

Muellbauer, J. (1986), "Productivity and competitiveness in British manufacturing", Oxford Review of Economic Policy, vol. 2, Autumn, i-xxv.

Muellbauer, J. and A. Murphy (1988), "The determination of house prices in the U.K. and in the South East", in preparation.

Pissarides, C.A. (1985), "Short-run equilibrium dynamics of unemployment, vacancies and real wages", American Economic Review, September.

Robertson, G. (1979), Housing Tenure and Labour Mobility in Scotland, Scottish Economic Planning Dept., Edinburgh.

Roper, S. (1986), "The economics of job vacancies", London School of Economics, Centre for Labour Economics, Discussion Paper 252.

Sheppard, D.K. (1971), The Growth and Role of U.K. Financial Institutions, 1880-1962, London: Methuen and Co.

Todd, J.E., M.R. Bone and I. Noble (1982), The Privately Rented Sector in 1978, Office of Population Censuses and Surveys, Social Survey Division, H.M.S.O.

Zabalza, A. (1978), "Internal labour mobility in the teaching profession", Economic Journal, 88, 314-330.

Data Appendix

HP, HP_{SE} House prices

From 1968 Q2 we used the mix-adjusted Department of the Environment series of second-hand house prices based on a 5% sample of building societies. Before 1968 Q2 we used mix-adjusted indices of second-hand house prices kindly provided by the Nationwide Building Society. These are on a mortgage advances basis while the DOE series are on a completions basis and so lag behind. To splice the two series together both for the U.K. and the SE/UK log ratio, we fitted quarterly regressions for 1968 Q2 to 1975 Q4 and used these regression to project the DOE series back to 1954.

RWN Non-manual male earnings in SE relative to U.K.

In April of each year and refers to weekly earnings. For 1970-1986 from New Earnings Surveys. Before 1970, derived from fitted value in a regression on the weekly manual male earnings ratio (for April, from Historical Abstract of British Labour Statistics (HABLS) and Department of Employment Gazette (DEG), and other variables. The standard error for this regression of $\ln RWN$ for 1971-1986 was 0.0019. The manual male earnings ratio is available back to 1960. The 1958 Census of Production suggests a value the same as that for 1962. We interpolated 1959 and projected the manual male earnings ratio for 1954-1957 on the basis of a regression, s.e. = 0.0055, fitted for 1959-1986.

YO New labour market entrants

The change in the number of U.K. residents aged 20-24 between $t+1$ and t divided by the average labour force over $t-1$, t and $t+1$. Source: Annual Abstract of Statistics, labour force defined as in Layard and Nickell.

MOBR Mobility index

See p. 14-16 above for precise definition. Tenure proportions in the MOB component came from the Family Expenditure Survey. PCU, PRU, PUU for 1963-1981 were kindly supplied by Paul Ashton of Liverpool University. PCU before 1963 was based on interpolations of figures in Todd, Bone and Noble (1982) and PRU after 1981 was based on our own interpolation of data in Housing and Construction Statistics, Table 11.5

UD Union density

U.K. union membership relative to employees in employment, from DEG.

N_{SE}/N Ratio of employees in South East relative to Great Britain

Source: DEG Historical supplement, 1975 DEG, HABLS.

v Adjusted vacancies

This uses a new series of the adjustment factor λ computed by Stephen Roper and Jonathan Haskel. This differs somewhat from the series used in Layard and Nickell.

BWA Adjusted benefits/wage ratio, see p. 23-24.

HPW Log house/price wage ratio, weighted and normalized see p. 26 for precise definition.

RD Regional difference in house price/non-manual earnings ratio weighted and normalized. See p. 26 for precise definition.

u Male unemployment rate

As in Layard and Nickell (1986) but from 1982 derived from estimates provided by the Unemployment Unit which adjust the figures for the many redefinitions which have taken place.

RPSL Real private sector liquidity (PSL2) at year end.

Source: Economic Trends Annual Supplement from 1963. Before 1963, this series was spliced to 'total quasi-money', see Table (A) 3.3, p. 183), Sheppard (1971).

The remaining variables are just as in Layard and Nickell (1986), updated appropriately. See notes to Table 1 for explanation of their names.

Lists of instruments used

Table 1 col (i): constant, $\ln u_{-1}$, $(u_{52}/u)_{-1}$, DMM_{-1} , $BW(-1)$, $\Delta \ln(Pm/\bar{P})$, $v \ln(Pm/\bar{P})$, $(\ln Up)_{-1}$, lt_{-1} , DDW^*_{-1} , w^*_{-1} , $\Delta \ln N_{-1}$, $\ln(P^*/\bar{P})_{-1}$, AD_{-1} , $\Delta \ln WE_{-1}$, $\Delta \ln RSPL_{-1}$, D80

where N = UK employment, AD = adjusted public sector deficit, WE = volume indicator of world exports as in Layard and Nickell (1986).

col (ii): as col (i) plus $\ln u_{-2}$ and with $(\ln Up)_{-1}$ replaced by $M_2 \ln UD_{-1}$ and $BW(-1)$ replaced by $M_2 BWA_{-1}$.

col (iii): as col (ii) without $(u_{52}/u)_{-1}$, lt_{-1} and adding $\Delta \ln(P^*/\bar{P})_{-1}$.

col (iv): as col (iii) plus $M_2 HPW_{-2}$ and $M_3 RD_{-1}$.

Table 2 and Table 3 col (a): constant, $M_2 \hat{\ln} u$, $\Delta_3 \hat{\ln} u$, $M_2 \hat{DMM}$, \hat{v} , $\ln u_{-2}$, v_{-1} , $M_3 YO$, $M_3 BWA_{-1}$, $M_3 RD_{-1}$, $M_2 HPW_{-1}$, $M_2 \ln UD_{-1}$, $\Delta_2 w^*_{-1}$, DDW^*_{-1} , $\Delta \ln(Pm/\bar{P})$, $\Delta \ln(P^*/\bar{P})_{-1}$, D80 and two instruments which capture the part of $M_3 MOBR_{-1}$ which is independent of θ_4 and the part which is dependent on θ_4 . $M_2 \hat{\ln} u_2$, $\Delta_3 \hat{\ln} u$, $M_2 \hat{DMM}$ and \hat{v} are fitted values obtained from fitting with a subset of instruments in Table 1, col (iv).

For col (b) and (c) the relevant dummies are added to the instrument set.

For col (d), the instrument set also includes $\frac{1}{2}(e_{-1} + e_{-2})$ where e is the wage equation residual from the previous iteration.

Note that we include $\Delta \ln(P_m/\bar{P})$ as an instrument. The argument for doing so is that variations in it are dominated by exogenous shocks. Replacing it by its fitted value leads to some deterioration in parameter stability in Table 2, col (b) and (c) but otherwise very little change.

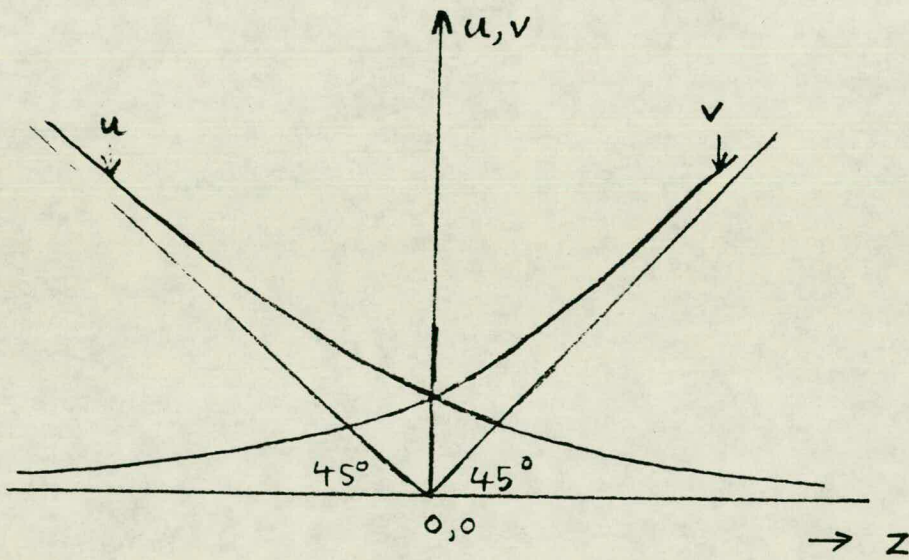


Figure 1: the relation between unemployment, vacancies and aggregate excess demand

Note that reducing sectoral dispersion σ brings the u, v curves closer to their asymptotes.

Figure 2 : the house price/wage ratio and the regional house price/earnings difference. In logs, weighted by owner-occupancy.

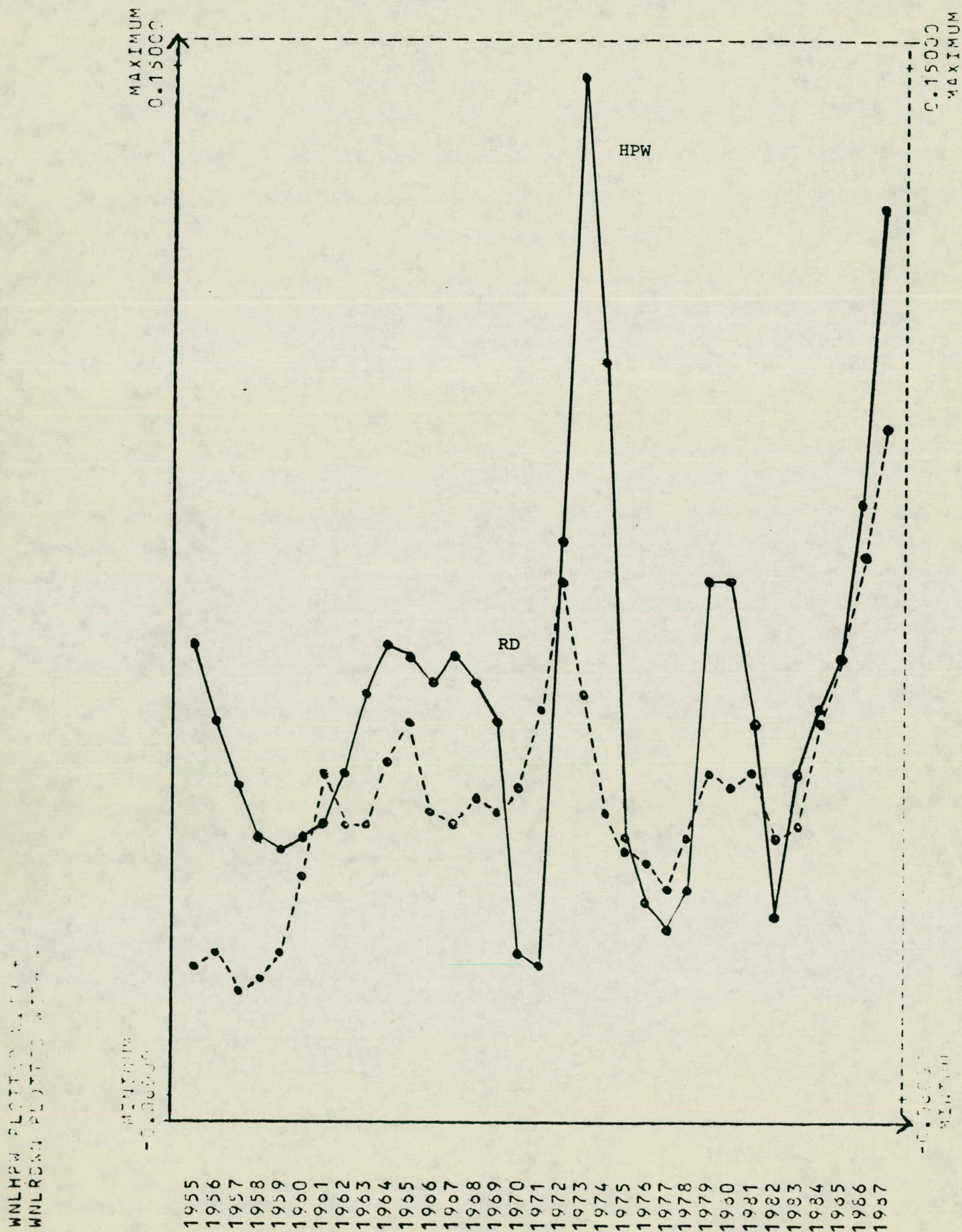


Figure 3 : the trade-off between the log unemployment rate and the adjusted vacancy rate.

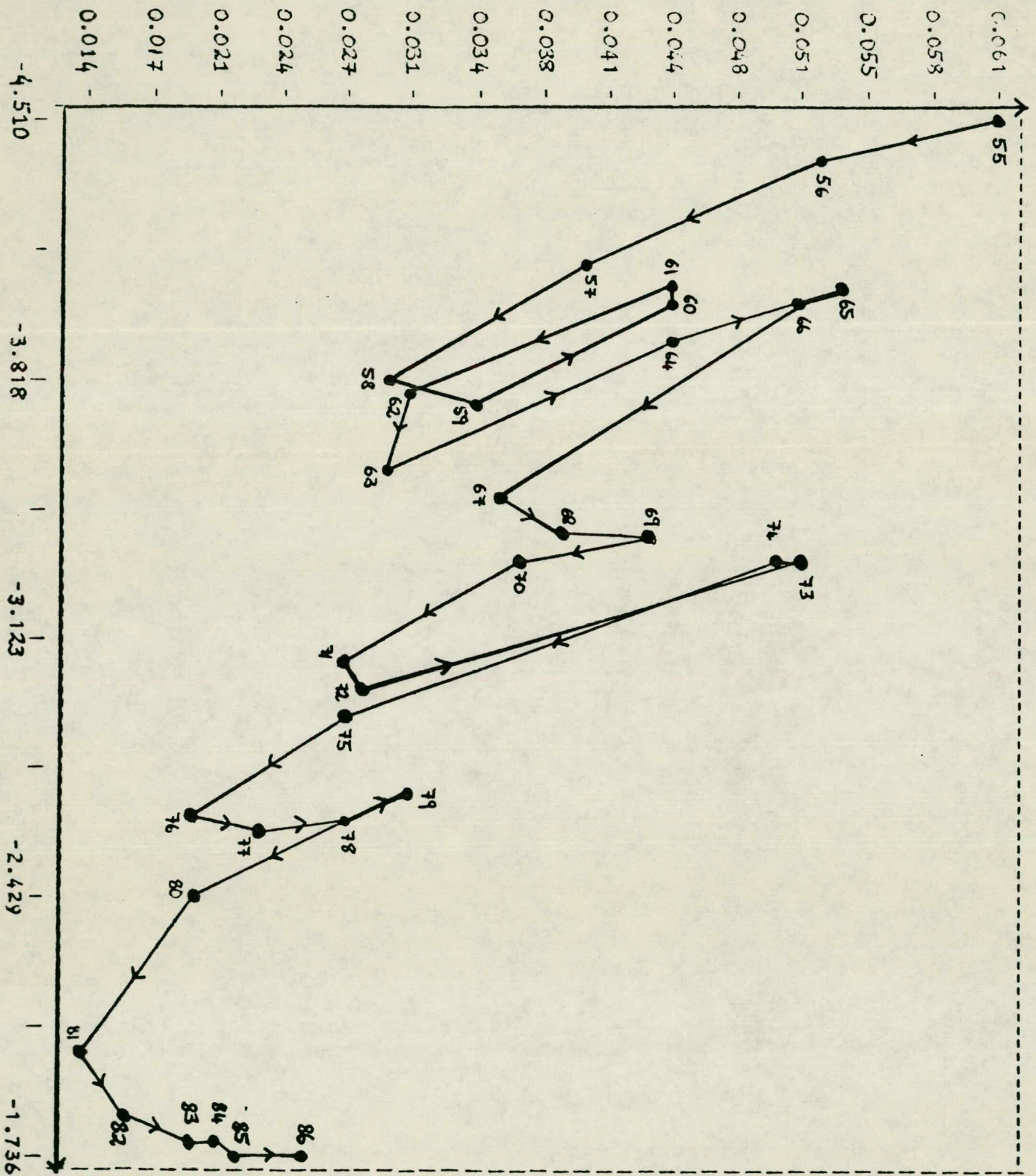
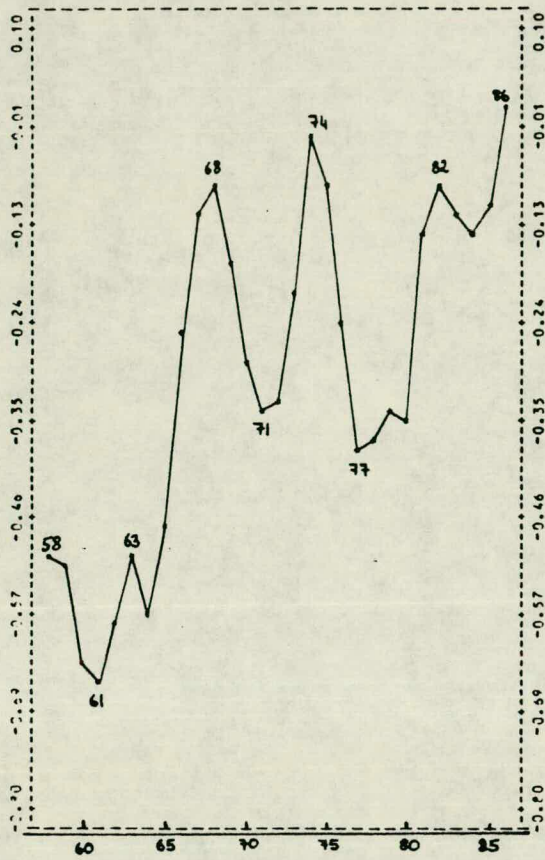
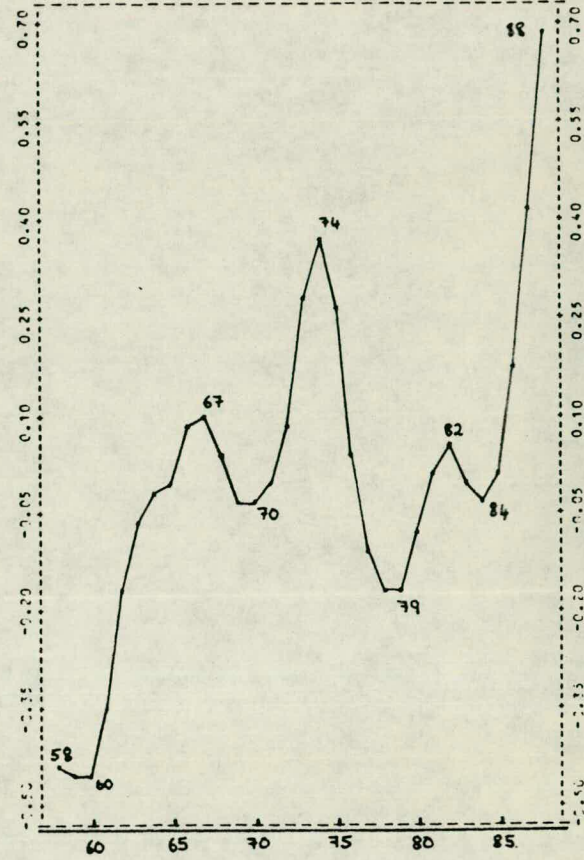


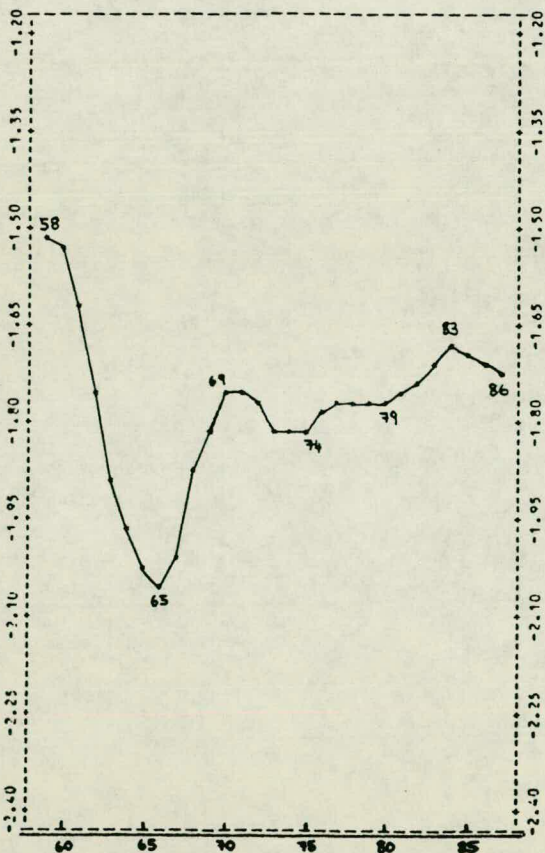
Figure 4 : the unemployment/vacancies locus and its main determinants



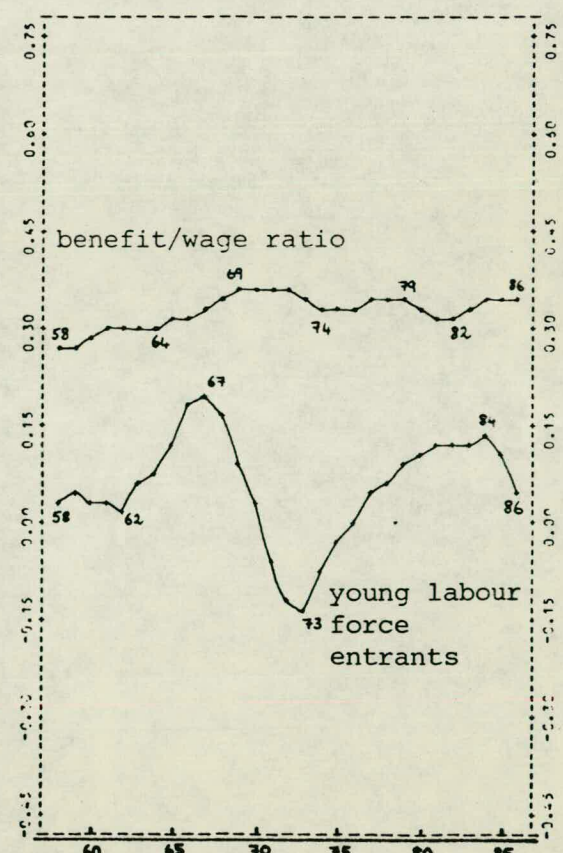
(a) The position of the u/v curve corrected for short run loops



(b) The u/v effect of the lagged regional difference in the house price/earnings ratio

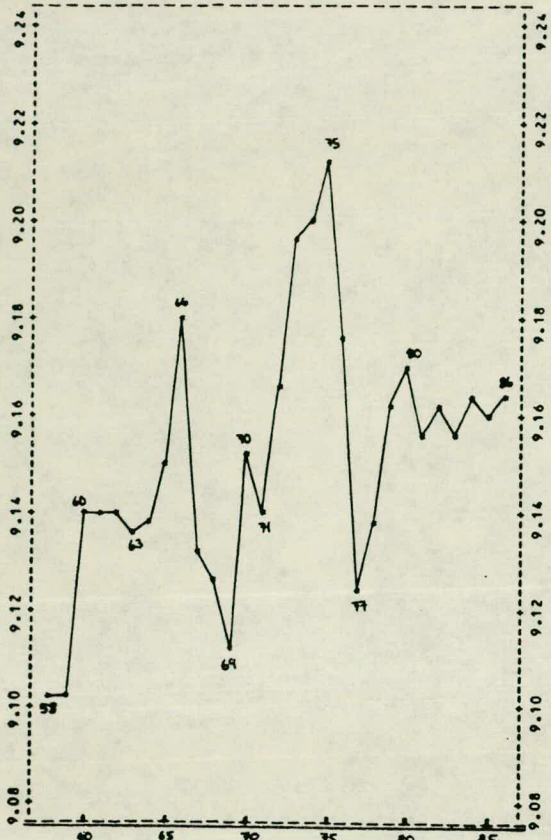


(c) The u/v effect of the mobility index

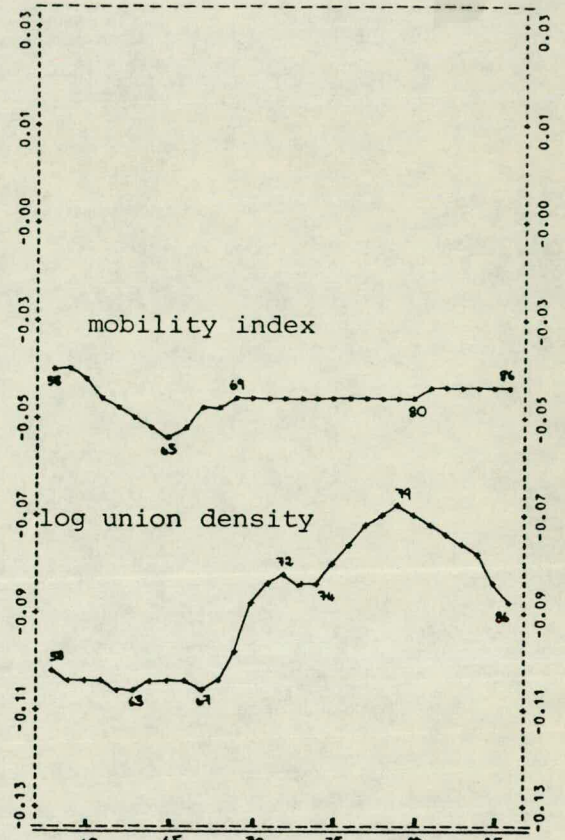


(d) The u/v effect of the benefit/wage ratio and of the proportion of young labour force entrants

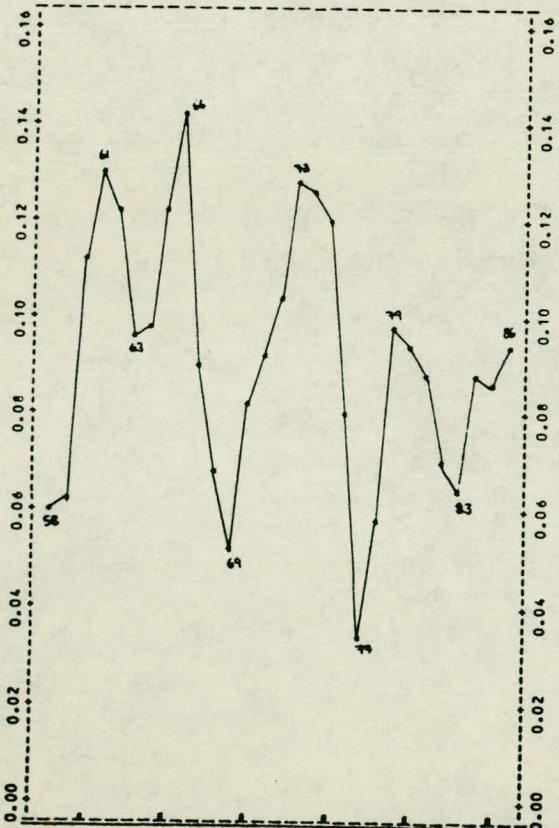
Figure 5 : the real product wage and its main determinants



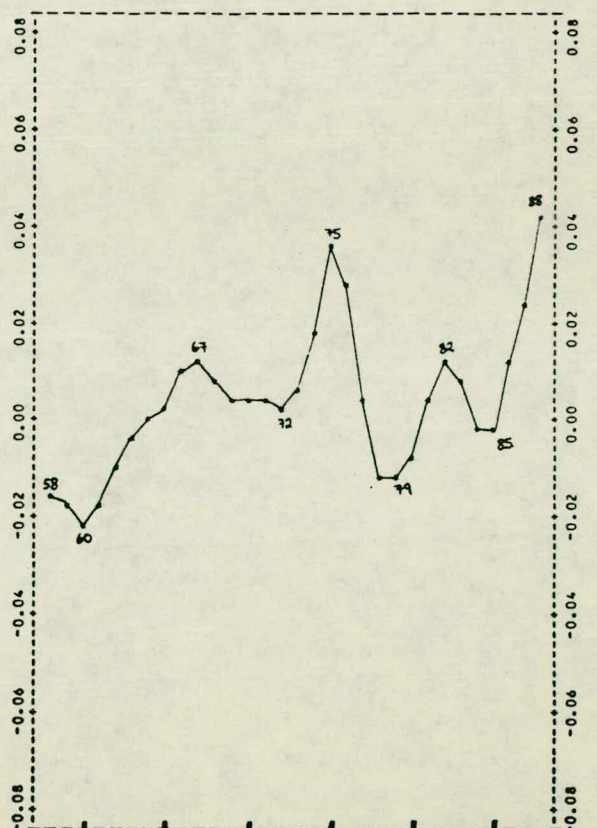
(a) Log real product wage corrected for productivity trend



(b) The wage effects of the mobility index and of log union density



(c) The combined wage effect of log unemployment, its 3 year rate of change, and 'change in mismatch'



(d) The combined wage effect of the lagged house price/wage ratio and its regional difference

UNCLASSIFIED



FROM: J M G TAYLOR
DATE: 4 August 1988

6/25/9/9

MR BYATT

cc PS/Chief Secretary
Sir T Burns

[Handwritten signature]

DOE PAPER ABOUT HOUSE PRICES

Mr Ridley has sent the Chancellor a copy of a paper about house prices, prepared by Mr Holmans in his department.

2. The Chancellor would be grateful if you could let him know whether there is anything new or important in this.

Jf

J M G TAYLOR

FROM: I C R BYATT
DATE: 19 August 1988

CHANCELLOR

Chief Secretary
Sir Peter Middleton
Sir Terence Burns
Mr Monck
Mr Scholar
Mr Odling-Smee
Mr Peretz
Mr Grice
Mrs Holmans
Dr Kosmin
Mr Tyrie

*Thanks.
In reference to Holmans' paper
(v), I see no sign of
the Tokyo house price boom
and a general inflation in
Japan - my view is
no extraordinary stock market
has done in Tokyo.*

HOUSE PRICES: HOLMANS' WORKING PAPER

Mr Ridley wrote to you on 25 July enclosing a long (171 pages) analytic paper on House Prices. (The paper, by Dr A E Holmans, a Senior Economic Adviser in the DOE had previously been sent to me for technical comment and to see whether the Treasury had any problems with publication.)

2. There are a number of rather casual references to policy in the Holmans paper (which we will ensure are removed before publication). They include references to the feasibility and desirability of forms of credit control. But I do not think this is what Mr Ridley has in mind when he says that "the conclusions reinforce confidence in the policies I am following". I have checked with his officials and been given the explanation that policies in this context means:

(a) house prices will stabilise and that there is no need to consider direct controls on mortgage lending;

(b) there is no need to change policy on planning controls. DOE will continue to seek to get land released, recognising the political difficulties, etc.

3. I understand that Mr Ridley is not expecting a reply.

4. Your Private Secretary's note of 4 August asks whether there is anything new or important in this paper.

5. Dr Holmans is one of the country's foremost experts on housing and the paper is primarily a work of reference. The main points are:

(i) the pattern of regional differentials has been changing over time. Before 1914 there was no North/South difference in housing costs, only a difference in rents between London and the provinces. In the inter-war period and up to the end of the 1950s, the difference in house prices between the North and the South East was only 3:4. At the end of the 1950s and the early 1960s house prices in the South East rose much faster than in the North, and this permanently widened the North/South East house price differential. From the late sixties to about 1982-83, the average North/South East differential was 4:7, widening in booms then narrowing again as housing market activity declined. Since then the difference has become greater, reaching 5:12 in 1987. According to the author not much of the widening of the North/South East difference between 1982 and 1988 is likely to be reversed.

(ii) The British North/South East house price differential is not unique internationally. Comparable regional differences are to be found in France, Sweden, Germany, the Netherlands, and the USA, apparently without some of the ill-effects (e.g. on labour mobility) attributed to our own North/South East house price 'divide'.

(iii) The long-term trend over the last 40 years has been for house prices to rise faster than the general level of prices but by less than the rise in real personal disposable incomes, if house prices are adjusted for the rise over time in the quality of the housing stock (e.g. central heating and better insulation) and for changes in the 'mix' of types and location of dwellings. Unadjusted movements in house prices

indicates an increase of over 3 per cent per annum in real terms (i.e faster than RPDI per head); Holmans' long-term quality adjusted house price rise at $1\frac{1}{4}$ - $1\frac{1}{2}$ per cent per annum in real terms.

(iv) The explanation given by the author of the long-term trend rise in real house prices is that demand generated by rising incomes was pressing against a limited supply caused mainly by controls over the use of land. In the South East demand has been stronger and the supply more limited than elsewhere.

(v) The recent boom in house prices is attributed to the interaction of very plentiful credit for house purchase, with lenders competing to lend, and a rise in real incomes, heavily weighted towards the house buying section of the population. The author however rejects the notion that a house price boom causes general inflation in the economy. The idea that it does so is attributed to the 1970-73 house boom being followed by the world commodities boom, the first "oil shock" and the collapse of pay restraint, and the boom of 1978-79 being followed by the second "oil shock". In response to this, we would point out that asset prices, and house prices in particular, are an important indicator of monetary conditions and hence of potential inflationary pressures.

(vi) Because a boom in house prices could be harmful from a labour market and housing policy standpoint, the author suggests that selective credit controls might be considered. His favoured instrument would be a minimum deposit related to the price of the house, which could be raised or lowered in the same way as hire purchase control in the 1950s and 1960s. His model for this was the American Regulation X, in force between 1950 and 1952. This suggestion is new, but we in the Treasury consider it to be unworkable.

(vii) The author cannot see an early end to the rise in real house prices or the widened North/South house price

differentials. However, in the 1990s he feels the possibility of an actual house price fall should not be ignored - the number of new entrants to owner-occupation is likely to fall (even though the total number of households will go on increasing, albeit at a reduced rate). This is mainly because of demographic factors, i.e the end of the 'baby boom' feeding through into household formation. Moreover supply, especially at the lower end of the housing market, is likely to increase as more houses are inherited from deceased parents which are surplus to the children's requirements. Dr Holmans notes that in the early 1950s house prices fell, probably because the supply was augmented by sales of previously privately rented houses. He also draws attention (perhaps too much attention) to the Dutch house price collapse of 1978-80, when house prices fell by between 20 and 25 per cent in cash terms following a strong boom.

IB

I C R BYATT

*Thanks.
Reply as drafted
containing a
copy of letter
(plus approval
for letter reply)*

FROM: S J DAVIES
DATE: 23 August 1988

CHANCELLOR - 12/2

cc - Sir P Middleton
Sir T Burns, o/r
Mr Scholar, o/r
Mr C W Kelly
Mr Odling-Smee, o/r
Mr Peretz
Mr Sedgwick
Mr C Riley, o/r
Mrs Holmans, o/r

*Oh / Do you want to write
as drafted. Or psack?
Or perhaps even better to leave*

HOUSING, WAGES AND UK LABOUR MARKETS

*after all this time?
mjm*

You asked Sir Terence Burns and others for comments on the CEPR discussion paper "Housing, Wages and UK Labour Markets" by Bover, Muellbauer and Murphy. I have discussed the paper with Sir Terence Burns and he suggested I let you have a note.

2. The bulk of the paper is taken up by discussion of the econometric evidence on the determinants of wage inflation, and in particular on the effect on earnings of regional differences in house prices, the overall level of house prices, and the pattern of housing tenure.

3. Muellbauer et al propose an earnings equation which has impressive technical properties. On standard statistical criteria it seems a clear advance on the equations that have been publicised by Professors Layard and Nickell in recent years. Muellbauer et al test their equation for "robustness", ie they see whether the results obtained are much affected by omitting apparently important years from the estimation period. The equation passes these tests with flying colours.

4. According to their equation, the determinants of real wages are:

- productivity
- the level of unemployment

- changes in unemployment
- changes in "mismatch", measured by changes in the industrial composition of employment
- terms of trade and competitiveness
- union power as measured by union density ie the proportion of the employed labour force that is unionised
- the level of house prices relative to earnings
- the differential between house price/earnings ratio in the South East and in Great Britain as a whole
- an index of "mobility": a weighted average of the proportions of households in different types of housing tenure, adjusted for the presumed effect on mobility of the 1965 and 1974 Rent Acts.

5. This is a long list and there must be some question whether there is actually enough data to distinguish between all these different influences and other possible influences on pay determination. (The main Treasury model earnings equation includes only the first three and the fifth items of those on the list above; at the same time it includes taxation and profitability effects that Muellbauer excludes.) The estimated equation suggests that in the recent past the most important influences on movements in real wages have been:

- productivity
- unemployment and mismatch which reduced real wages by about 4 per cent between 1979 and 1983, but raised them again by almost the same amount by 1986

- falling union density which reduced real wages by about 2 per cent between 1979 and 1986
- house prices (including the effect of regional differences) which added about 1½ per cent to real wages between 1979 and 1985, and will have added a further 4 per cent between 1985 and 1988.

6. There is not much that one can make by way of technical criticism of Muellbauer's work. One can only draw attention to the short life of previous apparently promising econometric work on earnings determination. Two years ago the rage was to distinguish between the effect of long term and short term unemployment. The distinction seemed econometrically important, and made some sense in economic terms. But this distinction disappears in Muellbauer's work - he finds no difference between the effect on earnings of long and short term unemployment.

7. Once reason to be cautious about Muellbauer's findings is that real house prices and the regional differential in house prices are quite closely correlated with the business cycle and hence with other economic variables which move with the cycle. There must be a possibility that house prices appear to explain earnings because they are picking up the effect of some other variable. Although Muellbauer obtains negative results when he tests to see if house prices are proxying liquidity or inflationary expectations, the suspicion remains that something of this sort could be involved.

8. Supposing the econometric result on the regional house price differential to be correct, there are several ways of interpreting it. Muellbauer's view is that the regional differential affects earnings through an effect on interregional migration. The proper functioning of the national labour market requires a certain level of migration to match workers to vacancies. In the early stages of economic upswings house prices rise faster in the South East than elsewhere because housing supply is less elastic in the South East. High house prices in the South East mean that workers already there are reluctant to move out (because they extrapolate

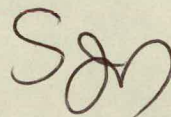
recent movements in house prices and want to hold on to their property investment in the South East), and workers from outside the area simply cannot afford to move in. Vacancies go unfilled and pay gets bid up. (There may be various undesirable second round effects - rising South East house prices add to consumption in the South East, with local multiplier effects on demand.)

9. The South East had a higher net outflow of manual households than any other region of Great Britain over the period 1983-1986, and also a net outflow of non manuals. Thus migration flows certainly did not reflect the relative strength of demand for labour in the South East over this period. However, this lack of net inward migration to the South East will only have mattered if there was actually a shortage of labour in the South East during 1983-1986. Unemployment in the South East was rising until the middle of 1986 and it is unlikely that there were widespread labour shortages. The net outflows from the South East during 1983-1986 will not therefore necessarily have caused much upward pressure on wages in the South East or nationally. The net migration flows are very small anyway in relation to the total labour forces in the different regions.

Policy conclusions

10. Muellbauer's policy conclusions are the weakest part of the paper. He simply asserts that the widening regional house price differential of recent years has been exacerbated by "tax distortions"; he does not actually offer any analysis of the interaction between taxation and house prices. It is not, in fact, clear to what extent, if at all, the tax system has been responsible for the recent rate of house price inflation.

11. I attach a short letter which you may care to send to Professor Muellbauer.



S J DAVIES

A Kyrne find

DRAFT LETTER FROM
THE CHANCELLOR TO
PROFESSOR MUELLBAUER

*MOLRA
— (address at flap)*

HOUSING, WAGES AND UK LABOUR MARKETS

The Ch. — has asked me to

him
Thank you for sending me a copy of your CEPR discussion paper on housing and the UK labour market, together with your correspondence with Sir Alan Walters. *I am sorry you have not had an earlier reply.*

2. *The Chancellor agrees that* The question of what economic effects house prices have outside the housing market is an important one, and the research you and your colleagues have been doing is of considerable interest. *The Chancellor has asked me to say* I have to say that I remain an agnostic on the effect of house prices on pay; but trends in pay have not been very successfully predicted in the past and the evidence that you adduce is clearly not something that we can ignore.

Misc Man

MP



FROM: MISS M P WALLACE

DATE: 12 September 1988

MR BYATT

cc Chief Secretary
Sir P Middleton
Sir T Burns
Mr Monck
Mr Scholar
Mr Odling-Smee
Mr Peretz
Mr Grice
Mrs Holmans
Dr Kosmin
Mr Tyrie

HOUSE PRICES: HOLMANS' WORKING PAPER

The Chancellor was most grateful for your minute of 19 August. In defence of Dr Holmans' rejection of the notion that a house price boom causes general inflation, the Chancellor notes that he sees no sign of the Tokyo house price boom leading to general inflation in Japan - any more than the extraordinary rise in the Tokyo stock market has done.

M P Wallace

MOIRA WALLACE



MP

Treasury Chambers, Parliament Street, SW1P 3AG
01-270 3000

30 August 1988

Professor J Muellbauer
Nuffield College
Oxford OX1 1NF

Sir P Middleton
Sir T Burns,
Mr Scholar,
Mr C W Kelly
Mr Odling-Smee
Mr Peretz
Mr Sedgwick
Mr RILEY
Mrs Holmans
MR DAVIES

Dear Professor Muellbauer,

HOUSING, WAGES AND UK LABOUR MARKETS

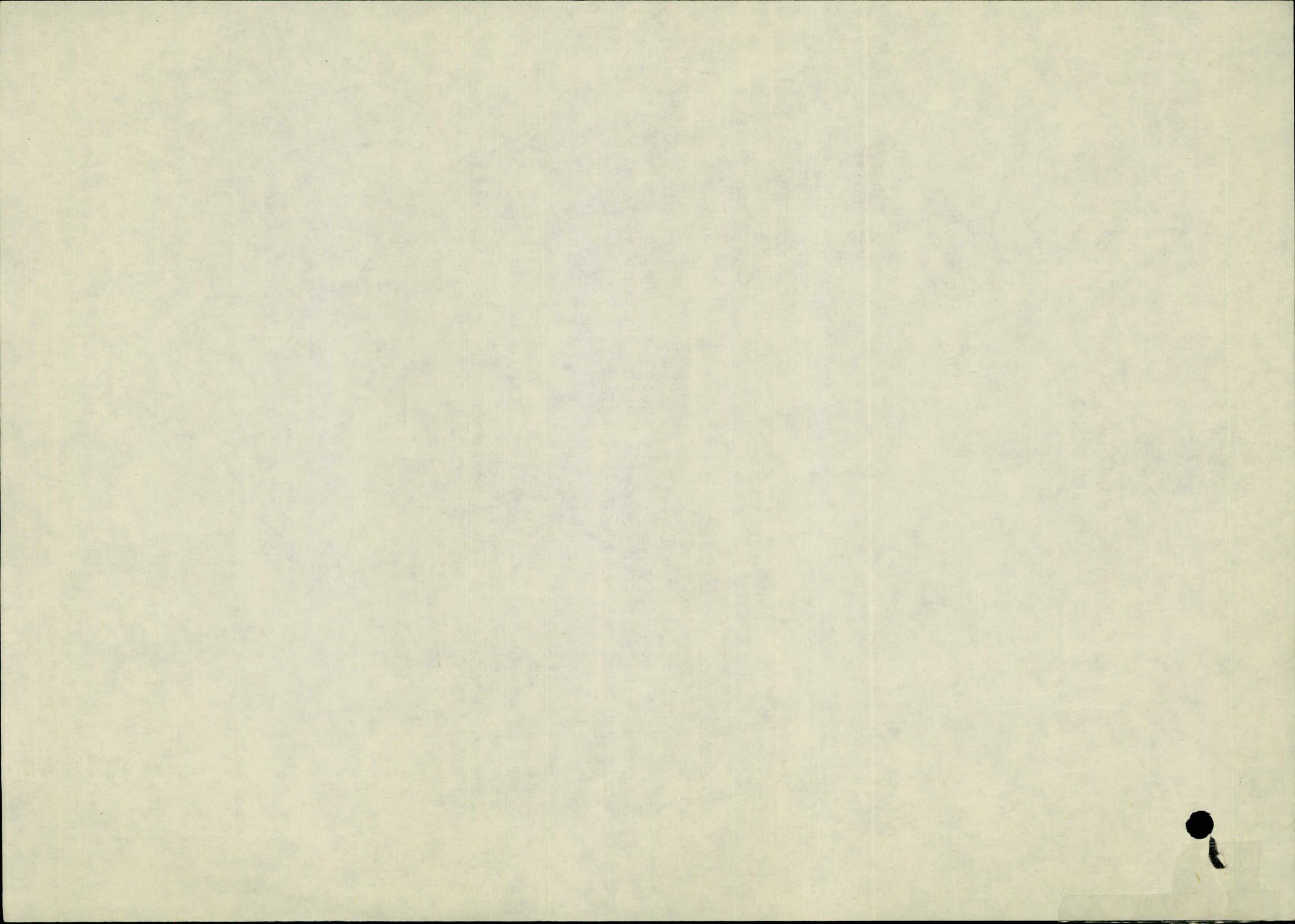
The Chancellor has asked me to thank you for sending him a copy of your CEPR discussion paper on housing and the UK labour market, together with your correspondence with Sir Alan Walters. I am sorry you have not had an earlier reply.

2. The Chancellor agrees that the question of what economic effects house prices have outside the housing market is an important one, and the research you and your colleagues have been doing is of considerable interest. The Chancellor has asked me to say that he remains an agnostic on the effect of house prices on pay; but trends in pay have not been very successfully predicted in the past and the evidence that you adduce is clearly not something that can be ignored.

Yours sincerely,

Moir Wallace

MISS M P WALLACE
Private Secretary



NUFFIELD COLLEGE

OXFORD OX1 1NF

Telephone: OXFORD(0865)278500
Direct Line 2 78583

CH/EXCHEQUER	
REC.	19 SEP 1988
ACTION	
COPIES TO	SIR P MIDDLTON,
	SIR T BURAS,
	MR SCHOLAR,
	MR KELLY,
	MR ODLING-SMEE,
	MR PERETE, MR SEDGWICK,
	MR RILEY, MR HOWARD,
	MR DAVIES.

12th September, 1988.

Miss M P Wallace,
Private Secretary to
Chancellor of the Exchequer,
Treasury Chambers,
Parliament Street,
London SW1P 3AG.

Initials

mp

Dear Miss Wallace,

I am most grateful for your message of 30 August from the Chancellor. I might just ask whether Mr Lawson is aware of the latest, not yet published OPCS figures on net regional migration out of the South East. For 1987 these show, I believe, the highest level since the 1973 record. While these figures have their positive aspect, they are certainly consistent with my theories which suggest a 1988 outflow as great or greater. Meanwhile, wage pressure in the South East persists, to say the least.

Yours sincerely,

John Muellbauer

John Muellbauer.

mp

gn!

✓199

FROM: MARK CALL
DATE: 10 OCTOBER 1988

CHANCELLOR

cc Chief Secretary
Financial Secretary
Paymaster General
Economic Secretary
Miss Haskins
Mr Cropper
Mr Tyrie

HOUSING LEGISLATION - OPTING OUT

Alan Howarth raised at Prayers the question of whether an abstention is to be counted as a yes vote. Gina Haskins has confirmed this, although not surprisingly, it is not as simple as that.

2. Accordingly you could have the situation whereby 49% of residents turned out to vote, all voted against opting out, and the result being declared in favour of opting out. The 51% who did not vote (or in a less extreme case the minority who did vote to opt out plus the abstentions) would be opted out. That means that the freehold for the property would be transferred to the new landlord, who would receive rent from those deemed to have opted out, and who would be responsible for maintenance.

3. Those who had voted against opting out (even in the case where overall opting out had succeeded) would be able to stay with the Local Authority. For them the Local Authority would lease back the flat from the new freeholder, for so long as that tenant wanted it.

4. The intention seems to have been to create a system where the benefit of the doubt, ie apathy, favours opting out; and at the same time to provide an escape clause for those who felt so strongly that they wanted to stay with their Local Authority landlord. There is an asymetry in that those who want to stay with the Local Authority can whatever the outcome of the vote; while those who want to opt out cannot do so if those who oppose opting out form an absolute majority.

Handwritten notes in red ink:
Re para 3, can
abstentions count
with the LA in the way?
2. I think
of bad late
more in the
press
3. How
what
1000
John
the
Lords?

5. One might question whether the (perhaps substantial) minority which favoured opting out in a property which overall had not supported opting out should similarly have the benefit of the doubt. As it stands they would have to stay with the Local Authority landlord against their wishes. One solution would be to transfer all freeholds to new landlords with the Local Authority leasing back whatever proportion of flats wished it. Would that be trying to move too fast? Perhaps it's too late.

6. Sensible questions to which I do not yet know the answer would seem to be: 1) at what commercial terms does leaseback take place? 2) Would the leaseback arrangement be hereditary in any way, as is sometimes the terms of council property?

Mc

MARK CALL

SECRET AND PERSONAL

1. Alex ✓
2. pnp

Thanks. This needs to be kept in mind. It must also be fact. It must also be used for great starters.

FROM: ROBERT CULPIN
DATE: 13 October 1988

CHANCELLOR

TAXATION OF HOUSING

Todd McC. ✓

I think I ought to tell you about some work we are doing, just so that you know it is going on.

2. I agreed with Chris Riley a few weeks ago that he would pull together a paper on the taxation of owner occupied housing, looking ahead in particular to the abolition of domestic rates. I had two main reasons:

(a) While the recent rise in house prices is clearly yesterday's problem, Gordon Hughes says the abolition of domestic rates could add another 20 per cent - and he is no sensationalist. Peter Spencer comes up with much the same sort of figure. This is a far cry from the DOE's estimate of about 5 per cent. And although Hughes/Spencer are probably exaggerating, their sums are not obviously bonkers: we shall, after all, be lifting £8 billion of tax from housing - more even than the value of mortgage relief.

(b) Officials tend to say privately that we ought to deal with this by introducing a Muellbauer tax when we abolish the rates, and could probably overcome the practical difficulties if we really wanted to - and yet the official response to your requests for comments on Muellbauer is to dismiss his case.

I thought we should try to look at these things dispassionately.

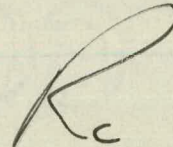
SECRET AND PERSONAL

3. I need hardly add that I am extremely well aware of how sensitive this is. So we have of course kept it to ourselves.

4. We now want to consult a very few people in the Revenue, so Chris Riley will probably be approaching Terry Painter and John Isaac. I have asked him to make it absolutely clear that we are acting on our own initiative, and that this has nothing to do with Ministers; and that, even so, knowledge that we are working on the subject at all should be tightly limited to those with an operational need to know.

5. For their part, you will remember that you told the Revenue to work up a further note on CGT on the main residence, and they are still doing that.

6. We will of course send you our paper, for what it is worth, when we have done it. I don't want to raise any expectations at all, or create any excitement. We have certainly not found the philosopher's stone, and I don't suppose we will. But as Sir John would say, I think you should be told.

A handwritten signature in dark ink, consisting of a large, stylized capital 'R' with a cursive flourish, and a smaller lowercase 'c' positioned below the right side of the 'R'.

ROBERT CULPIN



FROM: A C S ALLAN
DATE: 17 October 1988

A handwritten signature in black ink, appearing to be 'ACSA'.

MR CALL

cc PS/Chief Secretary
PS/Financial Secretary
PS/Paymaster General
PS/Economic Secretary
Miss Haskins
Mr Cropper
Mr Tyrie

HOUSING LEGISLATION - OPTING OUT

The Chancellor was grateful for your minute of 10 October. On your paragraph 3, can abstainers choose to ~~stay~~ with the LA in this way?

2. The Chancellor thinks it is too late to move in the direction suggested in your paragraph 5, even if desirable.
3. But what loose ends still remain, following debate in the Lords?

A handwritten signature in black ink, appearing to be 'ACSA'.

A C S ALLAN



minimum turnout would not be met. Such authorities would have just the same incentive as they would under the Bill as drafted to get tenants to vote: "no" votes would remain the key to blocking the application, which is what such authorities will want. And above all, there are no consequences that would make the existing "no majority against" voting test untenable for voluntary disposals of tenanted housing by local housing authorities, to the success of which it is crucial.

I have in mind a Government amendment at Report to make an applicant landlord's ability to complete a transfer dependent both on the "no majority against" test, and on a minimum turnout. A final decision on what the figure should be will require a little further thought because of the possible read-across to voluntary transfers, though we must obviously start our consideration from the 50% figure in the Education provisions. I would prefer to avoid a second ballot on Education Reform Act lines: it would add to bureaucracy and to costs; the existence of a second chance to vote would reduce the incentive for tenants to turn out in the first vote; and we expect in any case that a reasonable turnout test - say 50% - will be achieved in virtually all cases where prospects of a successful transfer are good.

We shall need to table an amendment later this week for the Report Stage, which is due the following week, so I should be grateful to know by Wednesday 19 October whether you and colleagues are content for me to proceed as I propose.

I am copying this to other members of E(LF) and to Sir Robin Butler.

N R

P.B. 17 October 1988

(approved by the Secretary of State and signed in his absence).

BF 18/10



CH/EXCHEQUER	
REC.	17 OCT 1988
ACTION	CST
COPIES TO	

✓ 17/10

Prime Minister

TENANTS' CHOICE: VOTING

17/10/88.

You will have seen that Part IV of the Housing Bill (Tenants' Choice) successfully completed its Lords Committee Stage on 11 October. You will also have seen press reports of a tactical concession which Malcolm Caithness offered in order to help achieve the significant majority (47) that we had on the Tenants' Choice voting arrangements despite widespread predictions in the Press of a possible defeat.

You will recall that Tenants' Choice applications will be governed by a ballot. Under clause 102, transfer may proceed unless a majority of those eligible to vote, does so against transfer. If transfer proceeds, all those who vote in favour will transfer along with those who abstain. All secure tenants who vote against transfer will be able to remain with the local authority.

Malcolm undertook to consider introducing a minimum turnout provision on the Tenants' Choice vote. This change, which I believe we are effectively committed to making, would be similar to the 50% minimum turnout requirement in the first stage of the dual ballot arrangements on schools' opting-out introduced by Kenneth Baker into the Education Reform Act in its final Commons stages.

This does not damage either the "no majority against" voting test, designed to avoid apathy from preventing those wishing to transfer from doing so; or the element of individual choice which makes this robust approach to the collective decision possible. Moreover it would give the lie to the suggestion that we would allow applications to go by default. There would be no new loophole which a hostile local authority could exploit, for example by campaigning for a "no" vote in the hope that the



FROM: S M A JAMES
DATE: 17 OCTOBER 1988

*Papers
JAMES
pays*

PS/CHANCELLOR *2*

Handwritten signature in red ink, possibly 'P. Banks'.

cc: PS/Chief Secretary
PS/Financial Secretary
PS/Paymaster General
Mr Betensen
Mr Cropper
Mr Tyrie
Mr Call

HOUSING LEGISLATION - OPTING OUT

X

The Economic Secretary has seen Mr Call's minute of 10 October.

2. He has commented:

(i) it is worth noting that, although those who oppose transfer to a new landlord can remain tenants of the council, they will have to pay the rent and maintenance charges applied by the new landlord;

(ii) this policy has not been well sold and a comprehensive brief for members as soon as it completes its Parliamentary stages is essential.

Handwritten signature of S M A James.

S M A JAMES
Private Secretary



10 DOWNING STREET
LONDON SW1A 2AA

CH/EXCHEQUER	
REC.	18 OCT 1988
ACTION	CST
COPIES TO	

From the Private Secretary

18 October 1988

✓ 18/10

Dear Roger,

TENANTS' CHOICE: VOTING

The Prime Minister was grateful for your Secretary of State's minute of 17 October. Subject to the views of colleagues, she is content with his proposal to table an amendment later this week for the Report stage.

I am sending a copy of this letter to the Private Secretaries to members of E(LF) and to Trevor Woolley.

Paul Gray

PAUL GRAY

Roger Bright, Esq.,
Department of the Environment

mp.

FROM: MARK CALL
DATE: 19 OCTOBER 1988

MR A C S ALLAN *ⓐ*

cc PS/Chief Secretary
PS/Financial Secretary
PS/Paymaster General
PS/Economic Secretary
Mr Betenson
Mrs Chaplin
Mr Tyrie

✓

HOUSING LEGISLATION - OPTING OUT

I can confirm that abstainers will be able to stay with the LA as outlined in paragraph 3 of my original minute. This arrangement for leasing back the flats of those tenants who wished to remain with the LA sits oddly with our attempts to stamp out creative accounting by LA's. Nevertheless, this is what is proposed, although the details of how it would work have not yet been finalised.

2. One loose end remaining after the Lords' debate is the qualifying turnout for the result to be valid. Mr Ridley is proposing 50%, and I cannot see any reason to disagree with that.

3. Finally, this is a policy that is going to need some selling. I will contact my opposite number in DOE to find out what briefing they plan for backbenchers.

mc

MARK CALL