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A Debt-owing Democracy: The Political Impact of Housing Market Recession at the British General Election of 1992

Charles Pattie, Daniel Dorling and Ron Johnston

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Summary. The 1992 British general election took place in the context of a severe housing recession which hit hardest in those regions from which the government usually drew much of its electoral support. The slump notwithstanding, however, the government went on to win its fourth successive election victory. The paper investigates the impact of the housing recession on the geography of the vote at the 1992 general election. Party fortunes were linked to local housing market conditions, and the failure of the housing market was a factor in reducing support for the government. Negative equity is identified as a particularly important problem in this regard.

Throughout the 1980s and 1990s, Britain's Conservative government has espoused its goal of a 'property-owning democracy'. In a document advocating the policy of council house sales, the party argued that "home ownership gives personal mobility, personal pride, and stimulates the natural instinct of care over, and preservation of, what is one's own. It helps create greater responsibility and stability in society" (Conservative Central Office, 1979, p. 1, quoted in Forrest *et al.*, 1990, p. 78). Whatever the social pros and cons of this stance, the potential electoral benefits for the Conservatives of encouraging more owner-occupation are clear. British home-owners have traditionally been seen as supporters of the Conservative party. They benefit from the economic conditions that the

Conservatives champion: low interest rates, low taxation on wealth and wealth creation, and rising demand for home-ownership, which helps to make their home an appreciating asset. During the mid and late 1980s, rapid property price inflation, running far ahead of the general rate of inflation, meant that many home-owners saw the value of their property rise very rapidly, promising potentially substantial profits when the property was sold. Government policy at this time helped to stoke the housing boom. In a series of budgets on either side of the 1987 election, Chancellor Lawson made borrowing easier and cheaper, encouraging more people to take out large mortgages. This was exacerbated by changes in the law governing tax relief on joint mortgages: many couples

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Table 1. Changing patterns of housing tenure, 1964–92 (percentages)

	Home owners	Council tenants	Other
1964	48.5	28.9	22.7
1970	54.5	29.7	15.8
February 1974	53.8	30.9	15.3
October 1974	53.4	29.5	16.4
1979	57.2	31.4	11.5
1983	65.7	27.7	6.7
1987	71.0	22.9	6.1
1992	71.8	19.3	8.1

Source: British Election Study.

rushed to beat the new legislation, further pushing up the demand for housing and exacerbating the boom.

Not all Conservative party policy objectives are in home-owners' specific interests, however. Since 1979, successive Conservative governments have put the battle against inflation at the top of their economic priorities. But an anti-inflation policy may well mean only slow property price inflation, and carries the risk of rising interest rates to dampen consumer booms. In response to the inflationary pressure introduced to the economy during the late 1980s by the Lawson boom, the government raised interest rates. This occurred at the same time as, and in part deepened, an economic downturn in the early 1990s.

One consequence was a major housing recession, which jeopardised the Conservatives' hold over home-owners, a key group of their supporters (Gentle *et al.*, 1994). Many home-owners saw the value of their property decline rapidly, and some faced substantial hardship. Personal indebtedness became a major problem, particularly for those property buyers who saw the market value of their property drop below the level of their mortgage, a condition referred to as negative equity. Those in the negative equity trap faced a double bind. Either they sold their homes—and faced the consequences of having to pay off the remainder of their mortgage—or they stayed in the same place, even if this created difficulties for jobs, families and so on. The property-owning democ-

racy threatened to become a debt-owing democracy. It would therefore seem sensible to expect that, when it called the 1992 general election during the housing recession, the Conservative government would have been punished by disgruntled owner-occupiers. But the Conservatives went on to win an unprecedented fourth successive term of office, with a scarcely changed national share of the vote. At first sight, the housing recession seemed to have had little effect on support for the government in 1992. In this paper, we subject that conclusion to analysis, using estimates of vote switches and housing market conditions in parliamentary constituencies.

Housing and Politics

For a large part of this century, housing tenure has been a major feature of political debate in Britain. Successive Labour and Conservative governments have varied markedly in their relative commitment to public-sector local authority rented accommodation, and to private home-ownership. Construction of local authority housing was generally a priority for Labour governments, while encouraging a shift to private-sector construction was a hallmark of Conservative administrations (Malpass and Murie, 1987). For most of the post-war period, however, both local authority rented accommodation and home-ownership grew as proportions of all household tenures, at the expense of the private rented housing market. By 1979,

almost 60 per cent of the electorate were owner-occupiers, and nearly a third were council tenants (Table 1).

Since the election of a Conservative government in 1979, however, the policy balance has shifted decisively from public- to private-sector housing. The incoming administration, under Mrs Thatcher, was committed to a monetarist policy, often described as Thatcherism, of reducing the role of the state and increasing the role of the market in all areas of social policy (Gamble, 1988). The commitment to monetarist measures and limited state intervention had two interlinked dimensions, one economic and the other social. First, the incoming government believed that high public spending and high taxation were crowding out private-sector investment and growth, and contributing to rising inflation: the solution, they felt, was a return to market regulation and market disciplines. Secondly, state provision of goods and services was held to undermine social values by creating a 'dependency culture' which stifled individual responsibility and initiative. Over the succeeding years, the Conservatives won re-election in 1983 and 1987, and the radical edge of Thatcherism continued to expand into many policy areas.

Housing policy was no exception. Early in its first term, the government followed through on its intention to shift housing policy from the public to the private sector by introducing 'right to buy' legislation making it easier for council tenants to purchase their homes from their local authorities at heavy discounts. In the first few years of its operation, the policy was remarkably successful, and many council tenants took the chance to become home-owners. Even so, there were widespread geographical variations in the take-up of the policy, and for the most part it was the most desirable terraced and semi-detached parts of the local authority housing stock which were bought, leaving less popular flats and maisonettes under local government control: overall, the policy reduced housing choice for those who remained in the local authority sector (Dunn *et al.*, 1987; Kerr, 1988). By 1991, 54 per cent of all flats

in residential buildings in Britain were still owned by local authorities, but the number of 4-, 5- and 6-room dwellings in council tenure fell by 14 per cent, 25 per cent and 27 per cent respectively between 1981 and 1991. By 1992, the proportion of the electorate living in council properties had declined from a peak of 31 per cent in 1979 to only 19 per cent. Over the same period, rates of owner-occupation had risen to around three-quarters of the electorate (Table 1). Property leaving the council sector as a result of 'right to buy' legislation has not been replaced. New council house building has declined rapidly since 1979, as governments have discouraged local authority building: crucially, local authorities have not been allowed to use the proceeds from council house sales to finance the construction of new public-sector housing (Malpass and Murie, 1987).

The political debate on housing policy has been fuelled not only by different views of social policy objectives, however, but also by party political judgements concerning the balance of electoral advantage to be accrued by following a particular strategy. Traditional views of British voting behaviour have emphasised the importance of social class to party allegiance. The class cleavage model argues that the majority of the working class should support Labour, and the majority of the middle class should support the Conservatives. However, the class cleavage seems to have become weaker since the early 1970s (Särilvik and Crewe, 1983; Franklin, 1985; but see Heath *et al.*, 1985). Some analysts have argued that the decline of class has been the consequence of the emergence of new electoral cleavages in the post-war period, reflecting the growth of the Welfare State, and the differences this has created between those who rely on the state for the services they consume, and those who rely on the private sector.

Housing tenure is part of a 'consumption cleavage' which some analysts have identified as an important element of Welfare State electoral politics (Dunleavy, 1979, 1980; Dunleavy and Husbands, 1985; Johnston, 1983, 1987; Williams, 1989; Saunders,

1990; though see Franklin and Page, 1984). When the provision of major services and utilities, such as housing, is split between the state and the private sector, and where political parties fall either into a state interventionist or a free market camp, the consumption of those goods and services can become a source of political mobilisation and cleavage. Those most dependent on the state for service provision will give their support disproportionately to the party which favours expanding the public sector, while those who depend largely on the private market for provision will support the party which promises to cut back on state involvement. The consumption cleavage is substantial, and could be strong enough to cross-cut other electoral cleavages, such as class. At recent general elections, around 50 per cent of owner-occupiers have voted Conservative, while only 20–25 per cent voted Labour. In contrast, 55–65 per cent of council tenants supported Labour (Table 2). The extent to which housing tenure cross-cuts the class cleavage can be gauged by measuring the ratio of Conservative to Labour voters in various groups. Not surprisingly, where class and housing tenure reinforced each other, parties were particularly likely to gain support: white-collar owner-occupiers were between 2.5 and 4.6 times more likely to vote Conservative than Labour, while blue-collar council tenants were between 2.3 and 4.8 times more likely to vote Labour than Conservative; but where the two influences ran in opposite directions, support for the ‘class party’ was weakened. Among the (very small) group of white-collar council tenants, for instance, voting for Labour was always more likely than for the Conservatives. Of more substantive interest is what happened to the larger (and growing) group of blue-collar home-owners. Even though in the two 1974 elections, this group was still predominantly Labour-voting, they were more likely to support the Conservatives and less likely to support Labour than were other blue-collar workers. And since 1979, more blue-collar owner-occupiers have voted Conservative than have voted Labour (Table 2). Expanding

working-class home-ownership, therefore, might be expected to pay electoral dividends for the Conservatives.

The basis for this cleavage is not simply, or even mainly, dependent on ideological preferences among the electorate, but emerges from real material interests. The links between home-ownership and the growth of personal wealth have been widely discussed (see, for instance, Saunders, 1990; Forrest *et al.*, 1990; Harmer and Hamnett, 1990). By opting for private-sector housing provision and by investing large sums of money in a major fixed asset, home-owners not only purchase a dwelling but also make a long-term and substantial financial investment. There is a clear financial incentive, therefore, for home-owners to support the party most closely associated with private housing and with maintaining the conditions for rising property prices and low personal taxation, both of which will tend to create growing wealth for existing home-owners.

It is clear that the main political parties recognise and try to gain from the political importance of housing tenure. Herbert Morrison, Labour leader of London County Council in the 1930s, actively pursued a council house construction policy, promising to “build the Tories out of London” (quoted in Dunleavy and Husbands, 1985, p. 49). In the late 1980s, the Conservative-controlled London Borough of Westminster was embroiled in allegations that it too had tried to use housing policy to party political advantage, this time by encouraging owner-occupation and discouraging council tenancy in marginal wards in the borough. Nationally, there seems little doubt that the possible electoral spin-off from turning Labour-voting council tenants into potentially Conservative-voting home-owners was a factor behind the promotion of ‘right to buy’ legislation by the Conservative government. That said, evidence from the British Election Studies suggests that the actual political benefits were relatively minimal, since few council tenants who bought their properties seem to have changed their party allegiance after purchase: they were more likely to vote Conservative

Table 2. Housing tenure and voting

	Percentage share of vote				C:L ratio			
	Owner-occupiers		Council tenants		ABC1		C2DE	
	Conservative	Labour	Conservative	Labour	Owner-occupiers	Council tenants	Owner-occupiers	Council tenants
1974F	50.0	27.7	17.4	63.6	2.75	0.44	0.79	0.22
1974O	46.7	29.6	17.8	65.3	2.49	0.46	0.66	0.21
1979	56.3	26.7	27.8	59.5	3.17	0.64	1.04	0.44
1983	53.0	19.4	23.3	54.7	4.65	0.72	1.49	0.33
1987	50.9	22.8	21.4	58.1	3.64	0.61	1.18	0.32
1992	52.7	26.5	18.2	64.8	3.07	0.43	1.07	0.24

Source: British Election Study.

than other council tenants *before* they bought their homes (Heath *et al.*, 1990; Garrett, 1994).

However, if the link between housing tenure and political alignment is the product of voters' material interests, then it would seem sensible to suppose that the dynamics of the housing market would have an influence on the direction of the link. The link between economic conditions and voting is well established; voters reward governments when they feel that they personally have become better off or can expect to do so in the near future (see, for instance, Sanders *et al.*, 1987; Norpoth, 1992).

Applying this logic to the housing market, home-owners should support governments which keep interest rates low, and which preside over periods of rapid increases in property prices. Other things being equal, lower interest rates reduce the cost of mortgage repayments, while rising property prices mean that the home-owner's main asset—the house or flat—is appreciating in value, and can become worth much more than the original purchase price. (That said, rising property prices are bad news for first-time buyers, as the 'entry level' price of housing increases; even among existing property-owners, the effects of property price inflation can only be realised in full by people selling for the last time.) However, the housing market is subject to the same cyclical movements as other commodity markets: the market can experience boom, and it can also experience recession. What is more, gains and losses from the housing market vary regionally, as property prices vary considerably from region to region, and as the housing market is itself sensitive to other features of regional economies (Hamnett, 1983, 1989, 1993; Harmer and Hamnett, 1990). In the British constituency-based electoral system, this means that shifts in the housing market may have effects not only on how individual voters behave, but also on the geography of party fortunes, since not all areas will either benefit at the same time from a boom in property prices, or suffer equally from a slump in property values.

Home-owners living in regions where the housing market is healthy and buoyant should be better disposed towards the government, therefore, than home-owners who lived in areas where the market was in recession.

During the 1980s, changes in Britain's economic geography, linked in part to the industrial and monetary policies of the government elected in 1979 and in part to the effects of changes in the international economy, became increasingly polarised regionally (Lewis and Townsend, 1989; Hudson and Williams, 1989). The economies of the traditional urban industrial areas of the north of England and the West Midlands were decimated as old industries collapsed. The service-sector economy of the south-east of England, meanwhile, enjoyed a boom, aided by factors such as the deregulation of financial trading, which helped the City of London to maintain its leading role in world financial markets (Thrift, 1989). The housing market was affected by these developments. In the south-east, the demand for housing grew quickly, and rapid property price inflation brought large paper profits to many households. Further north, however, property prices started from a lower base and did not grow as rapidly, since local economies were weaker (Hamnett, 1989). The ways in which property prices are affected by local economies are often subtle and indirect, however. For instance, immigration, both internal and international, was higher in regions with buoyant economies than in depressed regions, creating greater demand for housing and pressure on the existing stock, and so creating greater property price inflation, in the former areas than in the latter. Furthermore, during the 1980s, many employees in the financial services industry, which was a motor for growth in the south, were able to obtain mortgages at highly preferential rates through their companies as a job perk. People in this position could therefore afford to bid up prices, contributing once again to greater property price inflation in the south than in the north during the 1980s. There may also be other, non-economic influences,

linked to demographic factors such as the numbers of young households being established (itself a product in the 1980s of the 'baby boom' of the post-war years) which could have contributed to differential pressures on regional housing markets.

Changing regional patterns of party support during the 1980s are consistent with the regional geography of housing markets in that decade. Voters in the south of England generally felt that their personal economic situation was improving, and they became more likely over time to support the government. Further north, however, voters were less optimistic about their economic well-being, and their support for the government declined (Johnston and Pattie, 1989). Between 1979 and 1987, Britain's electoral geography became increasingly polarised in response to the polarisation of the country's economic geography. The Conservatives reaped the electoral benefits of property price inflation in the south-east (Spencer *et al.*, 1992).

However, the geography of the late 1980s housing boom contained some of the seeds of its own downfall. The north-south polarisation of economic fortunes became a source of concern; but in keeping with their general liberal economic philosophy, government ministers claimed that, left to itself, the market would remove regional inequalities as investors would increasingly look to cheaper opportunities in the north. However, before this process became established, the economy of the south-east of England began to show signs of overheating. Inflation, the *bête noire* of Thatcherism, began to rise. Ironically inflationary pressure in the south-east had been stoked in part by two government policies. A run of populist tax-cutting budgets in 1986, 1987 and 1988 helped to stoke a consumer-led boom. Widespread anticipation of changes in the legislation on mortgage tax relief (introduced in September 1989, but announced well in advance) removing joint tax relief from two-person households, produced a rush of first-time buyers trying to beat changes. Both government policies contributed to the growth of property prices in the south-east.

The government responded to rising inflation by raising interest rates. The building societies followed suit, raising the cost of mortgage repayments substantially and providing a strong disincentive against either buying for the first time or 'trading up' in the housing market by buying a larger or more expensive home. At the same time, the international economy went into recession. In Britain, this was manifested in the onset of a service-sector recession which brought rising unemployment to the previously affluent south-east, narrowing the regional economic gap which had opened in the 1980s. The UK housing market entered its longest and deepest property recession on record. As late as the end of 1994, signs of recovery were still weak and faltering.

Not surprisingly, the property slump has had an impact on individuals' economic circumstances. Falling property prices meant that many households were now confronted by negative equity: the market value of their home was lower than their mortgage, often markedly so. A recent study suggests that recent buyers of relatively poor-quality housing in the south of England were particularly badly affected by negative equity (Gentle *et al.*, 1994). The study argues that the groups most affected by negative equity are precisely those who are least able to cope with the problem: negative equity is not the prerogative of the "stereotype of the 'stricken yuppie' in his/her Docklands apartment" (Gentle *et al.*, 1994, p. 193). If home-ownership in the 1980s had seemed a path to wealth accumulation, in the early 1990s it threatened many with a rising and seemingly insurmountable burden of debt.

Like the housing boom of the late 1980s, there was a regional geography to the housing slump of the early 1990s. The decline in property price inflation and the problem of negative equity, while present throughout the country, were particularly deeply felt in the south (Hamnett, 1993; Gentle *et al.*, 1994; Dorling, forthcoming). If the housing boom of the 1980s had contributed to the Conservatives' success in seats where prices rose most rapidly during that decade, therefore, it

Table 3. National flow of the vote matrix, 1987–92

1987	1992			
	Conservative	Labour	Liberal Democrat	Rest/Non-voter
Conservative	68.0	7.5	10.0	14.5
Labour	3.8	74.5	8.2	13.5
Alliance	13.0	16.5	57.6	12.8
Rest/Non-voter	15.0	9.0	11.0	65.0

Source: Harris exit poll, supplied by Professor Ivor Crewe.

seems likely that the housing slump of the early 1990s would have damaged the party's standing there in the 1992 election, the first to be held after the collapse of the property market. A weak housing market in the run-up to that election was widely seen as a major problem for the government's re-election chances, particularly as it most threatened their support in precisely those regions of southern England where the party had always been strong and where it had enjoyed large advances during the 1980s (although there was a possibility that there would be countervailing trends further north, where housing markets were less badly affected by recession: Spencer *et al.*, 1992).

Expecting the Worst: Predicting the Likely Political Effects of Housing Recession

The impact of the property recession on electoral behaviour can be tested by looking at changes in voting between the 1987 and 1992 general elections: those who change the party they support between elections are of particular interest. Some of the movements of support from one party to another are to an extent self-cancelling: for instance, those who switched from voting Labour in 1987 to supporting the Liberal Democrats in 1992 were to some extent offset by people who switched their allegiance from the Alliance in 1987 to Labour in 1992. Simply comparing net changes in party support, by looking at the changes in total support for each party, will therefore underestimate the amount of

vote-switching going on. A better guide to the gross extent and direction of vote-switching between elections can be gauged from national electoral surveys, which ask people how they voted in the most recent, and in the previous election. This allows us to build a matrix of vote-switchers which reveals the gross flows between parties: this is often referred to as the flow-of-the-vote matrix. Exit polls after the 1992 general election suggested large amounts of underlying volatility in support for the major parties between 1987 and 1992: for instance, 68 per cent of those who voted Conservative in 1987 stayed with the party in 1992, but 7.5 per cent switched their allegiance to Labour, 10 per cent moved to the Liberal Democrats, and 14.5 per cent either voted for a minor party or did not vote at all (Table 3: the data in the table have been corrected to take non-voters into account).

On the basis of the above analysis of trends in the British property markets, it is possible to specify three sets of hypotheses concerning the effects of housing recession on electoral support for the government in particular constituencies at the 1992 general election. Each set of hypotheses is linked to one aspect of the housing market: property prices; changes in property prices; and levels of negative equity.

1. Property price effects. The resale value of their property is an important potential source of wealth for home-owners. High property prices are, therefore, a desirable feature of the local housing market for current owner-occupiers, who can realise their

profits by 'trading down' to a smaller home (perhaps when they have retired, and their children have left home), or by moving to an area where property prices are lower, allowing them to 'trade up' to a larger property without increasing their mortgage: home-owners can also use the value of their property as a form of investment for their immediate family, to be realised on their death. Other things being equal, we hypothesise that owner-occupiers living in areas where property prices were high in the run-up to the 1992 election were more likely to stay loyal to the Conservative party, or to switch their support to the Conservatives, and less likely to switch from the Conservatives to one of the main opposition parties or to abstention, than were voters living in areas where property prices were low. (But it should be noted that, for non-home-owners, high property prices may present real difficulties, by raising the entry level cost of home-ownership. High prices may contribute indirectly to growing homelessness, therefore. However, the homeless are much less likely to be on the electoral register than other groups, reducing the adverse electoral impact for the government. Furthermore, by definition, since they cannot afford to live there, the homeless, and those unable to buy a property because of prices, will be unlikely to vote against the government in areas with high property prices.)

2. *Market movement effects.* The market value of properties at a fixed point in time gives some indication of the relative differences between properties and between areas in the potential wealth tied up in housing. However, it ignores the likely impact of market movements. While *ceteris paribus*, owner-occupiers in highly priced properties may feel better off than owners in low-price properties, market movements have the potential completely to alter this. Home-owners who have seen prices fall either for their own property or generally in their home area are likely to feel relatively pessimistic about their current and future personal economic position, even if the market value of their

home remains high by national standards: they have still seen potential profits decline, and in some cases may be facing a loss. Conversely, home-owners who have seen prices rise over the same period are likely to feel optimistic about their economic position, even if their property has a relatively low market value, since they can expect its value to appreciate. The political consequences follow. We hypothesise, therefore, that there was a positive relationship between changes in property prices before the election and support for the government in 1992: the more property prices rose, the larger the number of voters who stayed loyal to the government or switched to it, and the fewer voters who deserted the Conservatives in favour of another party. The corollary is that where property prices fell, voters should have been more likely to shift away from the government and towards the opposition.

3. *Negative equity effects.* The effects of the housing slump and falling property prices need not have affected all home-owners in the same way, however. For many owner-occupiers, particularly those who bought their homes before the rapid property price inflation of the 1980s boom, falls in property prices during the slump of the early 1990s may not have been a source of substantial personal concern, however. The 1980s boom may have produced large paper profits, but where there was no intention to sell on and realise these profits, their value would have been nugatory. Furthermore, if the property had been bought before the boom began, falls in price during the early 1990s, while often substantial, diminished but did not remove the effects of property price inflation: the resale value of the property was still higher than the original purchase price. Home-owners in this position would still have come out ahead had they sold during the slump.

But those who bought *during* the market boom of the 1980s, particularly those who bought near the top of the market, were potentially in a very different situation. For them, falling property prices represented not

just declines in paper profits, but often real financial losses. Many home-owners in this group found themselves trapped by negative equity, as the market value of their home fell below the value of their mortgage, making it very difficult for them to move homes, even if they were finding mortgage repayments difficult (high interest rates and service-sector unemployment combined with the housing slump in the early 1990s to produce record rates of home repossessions as mortgage holders defaulted on their mortgages: according to the autumn 1992 wave of the British Household Panel Study, around 16 per cent of all mortgage holders had experienced some difficulty in paying for their housing during the previous year, and 24 per cent of those who had experienced problems had been two or more months in arrears). It is probable, therefore, that home-owners with negative equity would be less optimistic about the future than other owners, even when the effects of property price levels and movements were taken into account. Furthermore, negative equity may well have had an impact on other home-owners. In areas where many households were affected by negative equity, repossession rates also increased during the slump. Building societies then sold on repossessed properties at bargain prices, further depressing local housing markets in areas with many repossessions. Our argument is not that negative equity and repossession of homes by building societies are directly linked, but that the same factors which make some borrowers more likely to have negative equity (not having the resources to put down substantial deposits when buying a property) also contribute to the increased likelihood of repossession. Thus private housing problems become concentrated in particular places.

Taking both these factors into account therefore, we hypothesise that voters living in areas where a high proportion of households had negative equity in the early 1990s would be less well-disposed towards the government than voters living in areas with relatively low levels of negative equity, whether or not they themselves faced nega-

tive equity. The higher the proportion of households with negative equity in an area, therefore, the lower we expect loyalty to the government and shifting of support to the Conservatives to have been in 1992, and the higher shifts from the Conservatives to other parties.

In order to assess these hypotheses, we analyse constituency-level data on housing market and electoral change between the 1987 and 1992 general elections for all of the parliamentary constituencies in Great Britain. Constituency housing market conditions are measured by three variables which have been derived from the records of a major national building society (see Gentle *et al.*, 1994; Dorling, forthcoming). Average property prices for parliamentary constituencies were estimated by using a sample of property sale and mortgage records which extended from 1980 to 1991 and which contained over 1 million individual records. Each property purchase was postcoded, and its parliamentary constituency was derived from the post-code. A weighted average of the market prices of four types of dwelling was calculated for each constituency for each calendar year following the method described in Dorling *et al.* (1992). This ensured that an unusual mix of dwellings selling in any particular year in a constituency did not then unduly influence the average housing price estimates for that area. In the following analyses, we use the average constituency property price for 1991, expressed in £1000s (HP91). The second variable (DHP8991) draws on the same average property price estimates and measures the change in constituency average property prices between 1989 and 1991, as a percentage of the 1989 price: this allows us to estimate the effects of the housing slump (which began to bite in 1989) on local property prices prior to the election. The third variable (NEG93) estimates the number of mortgage borrowers in each constituency with negative equity: the data are identical to those reported in Dorling (1993). For these estimates, the recent postal-county-level changes in property prices

reported by the Halifax Building Society are used to estimate the current market value of the property of households who bought between 1988 and 1991.¹ The figures used were calculated for the third quarter of 1993 but the geographical pattern they contain is very similar to that which would have existed at the time of the 1992 election: the overall level was simply more severe.²

To examine the impact of local housing market conditions on local voting, we ideally need some estimate of the flow of the vote not for Britain as a whole, but for each parliamentary constituency. For each constituency, we need an estimate of the proportion of 1987 Conservative voters who changed their allegiance and supported Labour in 1992. This has a considerable advantage over simply measuring the change in a party's share of the vote from one election to another: not only can we see by how much support for a party has increased or decreased in net terms, but we can also see which parties its supporters have come from or moved to, and how many have shifted from one party to another.

Opinion polls are the main national sources of data on how individual voters switch allegiance from one election to the next, either by employing a panel design and re-interviewing the same individuals at two successive elections, or, in cross-sectional studies, by asking respondents how they voted at both the current and last election. Polls are not sufficiently detailed to allow measurement of the flow of the vote at the level of individual constituencies, and we have to use indirect estimation methods. Here, we have employed entropy-maximising estimation techniques. Basically, entropy-maximising takes information from known sources—the national flow of the vote between 1987 and 1992 derived from opinion polls, and the actual election results in each constituency at both the 1987 and 1992 elections—to estimate unknown values—the flow of the vote for each constituency (Pattie *et al.*, 1994: for details of the entropy-maximising procedure, see Johnston and Hay, 1982; Johnston, 1985). The estimates are

robust and conservative: any inter-constituency variations in the flow of the vote between parties that they reveal is the smallest amount of variation consistent with the national pattern and the constituency results (Johnston and Pattie, 1992a, 1993).

In the analyses below, we employ constituency flow-of-the-vote estimates for the period 1987–92. The flow estimates are expressed as the percentage of those who voted for party X in 1987 voting for party Y in 1992: to reflect this, the relevant variable would be called X87Y92. Since our main objective in the paper is to estimate the impact of the housing slump on support for the government, we concentrate on flows to and from the Conservatives. We thus focus on how those who voted Conservative in 1987 voted in 1992 and we employ estimates of flows from the Conservatives in 1987 to: the Conservative in 1992—that is, party loyalty (C87C92); to Labour (C87L92); to the Liberal Democrats (C87A92); and to other parties and abstentions (C87R92). We are also interested in those who changed their allegiance from another party in 1987 to the Conservatives in 1992: from Labour (L87C92); the Alliance (A87C92); and from other parties and abstentions (R87C92).

The main analytical strategy is to fit a series of regression models, with the flow-of-the-vote estimates as the dependent variables and the local housing market variables as the independents. However, before we can analyse properly the impact of housing markets on support for the government, we need to take some other factors into account.

First, there is a well established relationship between the geography of support for the major parties and the geographies of both social class and past support (Crewe and Payne, 1976; Miller, 1977; Johnston *et al.*, 1988). The Conservatives do best in seats with a large middle-class electorate, and Labour does best in seats with a large working class. Furthermore, all parties tend to do best in seats where they were strong in the past: the geography of party support is very stable (Pattie and Johnston, 1993). To take both of these factors into account, our

models include another independent variable, CON87, the Conservatives' percentage share of the electorate in each seat at the 1987 election. Since local social structure is strongly correlated to party support, this takes the geography of social class into account too. Briefly, we expect flows of support to the Conservatives to be greater, and flows from them to be smaller, where the party was already strong in 1987.

We also need to differentiate the impacts of the housing slump from the more general effects of the new recession of the early 1990s. The latter have been multi-faceted, but an important aspect has been the return of high rates of unemployment, particularly since this has now spread from the 'traditional' depressed northern industrial areas which were badly affected by the recession of the early 1980s to the previously affluent south of the country. There is clear evidence that the local impact of unemployment had an adverse effect on the geography of support for the government in 1992 (Johnston and Pattie, 1992b; Pattie *et al.*, forthcoming). We therefore use data on the number of unemployed in each constituency in December 1991, expressed as a proportion of the constituency electorate, as a surrogate for the wider effects of the recession (UNEM91: December 1991 was close enough to the 1992 election to give a good indication of the level of unemployment in the months preceding the poll). The higher the proportion of the local electorate registered out of work before the 1992 election, the lower we expect flows of the vote to the Conservatives would have been, and the higher the flows from the Conservatives to other parties.

One other feature of British electoral behaviour which became increasingly marked during the 1980s was the geography of voting: increasingly throughout that decade, where voters lived became an important guide to how they would vote, even when their social background was taken into account (Johnston *et al.*, 1988). To a large extent, this seems to have been a product of the changing economic fortunes of different parts of the country during that decade, as the

north-south divide widened: voters judged the government's record in part on what was happening in their local areas, so that a voter in Surrey would see economic success while another in Merseyside might see economic failure (Johnston and Pattie, 1989). The service-sector recession of the early 1990s, unlike that of manufacturing industry in the early 1980s, hit the south of the country hard, narrowing inter-regional disparities in economic fortunes and hence in voting. Nevertheless, while the electoral divide between different parts of the country narrowed in 1992, it did not disappear, and voters' choices were still influenced by the condition of their regional economies (Pattie *et al.*, 1994; Johnston and Pattie, forthcoming).

It makes sense, therefore, to include controls for the extent to which different areas vote in distinctive ways. We have employed a functional regional classification developed by the CACI marketing company (for details, see Crewe and Fox, 1984; Johnston *et al.*, 1988). The classification scheme uses a hierarchical cluster analysis of 1981 Census data to group constituencies together into 31 categories with similar socio-economic characteristics. The functional regions this creates are not comprised of contiguous constituencies, but they more clearly accord with separate local housing markets than the standard geographical regions. Furthermore, they also reveal an important dimension of the geography of the vote (Johnston *et al.*, 1988). For the current paper, we have amalgamated the 31 functional areas into 12 types.

Describing the Geography of the Housing Slump

The housing slump did not occur at the same time or to the same extent in all parts of the country. In order to understand its political implications, it is necessary to look in more detail at its geography, and also at the geography of the preceding boom. In part, the changing geography of the property market can be subsumed within more general discussions about north-south divides in Britain's economic geography. On the face of things,

Table 4. Average property prices, 1991, and proportion of households with negative equity, third quarter 1993, by geographical region

	Property price, 1991 (£000s)	Percentage change in property price, 1983-86	Percentage change in property price, 1987-89	Percentage change in property price, 1989-91	Percentage of negative equity, 1993
Strathclyde	42.44	13.39	19.65	11.95	6.66
East Central Scotland	47.01	12.25	26.16	8.66	1.12
Rural Scotland	39.19	8.60	27.98	23.06	2.07
Rural North	51.81	21.43	47.02	6.29	11.08
Industrial North East	38.27	12.98	31.59	6.83	5.53
Merseyside	46.99	8.31	44.01	22.17	8.72
Greater Manchester	48.68	17.82	48.97	4.98	8.05
Rest of North West	57.04	20.32	51.06	11.22	10.83
West Yorkshire	47.34	14.40	49.49	9.33	5.89
South Yorkshire	41.10	12.35	43.16	12.01	6.27
Rural Wales	45.05	13.14	49.18	2.26	10.05
Industrial South Wales	43.61	21.54	35.99	-0.82	4.14
West Midlands Conurbation	51.86	18.15	47.39	6.36	9.81
Rest of West Midlands	59.68	23.85	52.84	3.07	18.39
East Midlands	51.71	28.32	44.24	3.70	28.13
East Anglia	57.02	40.31	31.15	-12.91	27.34
Devon and Cornwall	59.27	30.71	46.52	-10.72	33.66
Wessex	63.94	37.02	32.99	-6.11	36.53
Inner London	78.15	62.34	13.14	1.81	39.83
Outer London	86.38	56.72	16.19	-3.38	39.36
Outer Metropolitan	84.86	50.91	25.37	-6.91	34.29
Outer South East	68.78	43.38	32.60	-10.90	38.79
Great Britain	59.20	30.18	35.01	2.19	21.04
<i>F (sig)</i>	78.19 (0.000)	117.57 (0.000)	47.96 (0.000)	9.62 (0.000)	73.24 (0.000)

despite talk of housing recession in the south of the country, the regional geography of property prices on the eve of the 1992 general election still showed clear signs of an affluent south and a poorer north: almost all of the regions with mean constituency property prices higher than the national average in 1991 were in the south of the country. (Table 4: for completeness, Tables 4–6 also report *F*-values and significance levels from analysis of variance tests. All the regional differences reported are statistically significant.) Average prices were still especially high around the capital: prices in outer London and in the capital's hinterland were around twice as high as prices in Scotland, Wales and the north of England.

However, closer examination of how prices changed over time gives a clearer picture of the development of the 1980s' housing boom and the 1990s' recession (Table 4). The changing regional geography shows clear signs of a 'growth wave' starting in the London region in the mid 1980s, and sweeping out from the capital in later years (Hamnett, 1993). Between 1983 and 1986, the largest average price increases were all in the south of the country, particularly in the south-east. From 1987 to 1989 (the year in which the boom turned into a slump), property prices continued to increase in the south, but the highest average increases were now taking place in the Midlands and north of England, and in Wales. Between 1989 and 1991, the crest of the growth wave had reached Scotland and the north of England—but the height of the wave, in terms of the average increase in property prices, was lower in that period than in either of the earlier ones: even where prices continued to grow, the housing market in the first years of the 1990s was not as buoyant as it had been during the 1980s. Furthermore, average property prices actually declined throughout south-east England. Not surprisingly, therefore, the proportion of households with negative equity in the third quarter of 1993 was much higher in the south-east of the country than anywhere else. On our estimates, around 40 per cent of owner-occupied households in

Inner London were affected by negative equity then, compared to only around 1 per cent of households in East Central Scotland (the Edinburgh area). As a consequence of the slump, many households in the Conservative government's stronghold region had seen the value of their major asset decline, often by substantial margins. The housing slump represented a double threat to the Conservatives, therefore. Not only did it affect a group of voters, home-owners, among whom the Conservatives would normally have expected to have been the largest party, but it hit home-owners in the Conservative southern heartland particularly hard.

The geography of the housing boom and slump across the 12 functional regions tells a similar story, albeit from a somewhat different perspective from the regional geography discussed above. There, the focus was on groups of constituencies in the same areas of the country. Here, the emphasis is on groups of constituencies with similar social profiles even when they are in very different parts of the country: we anticipate that these social profiles are related to local housing market conditions. The functional regions are organised in a rough order, with the less-affluent regional types towards the top of Table 5, and the more-affluent types towards the bottom. Average constituency property prices in 1991 were still highest in the latter (although the general patterns were not quite as clear as for the geographical regions), but once again this obscured the effects of housing market dynamics. Although the more affluent constituencies were the areas where property prices had grown fastest during the mid 1980s, by the end of the decade they had been overtaken by property price inflation in less-affluent areas. In the slump of the early 1990s, property prices in the most-affluent constituencies fell even though they continued to rise—albeit more slowly—in the less-affluent areas. Furthermore, some of the areas most affected by negative equity in 1993 were among the most-affluent areas on this classification of constituencies. Negative equity was also more common than average in some less-affluent areas too, however—

Table 5. Average property prices, 1991, and proportion of households with negative equity, third quarter 1993, by compressed CACI region

	Property price, 1991 (£000s)	Percentage change in property price, 1983–86	Percentage change in property price, 1987–89	Percentage change in property price, 1989–91	Percentage of negative equity, 1993
Immigrant	54.02	32.09	36.72	0.35	28.41
Blue collar	44.67	18.27	40.62	6.68	14.89
Depressed industrial	43.72	15.30	39.18	9.28	11.84
Poor council house	42.62	22.35	24.11	6.41	14.37
Mid Scotland	43.68	11.16	26.03	19.50	3.76
Inner Metropolitan	81.76	55.21	16.90	1.99	31.88
High status	87.04	48.64	26.64	-1.94	23.71
White collar	68.67	38.11	28.77	1.11	27.32
Resort	62.26	36.37	29.21	-8.16	34.84
Mid Britain	62.51	32.80	39.20	-0.51	24.22
Bouyant	71.46	39.35	34.05	-5.06	24.61
Agricultural	55.85	28.26	42.53	-4.04	20.81
Great Britain	59.20	30.18	35.01	2.18	21.04
<i>F</i> (sig)	66.62 (0.000)	32.35 (0.000)	13.55 (0.000)	8.32 (0.000)	13.86 (0.000)

Table 6. Average property prices, 1991, and proportion of households with negative equity, third quarter 1993, by winning party 1987

	Property price, 1991 (£000s)	Percentage change in property price, 1983-86 ^a	Percentage change in property price, 1987-89	Percentage change in property price, 1989-91	Percentage of negative equity, 1993
Conservative	68.38	36.55	35.19	- 1.78	26.45
Labour	45.68	19.79	34.80	6.91	13.07
Alliance	49.12	17.81	34.63	21.65	15.10
Nationalist	36.80	11.51	32.94	- 0.85	7.88
Great Britain	59.20	30.18	35.01	2.19	21.04
<i>F</i> (sig)	123.35 (0.000)	50.54 (0.000)	0.070 (0.976)	21.90 (0.000)	37.55 (0.000)

^aWinning party, 1983.

particularly those with a high immigrant population. (The Inner Metropolitan constituencies, on the other hand, where negative equity was also prevalent, contain a mix of highly affluent and poorer places, ranging from Chelsea, Glasgow Hillhead and Hampstead, to Streatham, Hackney and Lewisham.)

Thus the Conservatives were once again faced with an electoral problem. Not only had the slump hit the regions which were traditional Conservative strongholds, but within those regions it had the most severe effects on those seats which were most marginal, and where the Conservatives were most vulnerable.

The most alarming trend for the Conservatives, however, was what was happening to the housing market in their parliamentary seats, compared to the situation faced by other parties (Table 6). Not surprisingly, perhaps, average property prices were higher in seats with Conservative MPs than in seats held by members of other parties. Between 1983 and 1989, home-owners in Conservative seats saw the value of their properties increase by more than did home-owners in other seats (even though the difference between Conservative and other seats in property price changes over the period from 1987–89 was not markedly greater than for any other seat). Overall, the government could have reasonably expected that this trend would consolidate their hold of these seats: why should voters oust their sitting Conservative MP when a Conservative government had presided over a housing boom which had made larger-than-average paper profits for home-owners in those very seats.

Conservative MPs lost this advantage during the slump. The slump in the housing market would have been a problem for the party in any case, since the opposition parties could use it as a weapon with which to beat the government at relatively little risk to themselves: whereas the government was responsible, in the public mind, for the slump, the opposition parties, out of office for 13 years by the time of the 1992 election, could

reasonably claim that it was not of their creation. To add to the government's problems, however, the slump hit hardest not only in the regions and constituency types where the Conservatives' bedrock support has always been located, but also in the very seats which the party was defending. Between 1989 and 1991, constituency average property prices fell by almost 2 percentage points in seats won by the Conservatives in 1987, whereas property prices were still growing in Labour- and Alliance-held seats. Even worse for the government, owner-occupiers in Conservative-held seats were twice as likely to be threatened by negative equity as owner-occupiers in Labour-held seats (26 per cent and 13 per cent of owner-occupiers in Conservative- and Labour-held seats respectively were affected).

The slump created a reservoir of worried and financially challenged voters within a group of people who have normally been more likely to vote for the Conservatives than for any other party, and it had done so particularly in the seats and regions where support for the Conservatives had normally been strongest. It was hardly surprising, therefore, that Conservative MPs and party leaders were deeply troubled by the potential effects of the housing recession.

Measuring the Electoral Impact of the Housing Recession

We are now in a position to examine the three hypotheses set out earlier in the paper: the higher property prices were in an area, the more likely voters would be to switch to the Conservative government in 1992 (H1); the more property prices had risen before the elections, the more likely voters would be to switch to the government (H2); and the higher levels of negative equity locally, the less likely people would be to support the government (H3). In this section of the paper, we assess whether such concerns about the impact of the housing slump on support for the government were justified. The hypotheses are evaluated through a regression analysis of constituency flow-of-the-vote

Table 7. Regression models, negative equity, 3rd quarter, 1993

	C87C92	C87L92	C87A92	C87R92	L87C92	A87C92	R87C92
CON87	0.733	-0.110	-0.085	-0.537	0.093	0.257	0.677
UNEMP91	*	0.391	-0.477	0.276	-0.170	0.166	-0.504
NEG93	-0.034	0.019	0.029	*	-0.015	-0.022	-0.026
HP91	*	-0.037	0.021	*	0.024	*	0.027
DHP8991	0.047	0.042	*	-0.048	-0.018	0.045	*
CONST	43.94	11.38	12.90	31.78	1.48	5.14	10.13
R^2	0.76	0.56	0.06	0.71	0.72	0.36	0.86

estimates. All variables were entered into each model. In the interests of clarity, however, in the tables we only report those which were significant at the 95 per cent level.

The first set of models assumes that there were more regional dimensions to the flows of party support: the only factors we allow to influence changes in constituency support are the constituency-level factors. We include our control factor of previous Conservative strength in each seat (CON87), and the proportion of the local electorate registered out of work on the eve of the election. Both were related to flows of support for the Conservatives in expected ways (Table 7). The stronger the Conservatives were in a seat at the 1987 election, the larger the flows of support from other parties to them, and the smaller the rates of defection from them to other parties between 1987 and 1992. So, for instance, for every percentage point increase in their share of the electorate in a seat in 1987, the Conservatives retained 0.733 percentage points of their past supporters (C87C92), and their losses to minor parties and abstentions dropped by 0.54 percentage points. The basic constituency-level geography of support for the party was steady over time, therefore.

The early 1990s' recession did damage Conservative fortunes, in other ways than via the slump in property values. Constituency unemployment rates were significantly related to all flows of support to and from the Conservatives, with the sole exception of the extent of party loyalty. In all but one case, the relationships were in the expected direc-

tion: the higher the proportion of the local electorate registered out of work on the eve of the election, the smaller the flows of support to the Conservatives, and the greater the flows away from them.

The main goal here, however, is to assess the impact of the housing slump. Looking first at the property price hypothesis (H1), there is some evidence that the Conservatives did do best in areas where property prices were high in the run up to the election, and worst in areas where they were low. For every £1000 on the average property price in a constituency, the Conservatives lost 0.037 percentage points fewer of their 1987 supporters to Labour in 1992, and won over 0.024 percentage points more of 1987 Labour party supporters and 0.027 percentage points more voters from the minor parties and abstentions.³

The 'market movement' hypothesis (H2) also finds support, although once again there are anomalies. The greater the rise in property prices between 1989 and 1992 in a constituency (or the smaller the falls), the larger the proportion of 1987 Conservative supporters who remained with the party in 1992, the smaller the proportion who defected to the minor parties or to abstention, and the larger the flow of 1987 Alliance voters to the party in 1992. However, two of the coefficients for the change in property prices variables went in the opposite direction to that hypothesised: the greater the rise in property prices, the larger the proportion of 1987 Conservatives who switched to Labour in 1992, and the smaller the

proportion of 1987 Labour supporters who switched to the government. Once again, this may well be an artefact of the geography of party support: as we have seen, property prices rose most over the 1989–91 period in those regions where the Conservatives had become progressively weaker during the 1980s, and where Labour was in the ascendant. Furthermore, on average, property price rises there during the early 1990s were lower than property price rises in the south during the 1980s. It may well be, therefore, that property price inflation in the north after 1989 was insufficient to persuade local voters to put aside the patterns of party support they had strengthened during the 1980s and turn to the government.

The negative equity hypothesis (H3) fares well. Only one of the coefficients was insignificant, and all of the others were in the expected direction. Negative equity damaged support for the government in 1992, *ceteris paribus*. The higher the proportion of owner-occupied households locally with negative equity, the smaller the flows of support from other parties to the government, and the higher the flows from the government to other parties: for instance, for every rise of 10 percentage points in the proportion of home-owners with negative equity in a seat, the Conservatives held on to 0.34 percentage points fewer of their 1987 voters, while losing 0.19 percentage points more to Labour and 0.29 percentage points more to the Liberal Democrats. Conversely, for every rise of 10 percentage points in negative equity, 0.15 percentage points fewer of Labour's 1987 vote defected to the Conservatives: the equivalent figures for the Alliance and for other parties and abstentions were 0.22 and 0.27 percentage points fewer respectively.⁴

Although the evidence that changes in property prices affected support for the government is mixed, therefore, there is strong evidence to suggest that negative equity was a significant factor which lost the government support. This is not surprising. We have already rehearsed the possibility that the anomalous results for the property price and property price change variables

may partly reflect in part the effects of the geography of party support rather than housing market effects *per se*. They may also arise because, even where property prices declined, many home-owners still possessed a property which was worth appreciably more than when they had bought it, albeit not as much more as at the height of the market. Home-owners in this position may have felt well-disposed towards a government under which they could still make a profit by selling their home. Furthermore, the effects of the slumping housing market are likely to impact particularly on two groups: potential first-time buyers (who should benefit as properties become more affordable), and those home-owners who wish to move house. Within the latter group, it is those who face negative equity who are in real difficulties. For them, unlike most home-owners in the post-war period, owning their own home was not a means to greater wealth, but a path to a rising burden of debt, with no clear way of paying it off. Home-owners in this position are least likely to be well-disposed towards the government, hence the general support for the hypothesis.

Controlling for the Geography of Party Support

To take into account the possible impact of the geography of party support, we introduced controls for region into the equations: however, since there are very strong inter-correlations between geographical region and the housing market variables, creating significant colinearity problems and biased estimates, we employed the functional regions in the following analyses. Dummy variables were entered into the equations for 11 of the 12 functional regions. The Agricultural functional region was omitted from the analysis, and serves as the comparator for the other regions. The coefficients for each of the regional dummies are interpreted as the percentage point difference in the size of the constituency flow of the vote between that region and the Agricultural region. The results are in Table 8.

Table 8. Regression models, compressed CACI regions

	C87C92	C87L92	C87A92	C87R92	L87C92	A87C92	R87C92
CON87	0.739	-0.116	-0.128	-0.495	0.092	0.285	0.640
UNEMP91	-0.242	0.430	-0.347	*	-0.168	*	-0.380
NEG93	-0.048	*	0.031	*	-0.013	-0.026	-0.038
HP91	*	-0.031	0.033	*	0.026	*	0.061
DHP8991	*	0.025	*	*	-0.013	0.023	*
IMMIG	2.949	1.069	-5.058	*	*	2.894	-2.343
BLUECOL	5.435	2.662	-4.445	-3.652	-0.654	3.425	1.315
DEPIND	5.319	1.512	-4.299	-2.531	*	3.090	*
PCH	*	*	-2.626	5.381	*	*	*
MIDSCOT	*	-1.852	-2.848	4.583	*	2.097	-3.874
INMET	4.115	*	-5.232	*	*	3.857	-2.143
HISTAT	*	1.360	-2.825	*	-0.438	1.710	*
WHITECOL	*	1.448	-3.371	*	-0.810	2.335	-2.524
RESORT	*	*	*	*	0.446	*	*
MIDBRIT	4.168	2.116	-4.444	-1.839	-0.809	3.716	*
BOUYANT	*	*	*	*	*	*	*
CONST	40.122	9.984	16.00	33.89	1.712	2.424	9.120
R^2	0.82	0.69	0.19	0.80	0.77	0.48	0.88

Once again, the relationships between the controls for past party strength and constituency unemployment rates and constituency flows-of-the-vote are much as expected. The regional dummies indicate some important shifts in the geography of party support between 1987 and 1992. Compared to Agricultural constituencies, for example, Conservative loyalty was relatively high in some of the more depressed functional regions. The party was also more successful in these regions than in Agricultural areas in limiting defections to the Liberal Democrats and to minor parties and abstentions, and in winning support from these parties. However, the Conservatives were less successful in most regions than in Agricultural areas at stemming flows of support from them to the Labour party. Flows from Labour to the Conservatives were lower in the relatively high-status areas than in Agricultural areas. The Conservatives did relatively well in 1992 in types of constituency where they had lost support during the 1980s, and they did relatively poorly in types of seat where they had previously done well. These regional results are consistent with the argument that the process of regional polarisation which had

been a hallmark of election results during the 1980s reversed somewhat at the 1992 election.

Adding the geographical context within which each constituency was placed slightly reduced the level of support for the market movement hypothesis. Only three of the seven coefficients for the property price variable, and none of the coefficients for change in property prices, were both significant and in the hypothesised direction once regional context was included. However, support for the negative equity hypothesis remains strong: all but two of the seven coefficients were significant and in the expected direction. Even when we control for regional context, for past party strength, and for other, non-housing market effects of the recession, therefore, negative equity was significant in reducing support for the government. Indeed, comparing Tables 7 and 8 reveals that the significant negative equity coefficients were about the same size, whether or not regional context was controlled for. This is generally true for the property price coefficients too. Local housing market conditions, particularly property prices and negative equity were independent influences on constituency-level

support for the government in 1992, therefore: the more negative equity there was locally, the worse the Conservatives did, but the higher local property prices were, the better the party fared.

Conclusions

The analyses reported here strongly imply that the housing recession damaged support for the government in 1992. Many home-owners would not have been faced directly with financial losses as a result of a declining market, either because their property was still worth more than when they bought it, or because they had no intention of selling. This probably set a limit on the extent of the electoral damage to the Conservatives. However, some home-owners saw the value of their home drop below the value of their mortgage, creating often substantial financial losses on selling the property. After a decade in which government policy had advocated home-ownership as a means of achieving personal autonomy and financial security, it is hardly surprising that the evidence advanced here suggests that support for the government in 1992 flagged most where more home-owners had seen this dream turn sour.

Furthermore, even in late 1994 signs of recovery in the housing market were at best fitful. The logic of the housing recession suggests that recovery will be very slow (Cornford and Dorling, 1994). Since recovery is slow, and most of those who suffer from negative equity are young and not very affluent, the negative equity problem will probably persist for some time to come. Even when recovery does finally reach the housing market it is likely to be uneven in its effects, doing least to raise the values of the poorest-quality properties where most negative equity holders live. Escaping from the negative equity debt trap is, therefore, liable to be very difficult indeed. Furthermore, many of those hit most directly by negative equity were younger buyers who had only recently entered the market and had not yet begun to see their property rise in value. As a conse-

quence, the memory of the housing slump may well persist in home-buyers' minds and behaviour for many years to come.

It seems more than likely, therefore, that when the next general election is called, probably in 1996 or 1997, substantial numbers of home-owners will still be suffering from negative equity. During the 1992 election, many of those with negative equity probably had no intention of moving, and saw negative equity only as a distant and theoretical threat. However, this is liable to change dramatically if, as we suspect, negative equity becomes a long-term problem. The longer people are unable to move home because of the effects of their negative equity, the more likely they are to *need* to move—as jobs change, reducing income or requiring a relocation, and as family circumstances alter, as a result of divorce, children and so on. A growing group of voters will be trapped by their housing circumstances. People in this situation are liable to become more disillusioned and frustrated as time goes on. If there was a relationship between the prevalence of negative equity in 1992 and how badly the government did in a constituency, that relationship is unlikely to diminish by 1996–97. Negative equity could prove to be an electoral time-bomb ticking under the current government.

Notes

1. Postal counties are generally identical to administrative counties, with only a few exceptions. Humberside is split into North and South, because the Humber estuary is a bar to easy delivery of the post. Greater Manchester is still part of Lancashire.
2. We use negative equity data for the third quarter of 1993, because a larger number of people held negative equity in 1993 than in previous years, which makes the estimates more robust as larger proportions of households are involved than would otherwise have been: it is likely that there is a lag period between the actual market depression and the appearance of negative equity in our data, because our estimates rely on building society data which are calculated on the basis of mortgages being completed when a property is sold. If the market is falling, there is

a period when people do not buy, and thus do not complete their mortgages, before sellers accept that the lower value of their property is a long-term reality. This will, therefore, delay the appearance of their negative equity in our estimates. The 1993 estimates, therefore, may well reflect market conditions during 1992.

3. Flows from the Conservatives in 1987 to the Liberal Democrats in 1992 represent something of an anomaly here, however: the higher the average property price in constituency, the greater the defection of 1987 Conservatives to the Liberal Democrats in 1992. This is the opposite of what we hypothesised. However, it is very likely that this is a consequence of the geography of opposition support during the 1980s and 1990s. Whereas the basic party competition in the north of the country was Labour against the Conservatives, in the south, where the boom of the 1980s had been most pronounced, the electoral competition was mainly between the Conservatives on one side and on the other the Alliance until 1987, and the Liberal Democrats thereafter (Johnston *et al.*, 1994). Since there is little point in switching support to a third-placed party if the intention is to support the eventual winner in a seat, flows to the Liberal Democrats should be higher than flows to Labour in the more affluent areas since the former were the main party of opposition there. In other words, this result is more a product of the structure of party competition than of the geography of property prices. Furthermore, shifts of support from the Conservatives in 1987 to the Liberal Democrats in 1992 were higher in relatively rural areas, particularly in the south-west, than in urban areas. High property prices there often reflected an influx of affluent city-dwellers, inflating property prices beyond the reach of local people: local resentment against the increasing difficulties for first-time local buyers may also be a factor in this apparently anomalous result.
4. Note that this is effectively a description of the relationship between property market conditions and constituency voting at the 1992 election: it is not a predictive model.

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