

Regression analysis of the unbanked

Using the 2006-07 Family Resources Survey

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Introduction

The Taskforce has been using the Family Resources Survey to track the number of people who live in a household where no-one has a bank account and, as part of this tracking, information has been provided about the types of people who are most likely to be unbanked. This has identified a number of personal and economic characteristics that are associated with being unbanked. However, a number of these are inter-related in ways that makes it difficult to know what is most likely to be affecting people's engagement with banking. For example, lone parents were likely to be unbanked, as were people on low incomes. At the same time we know that lone parents have low income compared with the population as a whole. What we don't know is whether they were just as likely to be unbanked as anyone else with a similarly low income or whether there is something specific to being a lone parent that means they are particularly likely to be unbanked. To overcome these difficulties we have used a statistical tool known as regression analysis.

This paper therefore presents the results of regression analysis carried out to identify the socio-demographic characteristics that are independently associated with being 'unbanked'. Regression analysis is a statistical technique for identifying the extent to which individual socio-demographic characteristics or other 'predictor' variables relate to an outcome of interest (in this case, being unbanked), whilst simultaneously holding constant the influence of all other predictor variables in the analysis. As such, the technique identifies the *independent* influence of each characteristic of interest, and helps provide an understanding of which of these are more or less important for understanding banking exclusion in the UK.

The analysis reported here adopts the Shared Goal definition of the unbanked, according to which adults are considered to be unbanked if no-one in their household has a bank account. The paper reports in detail the findings of analysis relating to *adults* who do not have access to a bank account in their household. We do, however, also consider in less detail the equivalent analysis relating to unbanked *households*, for which we draw on key characteristics of the household and the household reference person.¹ Finally, a third tranche of analysis examines the factors that explain the likelihood that an individual does not themselves have a bank account (regardless of the possibility people may access an account through other household members); this is also reported in brief. For each of these, the results are analysed separately for adults below and above state pension age (SPA).

First, however, we consider the definition of unbanked within the Shared Goal definition, and the methods used and characteristics tested in the analysis.

¹The household reference person is sometimes referred to as the 'head of household'. It is defined as "the sole householder or, if there is more than one, as the householder with the highest personal income from all sources. If two or more householders have the same income, the eldest should be the household reference person" (source <http://www.statistics.gov.uk/about/data/harmonisation/downloads/P2.pdf>; p15).

Definitions of the ‘unbanked’

Within the Shared Goal definition, a bank account constitutes any banking, saving or investment account, with the exception of a Post Office Card Account (POCA). A full list of these product types is given in the Appendix A. There are, however, two complicating factors that need to be considered in relation to the definition.

First, from our sample of 45,133 adults, we identified 56 people *only* had investments but who were nonetheless classed as being ‘banked’ according to this definition even though they had neither a transaction nor a savings account. Most of these people had only premium bonds or stocks and shares, which previous research shows may well have been received as a windfall when a building society with whom they had an account de-mutualised. Although these individuals represent only a tiny minority of people, this finding does raise an important question of whether or not it is correct to count them as being banked, since these forms of investment do not represent a practical means for people to access money.

Secondly, while information about account holding was complete for the vast majority of households, we were unable to classify a small proportion of households (two per cent) as banked or unbanked due to missing information (where respondents did not know or refused the answer the question). This problem was also identified in the most recent (third) Taskforce banking report, which noted that in previous years people who ‘did not state’ had been collapsed together with the ‘unbanked’.² It also noted that these two groups seemed to have rather different characteristics.

We undertook an initial regression analysis to understand whether any characteristics distinguish adults who ‘did not state’ compared with the ‘unbanked’. Confirming the results of the earlier cross tabular analysis for the Taskforce, this analysis shows clearly that the ‘did not state’ group were a distinctly different group of people compared with those who were unbanked. Moreover, the people who ‘did not state’ were in many respects the ‘opposites’ or ‘mirror image’ of those who were unbanked. So, whilst the likelihood of being unbanked decreased with age, the likelihood of being a ‘did not state’ increased with age. The interested reader can find the detailed results in Appendix B (Table B1). These findings strongly suggest that the ‘did not state’ group should not be treated as ‘unbanked’ in future reporting.

We have therefore excluded this ‘did not state’ group from the analysis reported here. Consequently, someone is ‘banked’ if at least one person in their household holds one or more accounts of the type listed. They are unbanked if no-one in their household has an account of any type listed.

² Reported in Financial Inclusion Taskforce (2008) *The Third Annual Report on progress Towards the Shared Goal for Banking*, available online at: http://www.financialinclusion-taskforce.org.uk/documents/papers/third_annual_banking_report.pdf

Methods and the characteristics examined

The analysis uses data from the Family Resources Survey for 2006-2007.³ The precise form of regression analysis used enables the significant predictors to be identified in order of the strength of effect and also indicates the additional contribution each successive significant measure makes to explaining being unbanked.

The analysis examined the influence of range of personal and socio-economic characteristics on being unbanked, including age, sex, household structure, ethnicity, employment and socio-economic status, housing tenure, being in receipt of income-replacement benefits and country of the UK. Since we expected that ownership of a POCA might also be an important reason why many adults and households are unbanked, we have also controlled for POCA-holding by including this in the set of predictor variables in each regression model.

Interpreting the results of logistic regression analysis

Regression analysis examines the extent to which characteristics relate to being unbanked, after holding constant the influence of all other characteristics included in the analysis. Characteristics that have are deemed to have an independent relationship with the outcome measure are those with a p-value smaller than 0.05. These are said to be 'significant' predictors (and are indicated with an asterisk, '*' in column 4); those with a p-value of less than 0.01 are considered 'highly significant' (and are indicated with a double asterisk, '**'). So, in Table 1, age is 'significant' while household composition is highly significant.

Whilst identifying which characteristics are significant, the analysis also identifies which categories of a characteristic significantly increase or decrease the odds of being unbanked compared to a 'reference' category on that measure (the reference category is designated by the researcher, usually to the group found least likely to be unbanked in crosstabular analysis). Categories that differ significantly from the reference are again those that carry a p-value of less than 0.05 (and are again marked with a single or double asterisk). By definition, the reference category has an odds ratio of 1.0. An odds ratio of greater than 1.0 indicates that the odds of being unbanked are increased relative to the reference category; where they are less than 1.0 they indicated that the odds are decreased. So, again in Table 1, a lone parent has 2.6 times the odds of being unbanked compared with a two parent family with dependent children that is similar in all other characteristics included in the table. In other words, it has an effect that is independent of the other factors (or characteristics) included in the analysis. It should be noted that the text only comments on results that are statistically significant.

At the bottom of each table we have given a figure known as the R² value which indicates of how well collectively the characteristics predict or explain the outcome measure. So the various characteristics in Table 1 together explain 51 per cent of the variation in the likelihood of being unbanked. An R² of between 0.15 and 0.50 is fairly typical in social research.

³ Department for Work and Pensions, National Centre for Social Research and Office for National Statistics; 2006/07 Family Resources Survey. Distributed by the Economic and Social Data Service. Crown Copyright material is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland.

Results

We have run separate analyses of adults (or households headed by adults) who are below state pension age (SPA) and those above SPA. This allows us to include in the analysis measures that typically do not apply to pensioners but that are highly relevant to non-pensioners, such as employment status other than retired and presence of dependent children, to be included in the analysis of those below SPA.⁴

It should be noted that a regression analysis among people of all ages that uses a more limited subset of characteristics applicable to people of all ages shows that age is, in fact, a significant predictor of being unbanked. The likelihood of being unbanked decreases steadily with increasing age after a peak in the 25 to 34 age group, independently of the other characteristics tested. The interested reader can find full results in the Appendix (Table B2).

Below state pension age

Looking first to the results relating to **adults who live in a household without access to a bank account**, Table 1 shows that all the characteristics tested in the regression analysis were independently related to being unbanked. As we go on to discuss, whether or not the household had a Post Office Card Account (POCA) was by far the strongest predictor of being unbanked. Three others were also strong predictors; in order of strength these were household income, tenure and employment status. The remainder were weak, but significant, predictors.

The analysis shows that the odds of being unbanked were almost 23 times higher among those with a POCA compared with those in households without a POCA. Similar analysis undertaken using the 1995/96 FRS data, prior to the introduction of the POCA, found that benefit receipt was the most powerful predictor of a household being without any financial products.⁵ Whilst the receipt of income-replacement benefits remains significant in the 2006/07 data, it is greatly weakened, the effects being replaced by the introduction of the POCA to the model.

Independently of the influence of POCA-holding and all other measures included in the analysis, the likelihood of being unbanked fell sharply with increasing levels of household income. The odds were 12 times higher among people in households with the lowest incomes (less than £100 per week) compared with those with the highest incomes (£500 or more per week). They were also more than five times higher among those in the second lowest income bracket, with incomes of between £100 and £200 per week.

Compared with owner occupiers, the odds of being unbanked were higher among adults living in homes rented from a housing association (3.4 times the odds) or a local authority (4.0 times), rising to over five times the odds for those renting privately (5.4 times). The individual's employment status was also significant. The odds of being unbanked were significantly higher among people who

⁴ This avoids a technical issue known as multicollinearity, which arises in the current analysis when employment status and the presence of children are included alongside age in a regression analysis of the full sample. The same problem was also found to arise when employment status and socio-economic classification were both included within any one model, resulting in socio-economic status being dropped from the analysis.

⁵ Kempson, E. and Whyley, C (1999) *Kept out or opted out? Understanding and combating financial exclusion*. Bristol: The Policy Press

were retired (1.9 times), those looking after the family or home (2.2 times), those not working because they were permanently sick or disabled (4.2) and those who were economically inactive for other reasons (3.1).

From the remaining measures, the characteristics associated with being at heightened risk of living in an unbanked household independently of other factors include: being Pakistani or Bangladeshi, and to a lesser extent Black or Black British, being in a single adult household, especially if a lone parent, and having left school aged 16 or under. The odds of being unbanked were slightly lower among people with a long-standing illness or disability compared with those who had neither and were slightly higher among men than women. They also decreased steadily with increasing age. Finally, adults living in Northern Ireland were more likely to be in an unbanked household than people living in any of the other three countries of the UK, the odds being twice those of England, Wales and Scotland.

Table 1 Logistic regression predicting adults living in an unbanked household, adults below state pension age

		Significance (p-value)	Odds ratio (ExpB)
Age	55 to 59 (women) or 64 (men) (reference)	0.042	*
	16 to 24	0.013	1.7 *
	25 to 34	0.007	1.7 **
	35 to 44	0.059	1.4
	45 to 54	0.394	1.2
Gender	Male (reference if female)	0.004	1.4 **
Household composition	Two adults, one or more children (reference)	0.000	**
	Single adult, no children	0.000	2.2 **
	Two adults, no children	0.002	1.7 **
	One adult, one or more children	0.000	2.6 **
	Other	0.015	0.6 *
Respondent is the HRP ⁺	Single adult household (reference)	0.000	**
	Yes	0.000	0.6 **
	No	0.000	0.5 **
Children ⁺	None (Yes is reference)	0.013	1.4 *
Ethnic group	White (reference)	0.000	**
	Indian	0.076	1.9
	Pakistani or Bangladeshi	0.000	4.5 **
	Black or Black British	0.000	2.4 **
	Other	0.965	1.0
Long-standing illness	No (reference)	0.006	**
	Yes, non-limiting	0.012	0.6 *
	Yes, limiting	0.009	0.7 **
Age left full-time education	20 or older (reference)	0.000	**
	16 or under	0.025	2.3 *
	17 - 19	0.927	1.0
Employment status	Full-time employment (reference)	0.000	**
	Part-time employment	0.416	1.2

	Unemployed	0.087	1.5	
	Retired	0.042	1.9	*
	Looking after family/home	0.000	2.2	**
	Permanently sick/disabled	0.000	4.2	**
	Other Inactive	0.000	3.1	**
	Other (Temporarily sick or disabled and students)	0.639	0.8	
Housing tenure	Owned outright or with mortgage (reference)	0.000		**
	Rented from Council	0.000	4.0	**
	Rented from Housing Association	0.000	3.4	**
	Rented privately	0.000	5.2	**
Household income	£500 or more (reference)	0.000		**
	Under £100 a week	0.000	12.0	**
	£100 and less than £200	0.000	5.4	**
	£200 and less than £300	0.000	2.6	**
	£300 and less than £400	0.000	2.5	**
	£400 or more	0.095	0.6	
Income-replacement benefits	Some received (reference is none)	0.003	1.4	**
Country in the UK	England (reference)	0.024		*
	Wales	0.906	1.0	
	Scotland	0.912	1.0	
	Northern Ireland	0.002	2.0	**
Post Office Card Account	Yes (reference is none)	0.000	22.8	**
Constant		0.000	0.0	
R^2 (Nagelkerke)=.510				
'HRP' denotes household reference person. '+' indicates that these variables were included in an otherwise identical regression but which excluded household composition (to avoid multicollinearity)				
Strong predictors (contributing at least a 1 per cent improvement in the model) are, in order of strength: Post Office Card Account, income, tenure and employment status.				
No measures were not found to be non-significant in the model				

Source: 2006-07 Family Resources Survey

When we move the focus to the characteristics *of unbanked households*, rather than the Shared Goal measure of adults living in those households, we find very similar results indeed. In fact, this should be expected, since the data for single-adult households are identical in both instances. Whether or not the household had a POCA was again the strongest predictor: having a POCA increased the odds of the household being unbanked by a factor of more than 28 compared with households without a POCA. Household income, housing tenure and employment status were again strong predictors. The main differences relate to the age of the household reference person (HRP), receipt of income-replacement benefits and the country of residence, which were not significant predictors of unbanked households. Full results are shown Appendix Table B3.

So far we have concentrated on whether the *household* is unbanked and considered the characteristics that are independently associated with this, both at the household level and among individual living in unbanked households. Briefly, we now turn to consider the characteristics that relate to an *individual themselves being unbanked*, that is that they personally do not have a bank account that in their own name (whether solely or jointly with someone else). Here we find some similarities with the earlier analysis and some divergences. As before, the odds of an adult not having a bank account in their own name were far higher (24 times) among people who had a POCA

compared with those without a POCA. Employment status and housing tenure were also strong predictors (with similar patterns found as before). Ethnicity and age were also strong predictors. In contrast, household income was only a weak predictor in this model. Full results are shown Appendix Table B4.

Above state pension age

Starting first with the results of the analysis that examine the characteristics associated with being an **adult living in a household that is unbanked**, we find a similar set of results for adults above SPA as we did for non-pensioners (Table 2, shown on the next page).

The strongest predictor was again whether or not the household held a POCA. The odds of living in an unbanked household were 19 times higher where the household had a POCA compared with those without one.

Housing tenure and household income were also strong significant predictors of being unbanked. The odds of being unbanked were four times greater among those renting privately, rising to almost six times bigger among those renting from a housing association or a local authority, compared with those living in a home that they owned (outright or with a mortgage). A household income of less than £200 was associated with more than seven times the odds of being unbanked compared to those with the highest incomes (£400 per week or more).

The remaining significant (albeit relatively weak) predictors were the individual's ethnic background, whether or not they had a long-standing illness, whether or not their household was in receipt of an income-replacement benefit (most commonly Pension Credit) and the country of the UK in which they lived. Although sample sizes did not permit a more detailed breakdown, people with a non-white background had an increased likelihood of being unbanked than those who were white after controlling for other characteristics (the odds were greater by a ratio of 1.4). Those with a limiting illness, those receiving income-replacement benefits and people living in Northern Ireland were also relatively likely to be living in an unbanked household, all other things being equal.

Age, gender, whether or not the adult was the household reference person (HRP) and the age they left full-time education were not significant predictors of a pensioner living in an unbanked household.

Turning to the equivalent analysis undertaken at the level of the **household** (shown in Appendix Table B5), we find very similar results to these (again, this is as we should expect for the reasons set out above). POCA-holding, housing tenure and income are strong predictors of unbanked households. Long-standing illness was also a strong predictor, with households in which the HRP had a long-standing illness being significantly more likely to be unbanked. Compared with the previous analysis, at the level of the individual, the effect of the HRP belonging to a non-white group was more marked: the odds that the household was unbanked were 3.8 times for this group compared with HRPs who were white. And in this analysis receipt of income-replacement benefits and the age the HRP left full-time education were significant, albeit weakly. Age and household composition were again not significant.

The final piece of analysis relates to bank account holding at the level of the **individual adult** (shown in Appendix Table B6). Among people over SPA, POCA-holding, housing tenure and ethnicity (being

non-white) were strong predictors of being without a bank account in one's own name. Having a POCA, living in rented accommodation and having a non-white background were independently associated with increased odds of personally being unbanked.

Table 2 Logistic regression predicting adults living in an unbanked household, adults above state pension age

		Significance (p-value)	Odds ratio (ExpB)
Age	60 (women) or 65 (men) to 74 (reference)	ns	
	75 to 84		
	85 or over		
Gender	Male (reference is female)	ns	
Respondent is the HRP	Single adult household (reference)	ns	
	Yes		
	No		
Ethnic group	Non-white (reference is white)	0.000	1.4 **
Long-standing illness	No (reference)	0.000	**
	Yes, non-limiting	0.846	1.0
	Yes, limiting	0.000	1.8 **
Age left full-time education	17 or over (reference)	ns	
	15 or under		
	16		
Housing tenure	Owned outright or with mortgage (reference)	0.000	**
	Rented from Council	0.000	5.8 **
	Rented from Housing Association	0.000	5.7 **
	Rented privately	0.000	4.0 **
Household income	£400 or more (reference)	0.000	**
	Less than £200 a week	0.000	7.4 **
	£200 and less than £300	0.000	4.8 **
	£300 and less than £400	0.000	3.9 **
Income-replacement benefits	Some received (reference is none)	0.000	1.7 **
Country in the UK	England (reference)	0.001	**
	Wales	0.805	0.9
	Scotland	0.428	0.8
	Northern Ireland	0.000	3.0 **
Post Office Card Account	Yes (reference is none)	0.000	19.0 **
Constant		0.000	0.0
R ² (Nagelkerke)=0.425			

'ns' indicates that this measure was not significant predictor; 'HRP' denotes household reference person.

Strong predictors (contributing at least a 1 per cent improvement in the model) are, in order of strength: Post Office Card Account, tenure and income.

Source: 2006-07 Family Resources Survey

Discussion of the findings

The most notable finding of this analysis is the very large effect that the POCA has upon account-holding both for non-pensioners and pensioners. Indeed, since the introduction of ‘payment modernisation’ for social security payments, it has replaced receipt of income-related benefits as the most significant factor determining whether or not someone has a bank account. This could be interpreted in one of two ways. A POCA could be seen as a stepping stone to banking inclusion or as contributing to banking exclusion. How the Taskforce responds to this finding will depend on which of these two interpretations it is minded to adopt. The first would argue for leaving things as they are; the second for either phasing out the POCA or increasing its functionality to something approaching a bank account.

Among non-pensioners it is clear that the groups that most need to be targeted with initiatives to raise levels of banking inclusion include: people who are permanently sick or disabled, lone parents, Pakistani or Bangladeshi people and tenants (in both the social and private rented sector). There is also a greater need in Northern Ireland than elsewhere in the UK. The more of these characteristics people possess the greater will be their need to be targeted. So, for example, Bangladeshi lone parents living in rented accommodation will have a very high likelihood of being unbanked.

The groups of pensioners that would need to be the focus of initiatives to raise levels of banking inclusion again include tenants but also lower-income home owners. As with non-pensioners there is a greater need for intervention in Northern Ireland than elsewhere in the UK.

Appendix A: Types of accounts included in the shared goal definition

Transaction accounts

- Current account
- Basic bank account
- National Saving Bank or Investment Account
- Individual Savings Account
- Savings account, investment account/bond or any other account with a bank, building society, supermarket/store or other organisation
- Credit Union account

Investments

- Government Gilt-edged stock (inc war loans)
- Unit trusts/Investment Trusts
- Stocks, shares, bonds, debentures, other securities
- PEP (Personal Equity Plan)
- Profit sharing
- Company Share Options Plans
- Member of Share Club
- National Savings Capital Bonds
- Index-linked National Savings Certificates
- Fixed Interest National Savings Certificates
- Pensioner's Guaranteed Income Bond
- Save-as-You-Earn (National Savings /Bank /Building Society)
- Premium Bonds
- National Savings Income Bonds
- National Savings Deposit Bonds
- FIRST Option Bonds
- Yearly Plan
- Fixed Rate Savings Bonds
- Guaranteed Equity Bonds
- Endowment not linked to current property

Appendix B: Additional Tables

Table B1 Logistic regression predicting adults living in 'did not state' from unbanked households, all adults

		Model 1: predicting the 'did not state' from the unbanked		Model 2: predicting the unbanked from the banked	
		Significance (p-value)	Odds ratio (ExpB)	Significance (p-value)	Odds ratio (ExpB)
Age	16 to 24 (reference)	0.000	**	0.001	**
	25 to 34	0.344	0.8	0.024	1.4 *
	35 to 44	0.068	1.7	0.022	1.4 *
	45 to 54	0.132	1.6	0.521	1.1
	55 to 59 (women) or 64 (men)	0.000	3.4 **	0.916	1.0
	60 (women) or 65 (men) to 74	0.007	2.3 **	0.899	1.0
	75 to 84	0.005	2.5 **	0.506	0.9
	85 or over	0.000	8.4 **	0.024	0.6 *
Gender	Male (reference if female)	ns		ns	
Respondent is the HRP	Single adult household (reference)	ns		ns	
	Yes				
	No				
Ethnic group	Non-white (reference is white)	ns		0.000	1.7
Long-standing illness	Yes, limiting (reference)	0.000	**	0.000	**
	No	0.000	2.4 **	0.000	0.6 **
	Yes, non-limiting	0.075	1.7	0.000	0.5 **
Age left full-time education	15 or under (reference)	0.000	**	0.000	**
	16	0.293	1.2	0.049	0.8
	17 or over	0.000	2.3 **	0.000	0.4 **
Housing tenure	Rented privately (reference)	0.000	**	0.000	**
	Rented from Council	0.389	0.8	0.115	1.2
	Rented from Housing Association	0.486	1.2	0.923	1.0
	Owned outright or with mortgage	0.000	4.5 **	0.000	0.2 **
Household income	Less than £200 a week (reference)	0.000	**	0.000	**
	£200 and less than £300	0.001	1.8 **	0.000	0.5 **
	£300 and less than £400	0.080	1.4	0.000	0.4 **
	£400 or more	0.000	6.7 **	0.000	0.1 **
Income-replacement benefits	None received (reference is some)	0.000	6.0 **	0.000	0.4 **
Country in the UK	Scotland (reference)	0.000	**	0.000	**
	Wales	0.000	2.6 **	0.138	0.9
	England	0.009	2.7 **	0.390	0.8
	Northern Ireland	0.961	1.0	0.000	2.6 **
Constant		0.004	0.3	0.000	0.5

R2 = .617

'ns' indicates that the variable was not significant. 'HRP' denotes household reference person.

In model 1, strong predictors (contributing at least a 1 per cent improvement in the model) are, in order of strength: Tenure, income replacement benefits, income, age left full-time education, long-standing illness

In model 2, strong predictors (contributing at least a 1 per cent improvement in the model) are, in order of strength: Tenure, income and income replacement benefits

Post Office Card Account since individuals living in single-adult household who 'did not state' could not, by definition, be unbanked.

Source: 2006-07 Family Resources Survey

Table B2 Logistic regression predicting adults living in unbanked households, all adults

		Significance (p-value)	Odds ratio (ExpB)
Age	85 or over (reference)	0.000	**
	16 to 24 (reference)	0.000	2.6 **
	25 to 34	0.000	3.2 **
	35 to 44	0.000	2.7 **
	45 to 54	0.001	2.2 **
	55 to 59 (women) or 64 (men)	0.010	1.9 *
	60 (women) or 65 (men) to 74	0.010	1.8 *
	75 to 84	0.156	1.4
Gender	Male (reference if female)	ns	
Respondent is the HRP	Single adult household (reference)	0.000	**
	Yes	0.002	0.7 **
	No	0.000	0.7 **
Ethnic group	Non-white (reference is white)	0.000	2.3 **
Long-standing illness	No (reference)	0.000	**
	Yes, non-limiting	0.049	0.7 *
	Yes, limiting	0.000	1.4 **
Age left full-time education	17 or over (reference)	0.000	**
	15 or under	0.012	2.1 *
	16	0.038	1.8 *
Housing tenure	Owned outright or with mortgage (reference)	0.000	**
	Rented from Council	0.000	10.0 **
	Rented from Housing Association	0.000	5.1 **
	Rented privately	0.000	4.1 **
Household income	£400 or more (reference)	0.000	**
	Less than £200 a week	0.000	4.6 **
	£200 and less than £300	0.000	4.1 **
	£300 and less than £400	0.000	5.2 **
Income-replacement benefits	Some received (reference is none)	0.000	1.7 **
Country in the UK	England (reference)	0.000	**
	Wales	0.919	1.0
	Scotland	0.391	0.9
	Northern Ireland	0.000	2.4 **
Post Office Card Account	Yes (reference is none)	0.000	20.1 **
Constant		0.000	0.0
R2=.467			
'HRP' denotes household reference person. 'ns' indicates that this measure was not significant.			
Strong predictors (contributing at least a 1 per cent improvement in the model) are, in order of strength: Post Office Card Account and income.			

Source: 2006-07 Family Resources Survey

Table B3 Logistic regression predicting that a household is unbanked, where the HRP is below SPA

		Significance (p-value)	Odds ratio (ExpB)	
Age of HRP	16 to 24 (reference)	ns		
	25 to 34			
	35 to 44			
	45 to 54			
	55 to 59 (women) or 64 (men)			
Gender of HRP	Male (reference is female)	0.002	1.6	**
Household composition	Two adults, one or more children (reference)	0.000	**	
	Single adult, no children	0.002	2.0	**
	Two adults, no children	0.098	1.5	
	One adult, one or more children	0.000	2.7	**
	Other	0.101	0.6	
Ethnic group of HRP	White	0.000	**	
	Asian or Asian British	0.001	2.6	**
	Black or Black British	0.000	2.5	**
	Chinese or other ethnic group + Mixed	0.577	1.2	
Long-standing illness - HRP	No	0.002	**	
	Yes, non-limiting	0.006	0.5	**
	Yes, limiting	0.004	0.6	**
Age HRP left full-time education	20 or older	0.000	**	
	16 or under	0.000	2.5	**
	17 - 19	0.370	1.3	
Employment status of HRP	Full-time employment (reference)	0.000	**	
	Part-time employment	0.350	1.3	
	Unemployed	0.016	1.9	*
	Retired	0.157	1.7	
	Looking after family/home	0.000	2.6	**
	Permanently sick/disabled	0.000	4.6	**
	Other Inactive	0.000	2.8	**
	Other (Temporarily sick or disabled and students)	0.815	1.1	
Housing tenure	Owned outright or with mortgage (reference)	0.000	**	
	Rented from Council	0.000	5.6	**
	Rented from Housing Association	0.000	4.6	**
	Rented privately	0.000	6.7	**
Household income	£400 or more (reference)	0.000	**	
	Under £100 a week	0.000	12.1	**
	£100 and less than £200	0.000	5.7	**
	£200 and less than £300	0.000	3.1	**
	£300 and less than £400	0.000	2.5	**
Income-replacement benefits	Some received (reference is none)	ns		
Country in the UK	England (reference)	ns		
	Wales			
	Scotland			
	Northern Ireland			
Post Office Card Account	Yes (reference is none)	0.000	28.3	**
Constant		0.000	0.0	
R2=0.544				

'HRP' denotes household reference person. 'ns' indicates that this measure was not significant.

Strong predictors (contributing at least a 1 per cent improvement in the model) are, in order of strength: Post Office Card Account, income, tenure and employment status.

Source: 2006-07 Family Resources Survey

Table B4 Logistic regression predicting being unbanked, adults below SPA

		Significance (p-value)	Odds ratio (ExpB)	
Age	16 to 24 (reference)	0.000	**	
	25 to 34	0.025	0.8	*
	35 to 44	0.000	0.6	**
	45 to 54	0.000	0.3	**
	55 to 59 (women) or 64 (men)	0.000	0.3	**
Gender	Male (reference if female)	0.000	1.6	**
Household composition	Two adults, one or more children (reference)	0.000	**	
	Single adult, no children	0.000	0.6	**
	Two adults, no children	0.003	1.4	**
	One adult, one or more children	0.000	0.5	**
	Other	0.000	2.2	**
Respondent is the HRP ⁺	Single adult household (reference)	0.000	**	
	Yes	0.059	1.2	
	No	0.000	2.3	**
Children ⁺	Yes	ns		
Ethnic group	White (reference)	0.000	**	
	Indian	0.001	2.0	**
	Pakistani or Bangladeshi	0.000	4.1	**
	Black or Black British	0.000	2.2	**
	Chinese or other ethnic group + Mixed	0.000	1.7	**
Long-standing illness	No (reference)	0.003	**	
	Yes, non-limiting	0.011	0.7	*
	Yes, limiting	0.007	0.7	**
Age left full-time education	20 or older (reference)	0.000	**	
	16 or under	0.000	2.6	**
	17 - 19	0.162	1.3	
Employment status	Full-time employment (reference)	0.000	**	
	Part-time employment	0.000	1.6	**
	Unemployed	0.000	3.7	**
	Retired	0.000	3.9	**
	Looking after family/home	0.000	5.4	**
	Permanently sick/disabled	0.000	8.1	**
	Other Inactive	0.000	7.1	**
	Other (Temporarily sick or disabled and students)	0.000	2.1	**
Housing tenure	Owned outright or with mortgage (reference)	0.000	**	
	Rented from Council	0.000	3.5	**
	Rented from Housing Association	0.000	2.7	**
	Rented privately	0.000	3.4	**
Household income	£500 or more (reference)	0.000	**	
	Under £100 a week	0.000	3.6	**
	£100 and less than £200	0.000	2.8	**
	£200 and less than £300	0.000	2.0	**
	£300 and less than £400	0.000	1.6	**
	£400 or more	0.820	1.0	
Income-replacement benefits	Some received (reference is none)	ns		
Country in the UK	England (reference)	0.015	*	
	Wales	0.812	1.0	

	Scotland	0.838	1.0	
	Northern Ireland	0.001	1.7	**
Post Office Card Account	Yes (reference is none)	0.000	24.0	**
Constant		0.000	0.0	
R ² (Nagelkerke)=0.403				

'HRP' denotes household reference person; '+' indicates that these variables were included in an otherwise identical regression but which excluded household composition (to avoid multicollinearity). 'ns' denotes that this measure was not significant.

Strong predictors (contributing at least a 1 per cent improvement in the model) are, in order of strength: Post Office Card Account, employment status, tenure, ethnicity and age

Source: 2006-07 Family Resources Survey

Table B5 Logistic regression predicting that the household is unbanked, where the HRP is above SPA

		Significance (p-value)	Odds ratio (ExpB)
Age of HRP	60 (women) or 65 (men) to 74 (reference)	ns	
	75 to 84		
	85 or over		
Household composition	Two adults (reference)	ns	
	Single adult, male		
	Single adult, female		
Ethnic group of HRP	Other (reference is White)	0.000	3.8 **
Long-standing illness - hHRP	No (reference)	0.000	**
	Yes, non-limiting	0.741	0.9
	Yes, limiting	0.000	2.0 **
Age HRP left full-time education	17 or older (reference)	0.041	*
	15 or under	0.091	1.7
	16	0.453	1.3
Housing tenure	Owned outright or with mortgage (reference)	0.000	**
	Rented from Council	0.000	5.5 **
	Rented from Housing Association	0.000	5.7 **
	Rented privately	0.000	4.7 **
Household income	£300 or more (reference)	0.000	**
	Under £200 a week	0.000	2.7 **
	£200 and less than £300	0.002	1.8 **
Income-replacement benefits	Some received (reference is none)	0.000	1.8 **
Country in the UK	England (reference)	0.004	**
	Wales	0.772	1.1
	Scotland	0.859	1.0
	Northern Ireland	0.000	3.1 **
Post Office Card Account	Yes (reference is none)	0.000	21.7 **
Constant		0.000	0.0
R ² (Nagelkerke)=.439	POCA, Tenure, income, health problems are strong predictors		

'HRP' denotes household reference person. 'ns' indicates that this measure was not significant.

Strong predictors (contributing at least a 1 per cent improvement in the model) are, in order of strength: Post Office Card Account, tenure, income, and long-standing illness.

Source: 2006-07 Family Resources Survey

Table B6 Logistic regression predicting being unbanked, adults above SPA

		Significance (p-value)	Odds ratio (ExpB)
Age	60 (women) or 65 (men) to 74 (reference)	ns	
	75 to 84		
	85 or over		
Gender	Male (reference if female)	ns	
Respondent is the HRP	Single adult household (reference)	0.000	**
	Yes	0.008	1.5 **
	No	0.000	2.7 **
Ethnic group	Non-white (reference is white)	0.000	1.5 **
Long-standing illness	No (reference)	0.001	**
	Yes, non-limiting	0.610	1.1
	Yes, limiting	0.000	1.6 **
Age left full-time education	17 or over (reference)	0.001	**
	15 or under	0.014	0.3 *
	16	0.001	0.2 **
Housing tenure	Owned outright or with mortgage (reference)	0.000	**
	Rented from Council	0.000	5.4 **
	Rented from Housing Association	0.000	4.7 **
	Rented privately	0.000	3.7 **
Household income	£400 or more (reference)	0.009	**
	Less than £200 a week	0.001	2.0 **
	£200 and less than £300	0.045	1.4 *
	£300 and less than £400	0.328	1.2
Income-replacement benefits	Some received (reference is none)	0.000	1.8 **
Country in the UK	England (reference)	0.000	**
	Wales	0.574	1.2
	Scotland	0.213	0.8
	Northern Ireland	0.000	3.6 **
Post Office Card Account	Yes (reference is none)	0.000	21.0 **
Constant		0.000	0.0
R ² (Nagelkerke)= .419			

'HRP' denotes household reference person. 'ns' denotes that this measure was not significant.

Strong predictors (contributing at least a 1 per cent improvement in the model) are, in order of strength: Post Office Card Account, tenure and ethnicity.

Source: 2006-07 Family Resources Survey