Household debt and spending: results from the 2007 NMG Research survey

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This article summarises the main results from the latest survey carried out for the Bank by NMG Research in late September about the state of household finances. There was a slight increase in financial pressure among renters, continuing a recent trend. Mortgagors appeared not to have experienced any increased difficulty despite the increase in policy rates over the year. Partly, this reflects the widespread use of fixed-rate mortgage products. Credit conditions appeared to have tightened a little for renters, but loosened for mortgagors over the year to September.

Introduction

A key question for monetary policy makers in many countries is whether the build-up of household debt in recent years has affected the way in which households respond to changes in interest rates and economic conditions more generally.(1) That question is particularly pertinent for UK monetary policy at the moment in view of the five increases in Bank Rate in the year to July 2007 and the possibility that changes in credit market conditions since August might affect household borrowing and consumption.(2) Because the response to these events is likely to vary substantially across households, it is important to examine disaggregated data to assess their effects.

In late September 2007, NMG Research surveyed a representative sample of around 2,000 people on behalf of the Bank and asked them a range of questions about their finances.(3) These included questions about how much debt households owed, whether their borrowing was secured or unsecured, whether they found it to be a burden and whether they had experienced difficulty accessing further credit. The survey is the fifth that the Bank has conducted on household finances.(4) This year, the survey included additional questions on how much mortgage payments had increased and how the households affected by this had financed their extra outgoings. A box in the November 2007 *Inflation Report* (page 21) summarised some key results from the survey. This article describes these results in more detail.(5)

Taken together with information from successive waves of the British Household Panel Survey (BHPS), the survey sheds light on trends in the financial position of British households since 1991, the first wave of the BHPS. This article includes data from the 2005 wave of the BHPS (published in April 2007). In both the BHPS and NMG surveys, care must be taken in interpreting small changes in results from year to year because they may not be a reliable guide to changes in the population as a whole.(6) This issue is particularly important when subsets of the survey population are analysed. In such cases, the number of households under consideration might not be large enough to reduce the influence of outlying observations. The possibility that some of the changes in the survey might reflect sampling variation should be borne in mind throughout this article.

In addition, although the survey post-dated some of the recent financial market turbulence, it was conducted too soon afterward to pick up any changes in household credit conditions that might occur as a result. As such, the survey is unlikely to provide any information about the effect of the financial market disruption on household finances or spending.

Participation in the debt markets

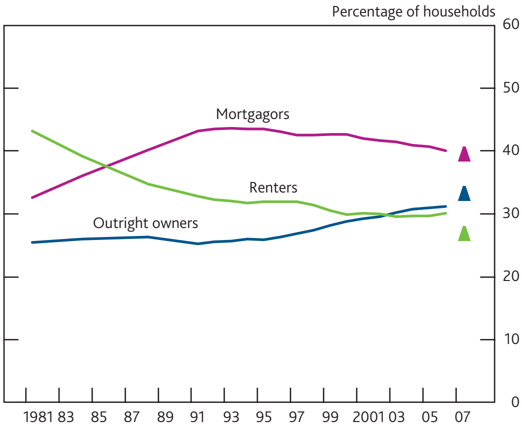
It is useful to distinguish between households who own their homes outright, mortgagors and renters. Past surveys have shown that outright owners tend to have very little debt and experience few problems in servicing it. Most debt is owed by mortgagors, where for most that debt is backed by substantial amounts of housing collateral. Partly as a result, mortgagors tend to report fewer problems servicing their debts than

(1) For recent Bank research on this issue see Benito, Waldron, Young and Zampolli (2007). For recent analyses of other countries see, for example, Dynan and Kohn (2007) and Girouard, Kennedy and Andre (2007).
(2) See for example, the latest *Inflation Report* published in November 2007.
(3) Some more detailed information about the survey is included in the box on page 520.
(4) See Waldron and Young (2006) for details of the previous survey.
(5) The raw survey data are provided at www.bankofengland.co.uk/publications/quarterlybulletin/nmgsurvey2007.xls.
(6) In principle, the BHPS should be more reliable and subject to lower sampling variation than the NMG survey. That is because it surveys around twice as many households, most of whom are surveyed over a number of consecutive years.

renters, who tend to be less well off and do not have housing equity to draw on when their financial circumstances worsen.

In the 2007 NMG survey, 40% of households were mortgagors, 33% owned their homes outright and the remaining 27% were renters. The proportion of mortgagors was similar to the proportion in the 2006 Survey of English Housing (SEH).(1) The SEH suggests that the proportion of mortgagors and renters in the population has gradually declined since the early 1990s, while the proportion of households who own their homes outright has risen (**Chart 1**).

Chart 1 Trends in housing tenure

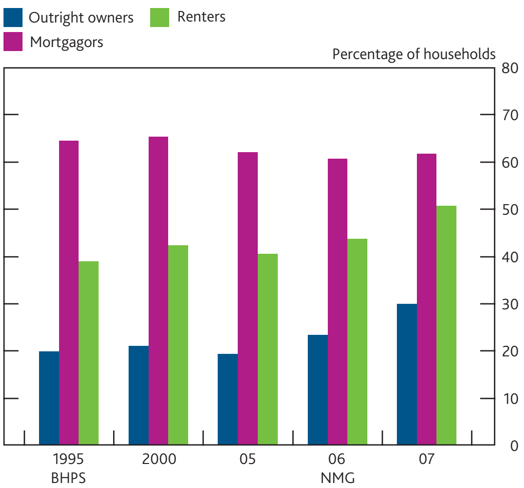


Notes: Triangles are from the 2007 NMG survey. All other data are from the Survey of English Housing (SEH). The data in the chart have been interpolated prior to 1991 because the SEH was not conducted annually until that year.

Sources: NMG Research survey, SEH and Bank calculations.

A higher proportion of mortgagors have unsecured debt than either renters or outright owners (**Chart 2**). In fact, mortgagors owed around 97% of the total amount of debt identified in the survey: 100% of the secured debt and 65% of the unsecured debt. This means that understanding how debt is distributed among mortgagors and how they react to changes in interest rates is vital in assessing the implications of debt for monetary policy.

Chart 2 Proportion of households with unsecured debt by housing tenure(a)



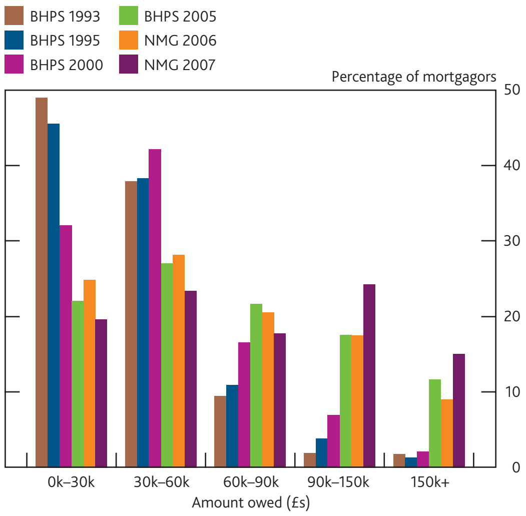
Sources: British Household Panel Survey, NMG Research survey and Bank calculations.

(a) The most widely used forms of household unsecured debt are credit cards, personal loans, overdrafts and hire purchase arrangements.

Distribution of debt among mortgagors

Chart 3 shows a rightward shift over time in the distribution of secured debt among mortgagors: the number of mortgagors with small mortgages has fallen and the number with large mortgages has risen. Higher house prices have meant that new entrants to the housing market have had to borrow larger amounts to finance house purchase than did their predecessors (Hamilton (2003)).

Chart 3 Distribution of secured debt among mortgagors



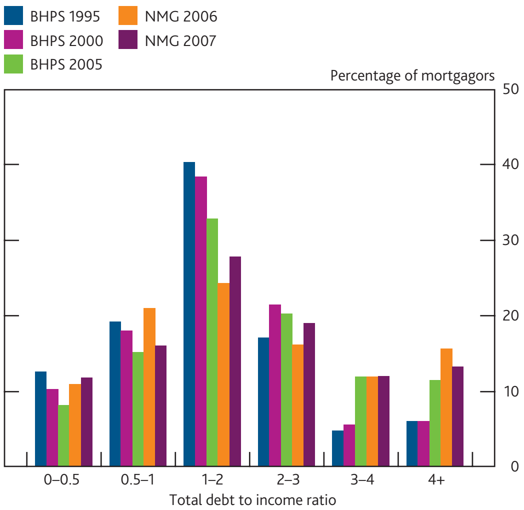
Notes: Mortgage debt from the BHPS captures mortgage debt owed by households on all properties they own. Mortgage debt from the NMG Research surveys only captures mortgage debt owed on households' primary residences. The 1993 wave of the BHPS was the first to ask households how much secured debt they owed.

Sources: British Household Panel Survey, NMG Research survey and Bank calculations.

That a higher proportion of households owed large amounts of secured debt than in previous surveys does not necessarily imply that mortgagors' debts had become less affordable. The affordability of debt also depends on the incomes of individual households. **Chart 4** shows that the ratio of total debt (secured and unsecured debt) to income of mortgagors had become more widely dispersed.(2) Around a quarter of mortgagors owed more than three times their pre-tax annual household income. That was broadly the same as in 2005 and 2006, but much higher than in the 1995 and 2000 waves of the BHPS, in which only around 10% of mortgagors were in that position.

(1) The SEH is an annual household survey in England conducted by the National Centre for Social Research. Its core purpose is to provide descriptive information about housing in England. See Benito and Power (2004) for more details.
(2) Almost 30% of mortgagors owed more than £5,000 in addition to their mortgage debt. That percentage was higher than in the 2006 NMG survey, but lower than in the 2005 wave of the BHPS.

Chart 4 Distribution of debt to income ratios among mortgagors



Notes: Mortgage debt from the BHPS captures mortgage debt owed by households on all properties they own. Mortgage debt from the NMG Research surveys only captures mortgage debt owed on households' primary residences. Mortgagors with reported debt to income ratios exceeding ten have been excluded from the sample on the grounds that their responses may have been spurious. Questions about unsecured debt are only included in the BHPS every five years; 1995, 2000 and 2005.

Sources: British Household Panel Survey, NMG Research survey and Bank calculations.

The impact of higher mortgage interest rates on household finances

Mortgage interest rates had risen over the year to September, driven largely by increases in Bank Rate. Bank Rate was 5.75% at the time the 2007 survey was conducted, 100 basis points higher than in September 2006. In order to assess the impact of higher mortgage rates on the financial position of different households, this year's survey included some new questions. Mortgagors were asked about the type of mortgage they had, by how much their mortgage repayments had increased over the twelve months preceding the survey (or how much they were expected to increase) and how they had responded to those increases (or how they planned to respond).

The effect of changes in mortgage rates on the repayments of an individual household depends on a number of factors. Of key importance is whether the household has a variable-rate or fixed-rate mortgage. For those with variable-rate mortgages, mortgage rates typically tend to rise in line with Bank Rate with a one-month lag. But for those with fixed-rate deals, the mortgage rate only changes when the term of the fix expires. This means that some mortgagors would have experienced no change in their mortgage repayments over the year because they had been on continuing fixed-rate deals. In addition, for those whose fixed-rate deals had expired, the change in their mortgage repayments would have depended largely on the rate at which their previous mortgage deal was agreed. Rates would have increased the most for those whose fixed rate had been agreed in the middle of 2003 when the policy rate was at 3.5% and longer-term household borrowing rates were historically low.(1) But for others, rates may not have increased at all.

The effect of changes in mortgage rates on the repayments of an individual household also depends on the size of their mortgage and, if they have a standard repayment mortgage, the remaining term of the mortgage. For example, monthly repayments on a standard repayment mortgage of £75,000 to be repaid over ten years amount to £795.49 when mortgage rates are 5% and £832.65 when rates are 6%, a difference of £37.16. But the difference is £42.35 for a mortgage being repaid over 20 years and £62.50 for an interest-only mortgage.(2)

Table A outlines some key facts about three different types of mortgagor identified in the survey: those who had continuing variable-rate mortgages (column 1), those who had fixed-rate mortgage deals that expired in the twelve months preceding the survey (column 2) and those who had continuing fixed-rate mortgage deals which had not expired in the twelve months preceding the survey (column 3). **Table A** shows the

Table A Characteristics of mortgagors and changes in repayments by types of mortgage

	Mortgagors on continuing variable-rate deals	Mortgagors who had a fixed-rate deal that expired during the preceding twelve months	Mortgagors on continuing fixed-rate deals
Percentage of mortgagors	46	16	38
Mean pre-tax income (£s)	49,409	48,795	47,029
Mean outstanding mortgage balance (£s)	78,570	95,008	98,679
Mean mortgage loan to house value (per cent)	32	51	45
Mean age of respondent (years)	44	38	42
Distribution of actual or expected changes in monthly repayments (per cent)			
Haven't increased or not expected to increase	6	21	24
£1–£39	56	26	18
£40–£79	18	22	19
£80–£119	13	17	26
£120–£159	3	8	4
£160–£199	4	0	4
More than £200	0	5	5
Mean change in monthly repayment (£s)(a)	45	59	66
Mean percentage change(b)	8	12	14

Sources: NMG Research survey and Bank calculations.

(a) Households were not given the opportunity to say that their mortgage repayments had gone down (or were expected to go down). Few households would be in that position, but any that were would be counted here as having no change in their repayments, rather than a decrease. As such, the calculated mean change in repayment may marginally overstate the true mean change among mortgagors in each group.
(b) Mean change as a percentage of those mortgagors' average monthly mortgage repayments prior to the change in their repayments.

(1) In June 2003, average quoted rates for borrowers with loan to value ratios of 75% or less were 3.85% for two-year fixes, 4.2% for three-year fixes and 4.36% for five-year fixes. The corresponding rates in September 2007 were 6.04%, 6.42% and 6.15% respectively.
(2) See the FSA mortgage calculator available at www.moneymadeclear.fsa.gov.uk/tools/mortgage_calculator.html.

distribution of reported changes in monthly mortgage repayments for those who had continuing variable-rate deals and for those who had fixed-rate deals which had expired over the year. It also outlines the distribution of changes that those on continuing fixed-rate deals were expecting to experience when their current fixed-rate deals eventually expire.

Just under 50% of mortgagors said that they had had a variable-rate mortgage of some description over the year to September 2007. The survey suggests that variable-rate mortgagors tend to have different characteristics to fixed-rate mortgagors: on average they owe less (around £79,000 compared with £95,000 for those on fixed-rate deals) and have a lower loan to value ratio (around 30% compared with 50% for those on fixed-rate deals), consistent with them having shorter remaining terms on their mortgages. Over the year until September 2007, their mortgage repayments went up by an average of £45 per month, equivalent to 8% of their average monthly mortgage repayments.(1) There is some variation around the reported changes in repayments reflecting different outstanding amounts of debt, different terms to maturity, different types of repayment vehicle, as well as inaccurate responses.

The change in repayments of those whose fixed-rate deal had expired in the twelve months prior to the survey would have depended on when their previous deal had been taken out. Altogether 16% of mortgagors in the survey said that they had been on a fixed-rate deal that had expired over the year. Of these, 21% said that their repayments had not increased. But mortgage repayments had gone up for most: on average repayments had increased by £59 per month or about 12% of those mortgagors' average monthly repayments. The repayments of about a quarter of the households whose fixed-rate deals had expired had risen by more than 20%, equivalent to 3% of their monthly pre-tax incomes.

When aggregated across the UK population, these figures imply that mortgage repayments for those whose fixed-rate deals had expired in the twelve months preceding the survey had gone up by around £300 million per quarter, equivalent to 0.1% of aggregate disposable income.(2) When the increases in mortgage payments experienced by those with variable-rate mortgages are included, mortgage repayments for existing borrowers were around £900 million per quarter higher than they would have been if there had been no change in mortgage rates over the past year (see the box opposite). This is equivalent to just over 4% of aggregate interest payments made by the household sector(3) and around 0.4% of aggregate disposable income.

The remaining 38% of mortgagors were on fixed-rate deals that had not yet expired and so had not yet experienced an increase in repayments. On average, they were expecting their payments to go up by £66 per month when their current fixed-rate deals expired, equivalent to 14% of their current monthly mortgage repayments. Of those, 23% said that their current deal was due to expire within the next twelve months, a further 20% within the next 24 months, while 50% thought that their deal would not expire within the next 24 months.(4)

Aggregating the change in mortgage repayments in the survey

The payments were aggregated as follows.

(1) The mean change in repayments was calculated for each group: £45 for variable-rate mortgagors and £59 for mortgagors who had fixed-rate deals which expired during the twelve months preceding the survey (**Table A**).

(2) These mean changes were weighted by the proportion of each group in the mortgagor population: 46% and 16% respectively (**Table A**), giving 0.46x£45 + 0.16x£59 ≃ £21 + £10.

(3) This was weighted by the proportion of mortgagors in the survey population as a whole: 40% (**Chart 1**), 0.4x(£21 + £10) ≃ £8 + £4.

(4) This was multiplied by an estimate of the number of households in the UK population in 2006 (just under 26 million)(1) to give the aggregate monthly change in mortgage repayments implied by the survey: 26 millionx(£8 + £4) ≃ £200 million + £100 million.

(5) Finally, this was multiplied by three to give the quarterly change: 3x(£200 million + £100 million) ≃ £600 million + £300 million ≃ £900 million.

(1) The UK household population estimate is the sum of estimates for Great Britain from the Department for Communities and Local Government, and for Northern Ireland from the Northern Ireland Statistics and Research Agency.

(1) Given the increase in Bank Rate over the past year, that is broadly in line with the increase that would have been expected for a variable-rate mortgagor on a standard repayment mortgage with around ten years until maturity and an outstanding mortgage balance of around £79,000 (the mean for that group).
(2) This figure is consistent with a similar calculation published in the August 2007 *Inflation Report* (page 12).
(3) This is less than the increase in total interest payments of the household sector over the same period as that would also include unsecured interest payments and, importantly, the interest payments of new borrowers. Over the year to 2007 Q2, seasonally adjusted interest payments of the household sector increased from £17.8 billion to £21.0 billion, a change of £3.2 billion per quarter.
(4) The remaining 7% said they did not know when their fixed-rate deal was due to expire.

The increase in mortgage repayments represents a loss in disposable income that requires some adjustment to household budgets. Households who said that their mortgage repayments had already increased were asked how they had responded to those increases. **Table B** jointly details the responses of those who had been on continuing variable-rate mortgages and of those whose fixed-rate deals had expired. Around half of households had cut back on spending to meet their increased interest payments. Around 10% had increased the amount they worked and a similar proportion had made some financial adjustment, such as running down their savings or borrowing more.

Table B Responses to higher mortgage repayments[(a)(b)]

	What were the main ways by which you met the increased payments?
Percentage that mentioned:	
Cut back on spending	50
Took a second job or increased overtime	10
Sold financial assets	8
Borrowed more	7
Reduced regular monthly saving	7
Extended term of mortgage	2
Other/none of these	23
Don't know	3

Sources: NMG Research survey and Bank calculations.

(a) Among variable-rate mortgagors and those whose fixed-rate deals had expired.
(b) Households were permitted to make multiple responses, so figures do not add up to 100.

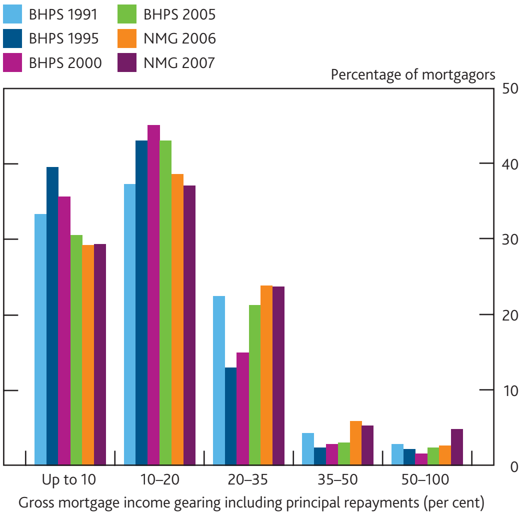
A similar question was put to those who expected their mortgage interest payments to increase when the terms of their fixed-rate deals eventually expired. When asked how they would respond to this increase, 39% said they would cut back on spending when the time came, 9% said they would take a second job or increase their overtime, and 8% said they had already started to cut back on spending.

Repayment difficulties among mortgagors

One measure of how increased interest rates and indebtedness over the past year have affected the affordability of debt is the share of household income that is devoted to servicing that debt. This varies significantly across households. **Chart 5** shows how the proportion of households' gross incomes that is spent on mortgage repayments is distributed. A slightly higher proportion of mortgagors in the 2007 NMG survey devoted a relatively large share (more than 20%) of their pre-tax incomes to debt service than was the case in the 1991 wave of the BHPS, when nominal interest rates were over 10%.[(1)]

As in past surveys, evidence on the amount owed and its affordability was complemented by asking households directly whether they had experienced problems meeting their debt obligations. The proportion of mortgagors reporting problems

Chart 5 Distribution of mortgage income gearing

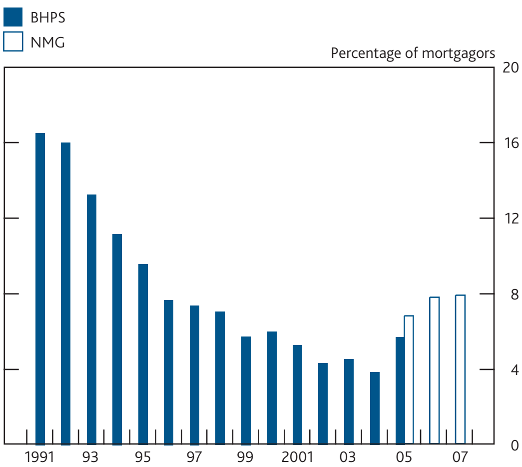


Notes: The 1991 wave of the BHPS was the first year the survey was conducted. Mortgagors who said that their repayments exceeded their pre-tax incomes were excluded from the sample on the grounds that their responses may have been spurious.

Sources: British Household Panel Survey, NMG Research survey and Bank calculations.

paying for their accommodation remained at 8% in 2007 (**Chart 6**). That is around half the level reported in the BHPS in 1991. Households who reported problems paying for their mortgages tended to have more debt and lower income than those who did not have problems.[(2)] They accounted for less than 5% of the total income of all households and about 9% of the debt. Consistent with variable-rate mortgagors tending to have less debt relative to their incomes than fixed-rate mortgagors (**Table A**), only 6% of those with

Chart 6 Mortgage payment problems[(a)]



Sources: British Household Panel Survey, NMG Research survey and Bank calculations.

(a) Question: 'Many people these days are finding it difficult to keep up with their housing payments. In the past twelve months would you say you have had any difficulties paying for your accommodation?'

(1) Econometric evidence suggests that mortgage payment problems become more likely when mortgage income gearing exceeds 20% (May and Tudela (2005)).
(2) The mean debt of mortgagors reporting mortgage payment problems was £102,453 against £90,539 who reported no problems. The mean income of mortgagors reporting mortgage payment problems was £36,056 against £48,912 who reported no problems.

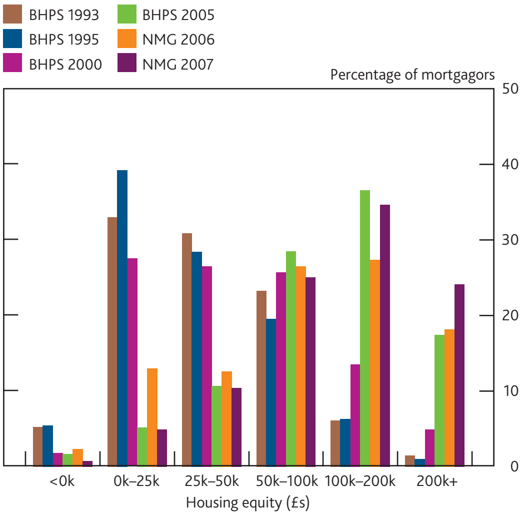
variable-rate mortgages reported problems paying for their accommodation, compared to 22% of those whose fixed-rate deals had expired in the year preceding the survey. This was appreciably higher than the 5% of mortgagors on continuing fixed-rate deals who reported problems.

If mortgagors are currently devoting a similar proportion of their incomes to debt repayments as in 1991, why is a similar proportion not reporting difficulties paying for their mortgage? There are several candidate explanations. First, interest rates increased sharply from 7.5% at the end of May 1988 to 15% by the end of September 1990, and remained at over 10% throughout 1991. Given the size and speed of that increase, it is quite likely that it was unanticipated by many households. Whereas increases over the past year are less likely to have been as surprising. In that sense, the distributions of debt and income gearing observed today are more likely to reflect household choices, so it is perhaps less surprising that households are currently more comfortable with their debts than they were in the early 1990s.

Second, as highlighted by Benito *et al* (2007), it is likely that the more favourable economic environment at the time of the most recent survey has meant that households have been able to adjust to changes in their circumstances and repayments in ways that were not available to them in the early 1990s. For example, some households may have responded by increasing their labour income, either by additional members of the household going out to work (Bottazzi, Low and Wakefield (2007)), by taking a second job (Boheim and Taylor (2004)) or by increasing the number of overtime hours worked. As an example of that, **Table B** showed that a significant minority of mortgagors said that they had reacted to increased mortgage payments by working longer hours. One implication of this is that the ability of households to adjust to changes in their circumstances is likely to vary as the macroeconomic environment varies.

Third, relative to the early 1990s, mortgagors have deep wells of housing equity to draw on should they experience temporary problems servicing their debts. As well as raising the amount that new entrants to the housing market have had to borrow, higher house prices have also raised significantly the housing equity of existing homeowners. In recent years the proportion of mortgagors with small amounts of equity in their homes was substantially lower than it had been in the mid-1990s (**Chart 7**). At the other end of the distribution, around 60% of mortgagors had more than £100,000 of equity in their homes, compared to less than 10% in 1993 (the first year in which the BHPS included information on households' outstanding balances of secured debt). Mortgagors with substantial amounts of equity in their homes can borrow against it to tide them over should they experience temporary difficulties. 4% of mortgagors in the 2007 NMG survey said they had withdrawn some of the equity in their homes over the preceding twelve months to consolidate debts, an increase on previous years.(1) This illustrates that, because most mortgagors have built a significant cushion of housing equity that could be used as collateral for additional borrowing, aggregate consumer spending may not be particularly sensitive to modest falls in house prices, see Benito *et al* (2006).

Chart 7 Distribution of housing equity



Notes: Mortgage debt from the BHPS captures mortgage debt owed by households on all properties they own. Mortgage debt from the NMG Research surveys only captures mortgage debt owed on households' primary residences. Mortgagors with loan to value ratios exceeding 200% have been excluded from the sample on the grounds that their responses may have been spurious. The 1993 wave of the BHPS was the first to ask households how much secured debt they owed.

Sources: British Household Panel Survey, NMG Research survey and Bank calculations.

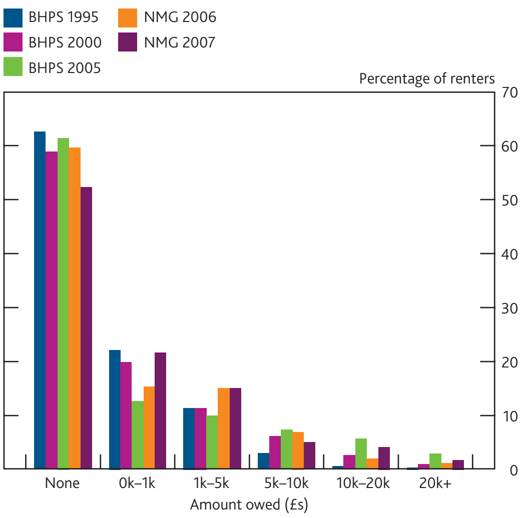
Given that mortgagors' unsecured borrowing accounts for around 65% of the total outstanding stock of unsecured debt, the extent to which mortgagors found their unsecured debts to be a burden to them is also of relevance. In the 2007 survey, 6% of mortgagors reported that their unsecured debts were a heavy burden to them, a small increase on previous years. There was a large overlap between mortgagors reporting problems paying their mortgage and mortgagors reporting that their unsecured debt was a burden to them. Of those reporting problems paying for their mortgage, 84% had some form of unsecured debt and 92% of those said that their unsecured debt was either somewhat of a burden or a heavy burden.

(1) In the 2007 survey, the proportion of mortgagors withdrawing equity in the twelve months preceding the survey was 10%, lower than in 2005 and 2006, in which 13% and 14% of mortgagors said they had withdrawn equity. Of the 10% in the 2007 survey who said they had withdrawn equity, 52% said they had done so to make home improvements, 36% to consolidate debts and 14% to buy goods for the home. Respondents were allowed to cite more than one reason for withdrawing equity so the percentages do not sum to 100.

Distribution of debt and repayment difficulties among renters

Chart 8 shows how unsecured debt was distributed across the renters responding to the survey. Around half had some unsecured debt, higher than in previous years: the proportion of renters with unsecured debt had risen from 37% in the 1995 wave of the BHPS to 51% in the 2007 NMG survey. The amount owed by most renters tended to be relatively small: only around 10% of renters owed more than £5,000, while only 1% of renters had unsecured debts in excess of their annual pre-tax income. That had fallen from 4% in the 2006 survey and 2% in the 2005 survey.

Chart 8 Distribution of unsecured debt among renters

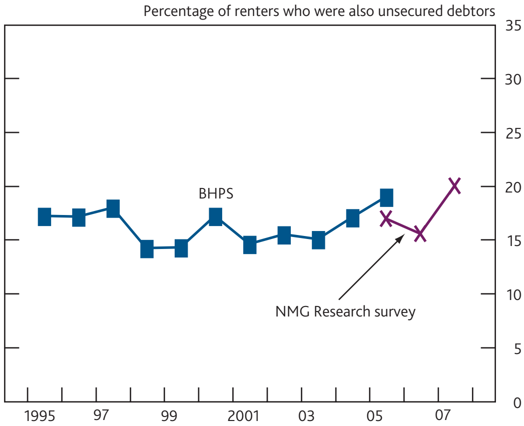


Note: Questions about how much unsecured debt households owe are only included in the BHPS every five years; 1995, 2000 and 2005.

Sources: British Household Panel Survey, NMG Research survey and Bank calculations.

A minority of renters, who do not have housing equity to fall back on, were experiencing difficulties in servicing their debts. About 20% of renters with unsecured debts said that their debts were a heavy burden. As with mortgagors, the proportion of renters who said that their unsecured debt was a heavy burden was a little higher than last year (**Chart 9**). However, although an increased proportion of renters said that they were having difficulties with their debts, the fraction of aggregate income and debt they accounted for remained small. Overall, renters for whom unsecured debt was a heavy burden accounted for just over 1% of the total income of all households in the survey and about 5% of the unsecured debt (0.4% of the total debt in the survey), a similar proportion to previous years. So, despite the increased incidence of debt repayment problems among renters over the past few years, the implications for monetary policy remain small.

Chart 9 Burden of unsecured debt among renters[(a)]



Sources: British Household Panel Survey, NMG Research survey and Bank calculations.

(a) Question: 'To what extent is the repayment of these loans and the interest a financial burden on your household?' The chart shows the percentage of renters with unsecured debt who said that their debt is a heavy burden.

What are the causes of debt repayment difficulties and how do households respond to them?

In addition to specific questions about the burden of unsecured debt and mortgage payment problems, households were also asked 'do you ever have problems paying your debts?'. As was the case in last year's survey, the majority of households said that they never had any problems paying their debts.[(1)] Renters were far more likely to report problems paying for their debts than homeowners. 28% of renters reported problems paying for their debts at least occasionally, compared to 15% of mortgagors and 6% of outright owners. For renters that was an increase of 4 percentage points from last year's survey.

Those respondents who said that they had problems paying for their debts were asked what had caused them. As last year, the two most frequently cited reasons by both renters and mortgagors were 'lack of cash flow that has been or will be resolved in the future' and 'overspending', though the proportion who cited a lack of cash flow had increased this year to around half the respondents who said they had problems paying for their debts (**Table C**). Renters were more likely than mortgagors to cite factors representing shocks to household circumstances like unemployment, higher-than-expected household bills and higher-than-expected interest rates. But overall, as in last year's survey, it would appear that most households saw their debt problems as either temporary or arising from circumstances within their control.

(1) There is a high, but not complete, overlap between households who said they at least occasionally had debt problems and those who said that their unsecured debt is a burden and those that said they were having problems paying for their accommodation. The proportion of households who reported having no problems of any kind is 57% for renters, 69% for mortgagors and 88% for outright owners.

Table C Reasons for debt problems[(a)(b)]

	Renters		Mortgagors	
	2006	2007	2006	2007
Percentage that mentioned:				
Lack of cash that has been or will be resolved in future	36	48	34	54
Overspending	29	25	27	28
Unemployment	16	17	5	3
Higher-than-expected household bills	15	17	10	11
Loss of income through reduction or cessation of overtime	12	5	9	1
Children's school or university fees	7	3	2	4
Illness	6	8	6	3
Divorce or separation	5	4	4	4
Debt legacy from being a student	4	2	1	2
Redundancy	3	4	2	0
Credit card and other loan offers were too tempting	2	2	4	3
You or your partner leaving work to have a child	2	8	6	2
Higher-than-expected interest rates	–	13	–	12
Other	4	2	9	7
Don't know	4	1	11	1

Sources: NMG Research survey and Bank calculations.

(a) Question: 'What are the main reasons for the problems you have in repaying your debts?'
(b) Households were permitted to make multiple responses, so figures do not add up to 100.

Households who said that they had problems repaying their debts were also asked what action they would consider taking to resolve them. The responses are shown in **Table D**. As in 2006, the most frequently cited response by both renters and mortgages was to cut back on spending, although the proportion saying they would do this fell relative to 2006. This dominated all other suggested responses with only a small proportion saying they would borrow more, remortgage their house or declare themselves insolvent (either by bankruptcy or an Individual Voluntary Arrangement (IVA)).[(1)]

Table D Action to resolve debt problem[(a)]

	Renters		Mortgagors	
	2006	2007	2006	2007
Percentage that mentioned:				
Cut back on spending	64	43	55	46
Take out another mortgage on your house	–	–	7	2
Take out another loan	4	7	8	8
Declare your self insolvent (ie bankruptcy or IVA)	5	6	2	0
Sell your house	–	–	6	2
Other/none of these	26	40	22	40
Don't know	–	4	–	2

Sources: NMG Research survey and Bank calculations.

(a) Question: 'What action would you consider taking to resolve your debt problems?'

Credit conditions

To assess how credit conditions for households may have changed over the year to late September, the survey included questions on whether households felt themselves to be constrained in the amount they could borrow. The questions covered both perceived constraints that discouraged households from applying for credit, and actual constraints where the household was prevented from borrowing either by the unavailability of credit or its high price. 14% of respondents claimed to be facing a perceived or actual credit constraint, marginally lower than in the 2006 survey. **Table E** shows that around a quarter of renters identified themselves as credit constrained, much higher than the proportions of mortgagors and outright owners. Compared to the 2006 survey, this proportion had gone up slightly, whereas that for mortgagors and outright owners had gone down slightly. **Table E** also shows that households who considered themselves to be constrained tended to be younger, have more unsecured debt and were more likely to be experiencing problems with their debts. Constrained mortgagors had higher existing repayment commitments (income gearing ratios) and larger outstanding mortgage balances as a percentage of the value of their homes (loan to value ratios).

Table E Characteristics of credit-constrained households[(a)]

	Unconstrained	Constrained
Renters		
Percentage of households	73	27
Mean age (years)	41	38
Mean pre-tax income (£s)	20,721	21,096
Mean unsecured debt (£s)	1,522	2,796
Proportion experiencing debt problems (per cent)	26	68
Mortgagors		
Percentage of households	86	14
Mean age (years)	41	40
Mean pre-tax income (£s)	49,306	38,070
Mean unsecured debt (£s)	3,445	8,751
Mean mortgage debt (£s)	90,188	80,166
Mean loan to value ratio (per cent)	38	46
Mean mortgage income gearing (per cent)	18	22
Proportion experiencing debt problems (per cent)	23	72
Outright owners		
Percentage of households	95	5
Mean age (years)	62	57
Mean pre-tax income (£s)	27,537	19,039
Mean unsecured debt (£s)	997	5,436
Proportion experiencing debt problems (per cent)	9	64

Note: Households were treated as having experienced debt problems if they said that they were having trouble paying for their accommodation or if they said that their unsecured debt was a burden or if they said that they ever had problems paying for their debts.

Sources: NMG Research survey and Bank calculations.

(a) Questions: 'Have you been put off spending because you are concerned that you will not be able to get further credit when you need it, say because you are close to your credit limit or think your loan application would be turned down?' 'Would you like to borrow any more at the moment but find it too difficult or expensive to do so?' 'Have you found it easier or harder to borrow to finance spending than a year ago?'

(1) An IVA is an agreement, whereby the borrower agrees a repayment plan with the lender as an alternative to bankruptcy.

Respondents were asked whether they found it easier or harder to borrow to finance spending than a year earlier; 22% said it was easier, while 16% said it was harder and the rest thought lending conditions had not changed. Within that, the proportion of renters who reported that they had found it harder to get credit over the year preceding the survey had gone up, while the proportion of homeowners who reported that had gone down.

Summary and conclusions

The latest survey updates analysis from previous years of how debt is distributed among households. As in previous years almost all of the reported debt was owed by mortgagors, the vast majority of whom report few problems in servicing it.

The increases in mortgage rates over the year preceding the survey had not been associated with an increase in the proportion of mortgagors reporting problems paying for their accommodation, which remained at about 8%. That was substantially lower than in the early 1990s despite the fact that mortgagors were devoting a similar proportion of their pre-tax incomes to servicing their debts. Moreover, households reporting problems paying for their accommodation accounted for only about 3% of the total income reported in the survey. As such, these problems are currently unlikely to have large implications for monetary policy because any effect that they might have had on aggregate consumer spending is likely to have been small.

One reason why fewer mortgagors have been reporting problems paying for their accommodation than in the

Survey method

The survey was undertaken by adding 25 questions to the monthly omnibus survey, MarketMinder, carried out by NMG Research. Interviews were conducted in the respondents' homes using Computer Assisted Personal Interviewing (CAPI). Altogether 1,857 people were interviewed between 21 and 27 September 2007. Survey results were weighted to correct for any bias in the sample using nationally defined profiles for age, social grade, region and working status.

A limitation of all surveys about sensitive issues such as household finances is that some people are reluctant to discuss them in face-to-face interviews. Because of embarrassment, those who face the most financial stress might be more likely than others to refuse to answer certain questions or to understate their difficulties.(1) As in previous years, the survey was designed to reduce these possibilities. In order to encourage respondents to divulge sensitive information, they were told that the survey was being carried out on behalf of the Bank of England and would be useful in assessing how spending might be affected by its interest rate decisions and in judging the risks to financial stability. They were assured that their replies would be treated in the strictest confidence, would not be passed to any third party at any stage in the future and would not under any circumstances be used for sales or marketing purposes. Also, to avoid embarrassment in revealing sensitive information to the interviewer, replies to questions were coded on show cards and recorded on a computer in such a way that the interviewer would not know the content of respondents' answers.

Response rates were similar to those obtained in previous years. Only those respondents who were the chief income earner or main shopper were asked for their income. This meant that 12% of respondents were not asked about their income. A further 31% of households either refused to provide (22%) or did not know (9%) their household income. About 16% of respondents refused to say whether their households had any unsecured debt and a further 6% did not know. There was a large overlap between those households who refused to provide information about their income and those who would not discuss their unsecured debt. There was greater openness and awareness about secured debt. Only 2% of those asked did not know how much they owed and 5% refused to say how much.

Several possible approaches can be used to adjust for missing values arising from non-response to particular survey questions. Effectively, these all involve imputing a value for missing observations.(2) All calculations reported in this article have been carried out using all available responses, implicitly assuming that non-response is distributed in the same way as recorded responses, regardless of the characteristics of non-respondents. In reality, non-response for individual survey questions is not distributed uniformly across groups in the survey population. For example, older people are a little more likely to refuse to say whether they have any unsecured debt.(3) Ignoring this causes a potential upward bias to estimates of the proportion of the population with unsecured debt and the overall amount owed. Nevertheless, internal analysis shows that the overall conclusions from the survey are not sensitive to which of the available imputation methods is used.

(1) There is a large literature on the psychology of survey responses. See for example Tourangeau *et al* (2000).
(2) The most common imputation methods are mean imputation, hot decking, multiple imputation and regression-based approaches. See Little and Rubin (2002) for further details.
(3) 19% of the respondents aged 65 or over refused to say if they had unsecured debt, compared to 15% for other age groups.

early 1990s could be that most mortgagors have a substantial housing equity buffer that can be used as collateral for borrowing, either to support consumption or consolidate debts. Of course, the sustainability of the buffer that mortgagors have depends heavily on the future outlook for house prices. But the current distribution of housing equity indicates that aggregate consumer spending may not be particularly sensitive to modest falls in house prices.

While only a small proportion of household debt was owed by renters, these households appear to have had the greatest problems both in getting access to debt and in servicing it. This reflects their lower income and the fact that they did not own a home that could act as collateral for loans. There had been some slight increase over the past year in the proportion of renters who found their unsecured debt to be a heavy burden, continuing a recent trend. But they accounted for only about 1% of aggregate income. The macroeconomic impact of changes in their spending is therefore likely to have been very small.

Compared to last year, there was little change in the proportion of households who reported that they had found it harder to access credit over the twelve months preceding the survey. Credit conditions appeared to have tightened a little for renters, but loosened for mortgagors over the year to September.

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