How much does ‘free banking’ cost?

An assessment of the costs of using UK personal current accounts

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Executive summary

This report considers two research questions:

A What are the customer costs of current account use, and how do these costs vary between firms and types of current account?

B Are the customer costs of using personal current accounts consistent with cross-subsidies flowing from low income customers to other customers?

This assessment is important and topical due to rising international regulatory disapproval of the pricing methods used in personal current account markets and in particular the 'free banking' model for pricing current account use. This regulatory discontent is matched by a growing public criticism and complaint as to the perceived high customer costs of current account use. Beyond this criticism as to how customer costs of using current accounts are determined, a specific concern raised both in the UK and internationally is the accusation of a distributional cross-subsidy arising from the 'free banking' pricing model. Lower income customers are assumed to use overdraft services disproportionately more, and as a consequence are bearing most of the costs of providing current account services for all current account customers. As current accounts are essential for modern life, assessment and comprehension of the costs of using these services is a policy priority. Further, investigating the presence or otherwise of a distributional cross-subsidy is important in ensuring that the costs of using current accounts are equitable and don't act to disadvantage one part of society disproportionately.

Key findings for question A: What are the costs to the customer of current account use, and how do these costs vary between firms and types of current account?

There is a substantial variation in the customer costs of current account use. Customers can make very costly mistakes when trying to choose a current account that is right for them.

The customer costs of current account use are increasing over time, and the recent increase in current account costs has disproportionately fallen on overdraft users.

The costs of current account use vary significantly with the type of firm supplying these services:

- On average, high street banks are the most expensive providers of current account services. However, relative to other suppliers high street bank accounts, on average, possess more payment services and are accessible through more distribution channels, such as by telephone and the internet and through branches. Many high street banks also have superior branch networks relative to other current account suppliers.

- Building and friendly societies and the now-defunct converted building societies have provided, on average, the least expensive current accounts over the sample period.

The customer costs of current account use vary significantly by the type of current account:

- Packaged current accounts and 'free banking' current accounts are the most expensive types of personal current account. They also offer more methods for customers to access current accounts and on average offer more payment services.
- Basic bank accounts and 'other current accounts without overdrafts' are cheaper to use, do not offer overdraft services and provide fewer opportunities to charge fees, have on average fewer methods through which they may be accessed by customers and provide relatively fewer payment services.

Key findings for question B: Are the customer costs of using personal current accounts consistent with cross-subsidies flowing from low income customers to other customers?

The measurement of cross-subsidies flowing between customers from different income groups is a function of how the costs of customer use of current accounts are quantified. When only the overdraft and package fees of current accounts are emphasised, there is evidence of cross-subsidy from lower income customers to other customers.

When we consider the implicit costs of current accounts and critically the costs of little or no interest provided on current account deposits, this cross-subsidy from lower income to other customers is not present. These implicit costs are incurred disproportionately by higher income groups.

While the costs of current account use are not equally shared between customers of different incomes, all customers that use overdraft and current account deposit services intensively can pay higher costs for using current accounts.

Basic bank accounts and 'other current accounts without overdrafts' provide the most affordable access to current account services, albeit with fewer methods to access these services, a relatively smaller number of payment methods and no access to overdrafts.

We do not identify any systematic differences for customers with different incomes between the payment services offered and the methods through which customers access current account services.

Research methods

The analysis used to answer the research questions involves two distinct approaches. First, 10 representative customers are defined to represent common forms of current account use in the UK.

- Within this classification we incorporate past evidence as to how customers with different levels of income use current accounts.
- These 10 representative customer definitions are linked to three different levels of customer income: lower, middle and higher.
- We interviewed four senior bankers with responsibility for considering current account provision to ensure the plausibility of these definitions.

Second we use three costing approaches to measure customer costs of current account use. These forms of costing are:

(a) The actual or net customer cost of current account use – this involves the calculation of the direct customer costs from using current account services, including any fees and overdraft charges and recording deposit interest as a benefit to the customer.

(b) The implicit customer costs of using current accounts relative to providing deposit and overdraft services at the prevailing base rates. This implicit approach considers the loss sustained by leaving funds on deposit in current accounts with relatively low rates of interest, relative to what would have been received if these funds were earning base rate level returns. Further, we acknowledge that overdrafts aren't costless for banks to provide and consider the differences in costs of using overdraft facilities relative to the costs of providing these unsecured short-term credit services at a base rate level of interest.

(c) The implicit customer costs of using current accounts relative to deposit and short-term unsecured credit services provided by the same parent firm supplying the current account. This form of implicit costing quantifies the amount the customer loses by holding funds at relatively low rates of interest in a current account relative to moving these funds to an average deposit account offered by the firm providing the current account. Further, the costs of providing overdrafts are compared to the interest cost of obtaining a small, short-term unsecured loan from the same firm providing the current account.

These costing methods are applied to a uniquely comprehensive data set provided by Moneyfacts PLC and covering 395 current accounts offered by 72 banks/firms with a monthly frequency between 1995 and 2011. In total there are 21,827 monthly observations of current account details and prices. This data includes 'free banking' current accounts, basic bank accounts, packaged current accounts and 'other current accounts without overdrafts' (defined in Note 9). These current accounts have been offered by a range of firms including high street banks, building and friendly societies, the now-defunct converted building societies, international banks and insurers and small UK banks and insurers often providing current account services to specific market segments. Over the 17-year sample period consistent data is obtained each month for packaged current account fees, deposit interest rates, overdraft interest rates and fees for both authorised and unauthorised overdrafts, buffers for fees and interest charges and authorisation fees. In addition to the current accounts data set, substantial data sets on instant access deposits and low value unsecured lending provided by the same banks offering current accounts are also employed in this assessment for the costing method (c).

The analysis undertaken

After the introduction, Chapter 2 provides a review of the wider regulatory and academic literatures examining current accounts and Chapter 3 outlines the research methods and data used in this study. The analysis is developed over three chapters.

Chapter 4 outlines the features of the data sets and the UK current account market. This chapter reviews the producers of current account services, the number and form of accounts, payments services and methods of accessing these services and how pricing is undertaken in this market.

Chapter 5 assesses research question A (What are the customer costs of current account use, and how do these costs vary between firms and types of current account?). This assessment applies the three methods of costing customer use of current accounts and estimates the customer costs of the 10 representative customers, which signify different ways in which customers commonly use current accounts. This assessment is undertaken: overall; by types of current account; for different types of current account provider; and over time.

In Chapter 6 we address research question B (Are the customer costs of using personal current accounts consistent with cross-subsidies flowing from low income customers to other customers?). This assessment is undertaken over four stages. We first quantify if accounts offered to low, medium or higher income customers have any systematic quality differences. Second, we consider what pricing differences exist in current accounts offered to lower, medium and higher income customers. Third, the average customer costs of representative customers associated with how lower, medium and higher income groups' use of current accounts are recorded. Fourth, we examine if significant differences exist in the customer costs of using 'free banking' current accounts relative to other types of current account. These assessments are undertaken graphically, descriptively and also using T tests.

Central to this assessment is whether customer costs are evenly attributed or fall disproportionately on one customer group or type of current account. If no cross-subsidy exists, little variation is expected in the customer costs of current account use for different representative customers from distinct income groups. Further, the costs of using 'free banking' current accounts should be similar to other types of current account if no cross-subsidy exists. If a cross-subsidy does exist and the use of 'free banking' current accounts does lead to a cross-subsidy from lower to higher income customers, two clear outcomes should be apparent:

1 We would expect to observe that the customer costs of 'free banking' current accounts vary from other types of current account.

2 We would expect representative customers indicative of lower income customers to incur significantly higher customer costs when using current accounts than representative customers signifying middle and higher income customers.

Within this assessment other features of this market that have influenced both our analysis and the operation of this market are reported. These include:

- The pricing in this market is complex and less than transparent.
- The customer cost of overdraft use has been rising over time and is relatively higher for representative customers associated with lower incomes.
- The degree of supplier concentration in this market has increased over time.
- The interest income customers receive from current account deposits is low and has declined between 1995 and 2011 following changes in the base rate.
- There is substantial 'market churn', with current accounts frequently being introduced to and withdrawn from this market.

Conclusions and proposals for future investigation

In this study we assess the customer costs of using current accounts and consider whether a distributional cross-subsidy between customers with different levels of income exists. High levels of variation in customer costs are reported between different types of current account, across different types of firms supplying current accounts and over time. This variation is persistent even when identical current account use is examined. While this variation could reflect differences in service quality of different types of account or supplier, the range of customer costs is so large as to indicate further factors could also be important. For example, customers may be expected to have difficulties in navigating these markets as the pricing of current accounts is complex and current accounts are introduced and withdrawn frequently. Such complexity and market churn could constrain buyer power, present challenges for comparing the costs of current account use and limit the ability of customers to keep up with the different current accounts offered in this market.

Further, the costs of providing current accounts are not solely borne by lower income customers. While lower income customers disproportionately face the burden of overdraft costs, many higher and middle income customers also incur costs from admittedly briefer overdraft events and also from the tendency to hold larger deposits in current accounts. If a cross-subsidy exists in this market this appears to have flowed from both low income customers incurring large and long duration overdraft loans and inattentive customers of all incomes accumulating large current account deposits and using overdrafts occasionally, to all other customers not displaying these behaviours. Indeed the most affordable form of current account use in this market is to keep low current account deposits and not to use overdraft lending if at all possible.

In conclusion we report ways of improving the pricing of current account use. These include:

- It is essential for all customers to be aware that overdrafts are a high cost form of borrowing and are to be avoided if possible. While changes to the Lending Code enabling customers to opt out of unauthorised overdrafts is a positive step, we recommend that customers should instead need to actively opt in to use such overdraft services.
- While personal current accounts provide credit, deposit and payment services in combination, the regulation of current accounts is fragmented, with oversight focused on each of these distinct services separately.
- This market has numerous current accounts and high levels of choice. It is not far-fetched to indicate that this market suffers from product proliferation and that some providers could reduce the number of current accounts offered to improve customer decision making and ease customer costs of searching for new accounts.
- The presentation of the customer costs of current account use needs simplification and standardisation. Standardisation of current accounts, along the lines of the Sergeant review (2012) of savings and protection financial services, would be welcomed. Equally, recent efforts to improve switching in this market may enhance competition and are welcomed.
- It is important to assess the benefits and wider utility of additional services provided within packaged current accounts. To date, information on these services is not collected systematically and a greater comprehension of the costs and benefits of complex packaged current accounts is important for customers.
- Customers persistently accumulating very large current account deposits could be offered ‘sweeping’ facilities, whereby excess funds could be automatically moved to a deposit account offering a higher rate of interest.
- Information on how customers actually use current accounts is very limited for the UK and further research in this area is long overdue. Increasing access to such data in a controlled and confidential manner would be a positive step in further comprehending the operation of personal current account markets.

Chapter 1
Policy background and research aims

SUMMARY

This chapter outlines why examining the customer costs of using UK personal current accounts is important and how this examination will progress.

This examination is timely as the equity of the 'free banking' model for personal current accounts has concerned the public and regulators in recent years.

Commentators and regulators have reported that a distributional cross-subsidy arises from the use of the 'free banking' pricing model in current accounts. In this alleged cross-subsidy, lower income customers using overdraft services disproportionately cross-subsidise other customers using personal current account services.

As current accounts are essential for modern life, assessment of the customer costs of their use is a policy priority.

Policy background

The 'free banking' pricing model used in personal current account markets purports to provide payment services at no direct cost to the customer when their current account remains in credit. This pricing model has been the focus of persistent regulatory, media, academic and public criticism that emphasises the perceived opacity of the customer costs of using current accounts and questions whether the burden of customer costs for current account services is spread evenly between customer groups. Even parliamentary investigations of the UK current account market have reported that due to the 'free banking' pricing model, customer costs of using current account services are unclear (House of Commons Treasury Committee 2011) and may involve distributional aspects, as certain parts of the population may pay relatively more and less for these services. This gap in our comprehension of personal current account usage costs is troubling, as these accounts are used by 90 per cent of the UK population and provide 31 per cent of all retail banking income (Office of Fair Trading 2008, hereafter OFT). The regulation of this market is currently fragmented, with the deposit or banking elements currently regulated by the Financial Conduct Authority and during the sample period by the Financial Services Authority; the credit element of overdrafts is regulated by the Office of Fair Trading; and the payments system is considered by the Payments Council.

Providing further information as to the customer costs of current account use is therefore a priority due to the continuing regulatory and public criticism of pricing practices in this market. Public concerns are reflected by the growth in unresolved complaints as to

HIGH LEVELS OF UNRESOLVED COMPLAINTS WITH THE CURRENT ACCOUNT MARKET

The Financial Ombudsman Service (FOS), which acts independently to resolve disputes between UK customers and financial services providers, has observed a substantial rise in the number of unresolved complaints about current accounts from 2–3 per cent of all complaints between 2001 and 2006 to 12 per cent of all complaints between 2010 and 2011.

Four per cent of all the complaints made to the FOS since 2000 have concerned unauthorised overdraft charges (approximately 46,000 cases). In 2010 and 2011 around half of these current account complaints have concerned financial hardship where bank charges and fees have added to existing problems. In 2011 some 80 per cent of all financial hardship cases brought to the FOS related to current accounts. Other products causing financial hardship include credit cards and unsecured lending. Considering 2011 figures, these complaints are made more frequently by the under 25s relative to other age groups and slightly more by women than men. Further details of this complaints data from the Financial Ombudsman Service are provided in Appendix 1.

the operation of this market in recent years. Regulatory investigations of current account pricing have also questioned and at times challenged the suitability of the 'free banking' current account pricing model. In the UK, these investigations include reports from HM Treasury (Cruickshank 2000), the Competition Commission on SME banking (Competition Commission 2002), Northern Ireland personal current accounts (Competition Commission 2007), the House of Commons Treasury Committee (2011) and most recently the Independent Commission on Banking (2011). This latest report indicated, as part of a wider review of problems in UK banking, that the ability for customers to switch current account between providers should be improved[1] and that the transparency of pricing of these accounts needs to be enhanced.

Perhaps the most significant UK regulatory intervention into the personal current account market was provided by the Office of Fair Trading (OFT) in its investigation into competition within the unauthorised overdraft market (OFT 2008, 2011, 2013). This competition agency reported that the current account market was not working well due a lack of transparency and complexity in pricing, which concentrated competition on more visible fees and charges. The 'free banking' pricing model was considered to result in low interest rates for deposits within current accounts and overly high levels of interest and fees for overdraft lending. Subsequently a cross-subsidy is believed to flow from customers holding overdrafts or substantial deposits to customers with minimal current account deposits or overdraft borrowing.

This scenario troubled this regulator as it was assumed the poor, vulnerable and less aware customers were incurring most overdraft fees and subsidising payment services for customers not facing such financial challenges. Legal action was undertaken by the OFT as to the fairness of unauthorised overdraft charges. This case between the OFT and seven banks led to rulings that bank overdraft charges are unfair by the High Court and the Appeal Court yet was eventually rejected by the Supreme Court in 2009. Within this judgment the scope of banking services provided and whether the combination of charges formed a price for these services were crucial (see Whittaker 2011). In 2011 the OFT also announced a further review of competition within and operation of the current account market (OFT 2011). This report outlined new standards prescribed in the Lending Code, which provides minimum standards of behaviour for firms supplying overdrafts to the personal current account market. These amendments included both an expectation that personal current account providers would inform customers when they are about to enter into an unauthorised overdraft and provide the ability for customers to activity opt out of unauthorised overdrafts. These and other amendments to the Lending Code are summarised in Appendix 2. The 2013 OFT report evaluated changes to competition within unsecured overdraft markets arising from past regulatory changes. It was reported that there has been a fall in the costs of using unauthorised overdraft services and the underlying profitability of these services. These changes were estimated to benefit customers by £928m.

Regulatory interest in current account pricing is also international in scope, with investigations and reforms of current account markets undertaken in Canada, Australia, the USA and the European Union:

- Canada has introduced the right of all customers to have a bank account that can be used for payment services (excepting in cases of suspected or past fraud), and measures to standardise the calculation and disclosure of current account fees, including being informed 30 days in advance of any changes to current account fees (Ministry of Justice 2003).

- In Australia, legislation has been undertaken to outlaw unfair charging structures, including penalty charges on current accounts.

- Regulatory developments in the USA include the introduction of Regulation E (Electronic Fund Transfers) by the Federal Reserve Board (Federal Register 2010) prohibiting financial institutions from charging customers for overdrafts incurred from ATM and one-time debit card transactions unless consent is obtained or the customer opts to pay such fees.

- The Commission of the European Communities (2009) also reported a high variance and lack of clarity in the costs of current accounts across the European Union.

The specific accusations of cross-subsidy in the personal current account market and the ‘free banking’ pricing model have arisen from a diversity of policy, academic and regulatory statements both in the UK and internationally. We observe the majority of these cross-subsidy claims emphasise the role of overdraft services and their assumed high cost. It is assumed in many of these statements that overdraft services are disproportionately used by the poor (e.g. Armstrong and Vickers 2012). The OFT (2008), the Independent Commission on Banking (2011) and the House of Commons Treasury Committee (2011) also considered the presence of cross-subsidies, yet distinctly through incorporating customer costs that arise from current account deposit services in addition to overdraft services. Therefore, to measure the costs of current account use we should also consider the implicit costs of deposit services. Using

CLAIMS OF CROSS-SUBSIDY IN PERSONAL CURRENT ACCOUNT MARKETS

The Office of Fair Trading (2008: para. 2.4) reports:

> There seems to be a substantial cross-subsidisation from those customers who incur insufficient funds charges to those who do not; and to a significant extent from 'vulnerable' low income and low saving customers, to higher income, high savings ones.

Criticisms have also been made by the House of Commons Treasury Committee (2011: para. 80), which reported:

> So-called free banking is not free. The term free-in-credit banking is a misnomer given that consumers with positive balances pay through interest foregone. It misleads the consumer. It is also clear that so-called free banking has important distributional consequences. A minority of consumers, often those on lower incomes, pay explicit charges associated with overdrafts. This results in high prices and poor outcomes for a sub-set of consumers. Meanwhile, other consumers, often on higher incomes, do not pay explicitly for their current account provision.

Concerns with possible cross-subsidies have also arisen within academic work. For example Armstrong and Vickers (2012: 479) report:

> financially constrained customers pay contingent fees which help fund the free service offered to those in credit – [this] might appear to some as a kind of 'reverse Robin Hood exercise'.

In a similar vein, Mullineux (2009: 462) reports that 'free banking' is 'founded on the cross-subsidisation of high payments usage, low balance users ("young professionals") by low payments usage, high balance users ("elderly widows")'.

Work from Australia also reports that penalty fees are not equally shared between customers and 'are disproportionately borne by those who can least afford to pay them, namely low income customers' (Rich 2004: 11). The Australian Senate report on competition in retail banking (Senate Economics References Committee 2011: para. 4.69) reported that bank fees may fall disproportionately on the poor, and 'poorer customer who do pay fees subsidise their wealthier counterparts on a per transaction basis'.

this approach allows us to quantify how much additional interest could be gained if current account deposits were placed in another savings account.

In light of these concerns it is essential to independently examine customers' costs of using personal current accounts and to determine if these regulatory criticisms of 'free banking' can be factually justified. Underlying all the accusations of cross-subsidies are clear incentives for customer groups to claim they are cross-subsiding other customers, in order to attempt to change the pricing of services in their favour. Many of these claims could also be viewed as redistributive policies, particularly where cross-subsidy is believed to flow from poorer to richer customers, and could even reflect the political decisions of regulators who can raise their public profile through pursuing such claims (Burton *et al*. 2009).

Research aims and methods

The objectives of the study focus on answering two research questions:

A What are the customer costs of current account use, and how do these costs vary between firms and types of current account?

B Are the customer costs of using personal current accounts consistent with cross-subsidies flowing from low income customers to other customers?

To answer these questions this study undertakes a number of different analytical stages. After this introduction and a review of the academic and regulatory literatures concerning current accounts provided in Chapter 2, these methods are outlined in Chapter 3. This chapter outlines how we estimate the customer costs of current account use for 10 different 'representative customers'. These scenarios are so defined to signify customer use of current accounts by customers from lower, middle and higher income groups. We also estimate customer costs of current account use using three forms of actual and implicit costing. The costs of current account use are then considered over a range of dimensions: the type of supplier of current accounts, the type of current account, over time and across different income groups. This assessment uses data provided by Moneyfacts PLC covering nearly the entire population of UK retail current accounts offered between 1995 and 2011.

The analysis is undertaken in three chapters. In Chapter 4 we outline features of the personal current account data set and consider the providers, current account products, payment services and pricing in these markets. In Chapter 5 we address research question A, and in Chapter 6 we examine research question B.

The analysis differs from past work as we estimate customer costs of using current accounts in terms of customers' direct, net or actual costs and also implicit costs, including costs of foregone interest on current account deposits. These implicit costs are determined relative to base rates and the costs of providing deposits and short-term, unsecured lending independently from the same firm offering the current account.

We determine whether the customer costs of using personal current accounts are consistent with a cross-subsidy from lower income to other customers through a range of analytical stages. Initially we examine if differences exist in the quality of current accounts, where quality is represented by the payment services associated with current accounts and the range of methods that can be used to access current accounts. Second, we examine if the representative customers associated with different levels of income display customer costs that are consistent with a cross-subsidy. Customer costs would be consistent with a cross-subsidy if the costs of using current accounts are significantly higher for lower income customers. Third, we examine if the current accounts available to customers from different income groups also display such trends in customer costs. Lastly, we examine if the use of 'free banking' current accounts results in customer costs consistent with a cross-subsidy or otherwise.

Following this assessment, Chapter 7 summarises the study results and recommendations for developing the operation of the UK personal current account market.

In the next chapter we turn to a review of past regulatory and academic assessments of personal current account markets.

Chapter 2

The personal current account market

SUMMARY

This chapter outlines how current accounts are used and what benefits are derived from using and providing these services.

Current accounts involve three principal services – payment services, deposit services and overdraft services.

International evidence reports the costs of payment services are low and are declining over time.

The use of overdraft services is increasing over the sample period 1995–2011.

Personal current accounts have been reported as having complex forms of pricing for some services and this pricing is disconnected from how payment services are used.

The use of personal current accounts has been increasing in the last decade, across the whole of UK society.

Current accounts provide many benefits to customers using, and banks supplying, these services.

The role of personal current account services

Personal current accounts are tools to facilitate financial transactions and provide payment services. In the UK approximately 90 per cent of households have access to these services, with roughly 54 million active current accounts in 2010 (OFT 2010). Across the European Union in 2007 the percentage of households using current account services was 87 per cent, an increase from 80 per cent in 2003; this is a higher percentage than for households having telephone services, both mobile and fixed line, or a gas supply (Commission of the European Communities 2009). This widespread use of current accounts underlines the key role this service provides, granting access to the monetary economy, allowing customers to make and receive payments, obtain currency and more widely undertake transactions.

The design of personal current accounts has varied greatly over time. Current accounts contain core services including payment services and current account deposit services, offered in all current accounts. Some current accounts also offer services associated with these core services, such as overdraft lending. In other accounts and particularly packaged current accounts, additional or add-on services unrelated to the operation of current accounts are included.

These additional services are used to differentiate current accounts from competitors' offerings and have included various insurance policies, music downloads or VIP airport lounge access (Financial Services Authority 2012). As the utility, costs and quality of these additional services vary between customers and current accounts, assessment of these additional services is not included in this work.

The cost of providing payment services is an area of much speculation and little evidence in the UK. Despite this paucity of evidence for the UK, European and Scandinavian evidence does exist as to the costs of these services. Schmiedel *et al.* (2012) estimate that across the EU 51 per cent of the social costs[2] of payment services are paid by banks and 46 per cent of payment service costs are paid by retailers. These costs are thought to be passed on to customers through current account usage costs by banks and through higher prices by retailers (Schmiedel *et al.* 2012). Studies of payment services emerging from Scandinavia report the costs of payment use have declined over time by 62 per cent between 1988 and 2001 (Humphrey *et al.* 2003). Guibourg and Segendorff (2007), examining the Swedish payments system, report that these services are actually profitable for banks. While the distribution of cash remains a costly activity for banks, card payments and acquiring services are highly profitable. Sadly, comparable work for the UK has not been undertaken due to the limited availability of such data. While this decline in the cost of payment services may reflect some of the differences between Scandinavian payments services and those in the UK (UK payments have historically taken longer to clear and the UK has both a larger and a more concentrated banking system, Milne 2006), this downward trend in the cost of payment services is associated with new information technology used in the banking industry. As this shift towards greater use of information technology is not restricted to Scandinavia, it is not implausible to question whether this decline in the cost of providing payment service is more widespread. While discussion of the wider functions of the payments system is beyond the scope of this report, reviews are provided for the UK and Nordic nations by Milne (2006) and for the USA by Gerdes (2008). In summary, international evidence reports that the costs of payment services have been falling for many years.

The deposit services offered within current accounts act as a repository of funds, into which income flows from employers, pensions and other sources, and from which payments are made. Current account deposits therefore act as transactional and precautionary balances for customers, providing day-to-day payments and a level of deposits from which unforeseen and costly events can be resolved. As the level of interest paid on current account deposits is generally lower than returns received from other forms of savings or investment opportunities, many customers move funds from current accounts to maximise their returns. The balance held within current accounts therefore reflects customers' cash inflows and outflows, where the maintenance of a sufficient yet not excessive level of funds is optimal.

Overdraft services are also provided within some current accounts. This form of lending emerges when a customer makes payments from their current account when current account deposits are insufficient to cover the payment, as a 'tied after market' for which contingent charges are levied (see Armstrong and Vickers 2012). Overdraft credit has been an area of major expansion in recent years and provides a valuable service to many customers. It has been reported that overdraft services are used by three million low income customers as a credit facility and by a further one million customers as a result of inadvertent excessive spending

WHAT DETERMINES THE SIZE OF CURRENT ACCOUNT DEPOSITS?

The balance held within current accounts reflects customers' cash inflows and outflows; these deposits can be substantial.

- For the Netherlands, Cunha *et al.* (2011) estimate that transactional balances held within current account deposits are 18.2 per cent of all liquid assets held by households, representing 1.4 per cent of total assets.
- The amount of money held in transaction accounts is positively influenced by income and the interest rate (Klee 2008), reflecting the opportunity cost of holding funds in often low or no interest rate current account deposits.
- After sufficient balances have been accumulated in a current account, surplus funds are often removed for use in other investments or spending (Nyström 2008).
- Merrigan and Nomandin (1996) report precautionary saving is a significant influence as customers save to guard against unanticipated income downturns. This factor is significant for households with more variable income and income uncertainty. This precautionary influence has also been recorded to be a significant determinant of current account deposits specifically (Tin 2008).
- Within the UK, the average level of current account deposit balance was £1,740 in 2006 (OFT 2008), with 49 per cent of current account deposits containing less than £500 in deposits on average and 35 per cent of current account deposits having over £1,000 in deposit balances. In Northern Ireland in 2005 (Competition Commission 2007) the average credit balance for clearing banks was £1,796 and for other banks was £1,174.

(Ellison *et al.* 2011). The Competition Commission (2007) reported that in Northern Ireland overdraft use is undertaken mostly by younger customer and customers from socio-economic classes A, B and C.

Overdraft lending arises from customers' actions and provides a source of emergency capital, acting as an ad hoc bridging loan for accommodating short-term liquidity concerns. This form of lending is either agreed or authorised by the bank or alternatively is unauthorised by a bank and may or may not be accepted at the banks' discretion. In some cases, and following recent regulatory intervention, customers using some current accounts can now opt out of the use of unauthorised overdrafts.

Depending on whether an overdraft payment is authorised or unauthorised, the resulting costs will vary, being higher for unauthorised overdrafts. In cases of unauthorised overdraft use, if the bank rejects a payment for which there are insufficient customer funds, a fee will be incurred by the customer for a rejected direct debit, cheque or other form of payment together with the potential customer annoyance and embarrassment of having a payment rejected. Alternatively, an unauthorised overdraft can be granted by the bank, a situation that will result in interest costs and fees being payable by the customer. When the bank opts to accept an overdraft loan it also faces a risk of non-payment. These risks can be reduced by ensuring income is paid into the current account, through curtailing future overdraft lending when overdraft loans are not repaid and initiating procedures for debt recovery when appropriate.

WHY DO BANKS USE OVERDRAFT FEES?

Historically, overdraft lending was considered an indulgence of the customer, forced on the bank by the travails of competition in banking markets (Whitney 1918). The bank therefore offers overdraft services as they are popular with customers and charges fees on overdraft lending both to cover the costs of this lending and to discouraging future undesirable customer behaviour and poor financial management.

While such a paternalistic approach may be appropriate, problems have arisen when some banks discover just how profitable such fees and interest costs can be. Banks have incentives to encourage their customers to incur fees, or at least not to discourage customers from doing so (McGovern and Moon 2007). This concern has been prominently discussed in the USA where the Federal Deposit Insurance Corporation (2008) reported that of the 86 per cent of US banks operating overdraft programmes half have used external consultants to increase the levels of overdraft interest and maximise fee income from their customers.

The customer motivations for incurring overdraft lending are important. If an overdraft arises from a simple mistake and the overdraft loan is swiftly repaid, the costs of such actions can be limited and customers' cash management skills may be 'nudged' towards greater prudency. Indeed when overdrafts arise from financial mistakes many customers prefer payments to be made, overdrafts to be granted, cost of refused payments eluded, potential embarrassment avoided and impacts on credit ratings mitigated. Alternatively, if the overdraft arises from excessive spending and is not repaid swiftly a different set of questions are raised. Such questions include, is the overdraft loan sustainable for the customer? Also, how should excessive spending be accommodated within the medium term?

Of course, if customers make decisions rationally and are aware of all pertinent information, they make payments with insufficient funds in the knowledge that this action has financial implications. Under these assumptions, the cost of overdraft payments is not a wider concern as the customer has entered into this lending agreement knowingly. Such assumptions can stretch credulity, as many customers are not consciously aware of the financial implications of decisions leading to overdraft lending. Further, does the customer always benefit from the acceptance rather than rejection of an overdraft debt? If the customer's actions are characterised by a lack of knowledge or misinformation this could lead to a misuse of overdraft services. In the worst cases, the customer could face a spiral of debt from which it is hard to emerge. In such circumstances bank fees act as a poverty trap due to the challenges faced by low income customers in returning their finances to credit (Stewart 2005). Clearly, the banks' decision to provide overdraft services is far more complex when rational decision making and perfect information are not present.

How are personal current accounts priced?

The 'free banking' pricing model for current accounts has been used in the UK since 1984 and is increasingly observed in other nations, such as Australia and the USA, where it has also raised public and regulatory concerns. Free banking was introduced into the UK by

Midland Bank, which gained approximately 450,000 customers in 1985 using this pricing model (House of Commons Treasury Committee 2011). By 2006 'free banking' current accounts had 75 per cent of market share in the UK personal current account market (OFT 2008). While other forms of pricing personal current accounts do exist, including packaged accounts, student accounts,[3] and basic bank accounts, their use is less widespread. Packaged current accounts require customers to pay an additional fee for using the current account, as well as any fees and charges specified in the account. For this additional fee customers often receive extra services that are 'bundled' with other current account services. The seven largest UK banks have supplied 7.7 million packaged accounts, accounting for 19 per cent of all new accounts opened in 2008 (OFT 2008).

Other types of current accounts often have restrictions on the services provided and/or offer a subsidised service (for example student accounts). This study also examines a range of current accounts without overdrafts. These personal current accounts offer varying payment services and forms of distribution, with some providing quite restrictive services. A consistent feature of these accounts is the lack of an overdraft facility. One type of current account without an overdraft is a basic bank account. It has been reported that basic bank accounts are primarily used by those on low incomes, with Ellison *et al.* (2011) finding that 56 per cent of customers on low incomes use basic bank accounts. This point is contradicted by the Household Resources Survey (Department for Work and Pensions, editions from 2005/06 to 2010/11), which reports that the use of basic bank accounts is undertaken by all income groups. These current accounts often have quite restricted access to payment services, offering access to cash and direct debit and credit services, yet often not the use of cheques and cheque guarantee cards, which have been withdraw from an increasing proportion of current accounts over the sample period. Also, this type of current account does not offer an overdraft. In all these types of personal current account there is not a direct cost applied for using payment services.

In 'free banking' current accounts the costs of payment services are not directly paid for by customers. These costs are often assumed to be paid from a cross-subsidy from customers using overdraft services and also by customers holding deposits within their current account, as the rate of interest provided on these current account deposits could be lower than offered on conventional deposit accounts.

There are, of course, many benefits of the 'free banking' pricing model for customers. Being able to conduct transactions without concern to the costs of payment services can be liberating and is popular with many. Certainly such pricing models act as an effective 'pricing innovation' or marketing tool to attract customers and particularly customers who will not require overdraft services or do not poorly manage their current account deposits facility. On this point the House of Commons Treasury Committee (2011: para. 98) reports, 'The predominance of so-called free banking in the UK appears to suggest a clear consumer preference for this particular model.'

The demographics of current account use

To determine how customer costs of current account use vary in the UK market and critically if costs vary between lower income and other households, it is important to understand the

HOW ARE CURRENT ACCOUNTS PRICED INTERNATIONALLY?

'Free banking' pricing approaches are not used globally and many different current account pricing models are employed internationally. In Europe, a variety of current account pricing models are employed:

- In France high debit card charges are used.
- In Germany credit transfer fees are used.
- In the Netherlands annual fixed fees are used to pay for payment services.

These forms of current account pricing ensure that pricing is linked to how much payment services are used by customers, as in France or Germany, or that all current account users contribute towards the costs of payment services, as in the Netherlands.

demographics of the current account market. In this section we outline the demographics of current account use and define who has been using these accounts and how personal current account use has changed between 1995 and 2011. One of the principal sources of data on financial services service use in the UK is the Household Resources Survey. This government survey compiles the use of current accounts by demographic groups, and also since 2004 has considered who has been using basic bank accounts. From this survey it is apparent the use of current accounts has increased both over time and across different demographic groups.

One dimension across which the use of personal current accounts has varied is geography. Within the UK we observe lower levels of current account use in Scotland and Northern Ireland. These differences between elements of the United Kingdom have been declining with time as the use of personal current accounts across the UK has risen, a trend illustrated in Figure 2.1.

When considering the take up of basic bank accounts geographically, as illustrated in Figure 2.2, we observe take up of these services was initially higher in Northern Ireland than for Great

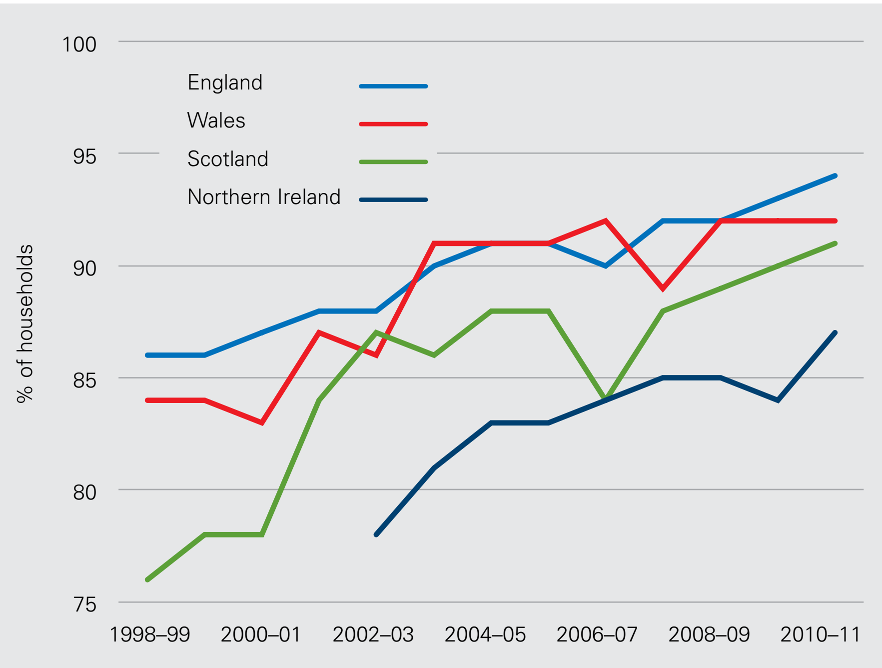

Figure 2.1
Distribution of current account use across the UK by household.

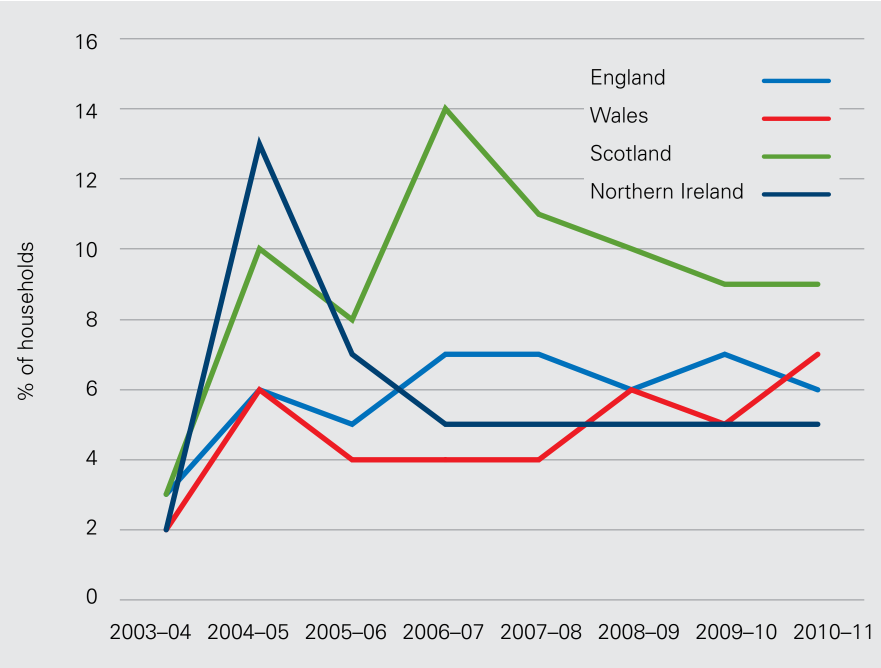

Figure 2.2
The use of basic bank accounts across the UK.

Britain. This possibly reflects the greater use of credit unions in Northern Ireland through which basic bank accounts can be distributed. With time the use of basic bank accounts has increased across the United Kingdom and has increasingly been adopted in Scotland. The level of use of basic bank accounts has stabilised in most parts of the UK in recent years. These trends may reflect wider international changes in the access and use of bank services. Indeed globally, the use of a bank account is associated with income, educational level and urban living (Demirguc-Kunt and Klapper 2012).

The distribution of current account use by age (Figure 2.3) indicates this has been constrained for customers over 75 and under 24 years old. The use of current accounts by these groups has increased in the last decade, narrowing the dispersion of current account use by age and reflecting the greater use of current accounts across society. The take up of basic bank accounts is illustrated in Figure 2.4 and indicates these services are increasingly used by customers under 24 years old.

The distribution of personal current account and basic bank account use is provided in Appendices 3 and 4, which summarise current and basic bank account use by customers' weekly income and current account use by family type. It can be observed that the use of current accounts, while historically lower for lower income households, has improved for all income groups during the sample period. There are no substantial differences in the take up and use of basic bank accounts by income, with higher income groups using this type of current account in similar proportions to lower income customers.[4] The take up of personal current accounts by households from different income groups indicates that the lower paid have used current account services relatively less than higher income groups.

Overall from the Household Resources Survey we report the take up and use of current accounts has been increasingly accepted across the wider UK population when customers are considered geographically, by income, age or family type. Indeed the increase in personal

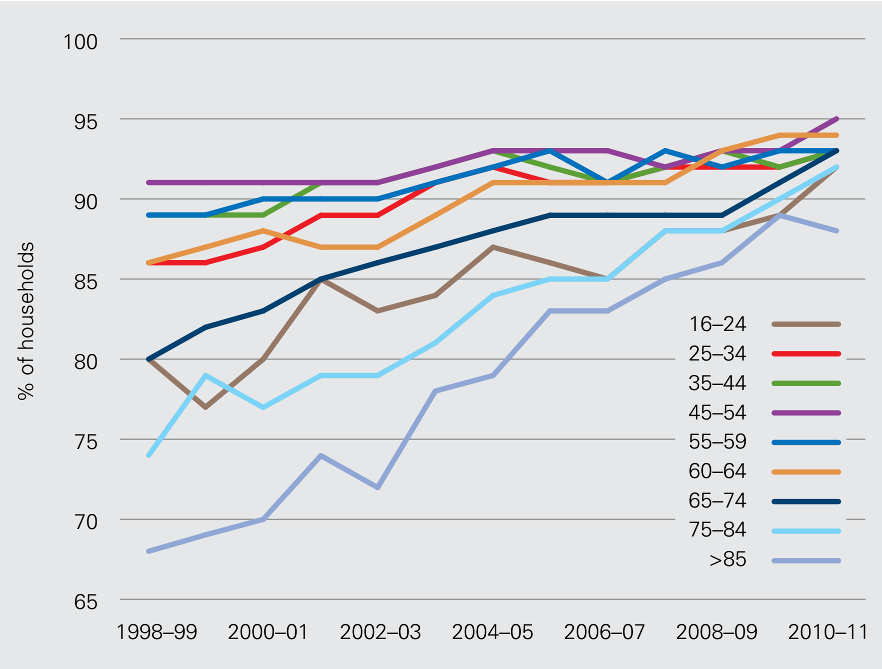

Figure 2.3
Current account use by age group.

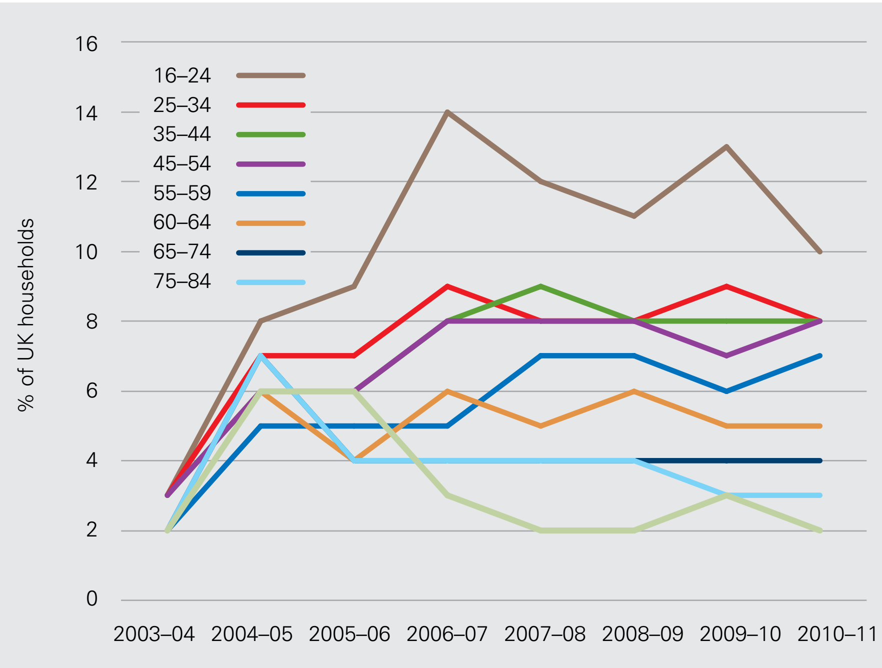

Figure 2.4
Basic bank account use by age group.

current account use by all parts of society is clearly a positive outcome achieved by the providers of these services and other concerned/interested parties and organisations.

How do banks benefit from providing current accounts?

Banks benefit from providing current account services. These benefits include:

- Deposits within current accounts are a low cost source of funds.

- Access to deposit funds does not evaporate during challenging financial environments (Huang and Ratnovski 2011; Shin 2009).
- Banks with high levels of deposit funding do not contract their credit provision under crisis circumstances (Cornett *et al.* 2011).
- The international Basel III agreement on liquidity risk management classifies current account deposits as 'stable', according regulatory benefits when these are held on bank balance sheets (Basle Committee on Banking Supervision 2010).[5]

The provision of current accounts and overdrafts also provides banks with information on customers. Transactions data from current accounts can be profitably employed to determine a customer's creditworthiness and to predict loan default (Mester *et al.* 2007; Norden and Weber 2010). This information also has a substantial commercial value, reflecting the 'gateway' function of current accounts, enabling banks to gauge customers' additional financial services requirements and the viability of such sales. In the USA, Hogarth and O'Donnell (2000) report that holding a current account effectively triples the demand for credit cards, increases the demand for consumer loans by 65 per cent and lifts demands for savings accounts by 128 per cent. Across Europe and including the UK the degree of cross-selling from current accounts to other financial services is high. Holding a current account in the UK results in a further 2.08 financial services being bought by the customers; the similar figure across the EU 25 is 2.14 (European Commission Directorate-General for Competition 2006).

Lastly, it has been reported that banks can derive substantial revenues from current account services. The bank revenues in this market arise from current account fees, interest forgone on money deposited in current accounts and from fees incurred by customers using overdraft services. For the UK, the OFT (2008) estimated the scale of overdraft fees, charges and other implicit and explicit costs of current accounts, as £8.63bn in 2006, or £152 for each active current account; a scale of profits greater than observed in the savings and credit card markets combined. More recently the OFT (2013) reported that while these costs have declined for unauthorised overdraft lending, profits from this sector remain large, if constrained in recent years following increased regulatory scrutiny. These high costs of overdraft provision are also observed internationally; for the USA, Parrish and Frank (2011) reported that consumers paid $23.7bn in overdraft fees in 2008; an increase of 35 per cent since 2006 ($17.5bn).

Chapter 3
Methods and data employed

SUMMARY

This chapter outlines the data set and the methods used, and discusses the decisions underlying the analysis.

The data sets examined consider UK personal current accounts between 1995 and 2011, and also deposit and unsecured lending markets over this period.

The empirical procedures used include: the three costing approaches employed to measure customer costs of current account use; and the 10 representative customers employed to display current account use by customers with different levels of income.

We examine how cross-subsidy has been previously quantified generally and specifically in banking.

In this chapter we detail the methods and data employed in the study. First, the data used to inform our analysis of customer costs is described. Second, we consider how customer costs are to be measured using three approaches. We define representative customers, who display common patterns of using current accounts, associated with customers with lower, middle and higher levels of income. Then we outline how customer costs are to be measured. Lastly we consider how cross-subsidies have been measured generally and specifically in banking, and what techniques are applied to quantify cross-subsidies in this study.

The data employed

The empirical analysis employs data from Moneyfacts PLC for the retail personal current account market. This data set of monthly observations was obtained in paper format and has been transformed into an electronic version for this project. Consistent monthly data is available for packaged current account fees, deposit interest rates, overdraft interest rates, fees for both authorised and unauthorised overdrafts, buffers for fees and interest charges and authorisation fees between 1995 and 2011. While fees for overdraft letters and rejected cheques and direct debits can be obtained for some of the sample period, this data is not available for the entire 17 year period. For these product features we follow approaches used by the OFT (2008) and employ this sample of observations to reflect these costs throughout the sample period, yet with an acknowledgement that these are estimates of costs and a degree of inference is required in their interpretation. This process was also assisted by reference to the current costs of bank charges received from banks' marketing materials in 2011.

WHY DO WE USE SUCH A DETAILED DATASET?

The use of this detailed dataset is important as many past studies of current accounts have only used a single interest rate to assess pricing in this market, an approach that does not reflect the complexity of pricing of current accounts, leading to erroneous results (Boyd 1976).

Examining these changes over time is important as competitive conditions, banking stability, product innovations and forms of distribution have all shifted over the sample period.

We also define different institutions that operate in the market according to their function, scale and origin. These five groupings include high street banks, building and friendly societies, small banks and insurers, international banks and insurers and the now-defunct converted building societies. A distinction between firms and parent firms is also made in the analysis due to the strategies of many parent firms to offer services through a range of firms or subsidiaries. Some banks have multiple subsidiaries that offer a range of often slightly differentiated products to market. For example, the Lloyds Group has been associated with Cheltenham and Gloucester, TSB, Scottish Widows, Chartered Trust, HBOS, Intelligent Finance, the Bank of Scotland and Halifax, amongst other brands. Also, many of the firms in this market have been affected by the ongoing process of merger and take over. For example, during the sample period Abbey National obtained National and Provincial, Cater Allen Bank and Fleming Premier before itself being acquired by Santander. As we assume decisions as to how firms engage with this market will be made at the parent firm level, awareness of these changes is important. Details of the firms and parent firms used in this assessment are provided in Appendices 5 and 6 respectively. The definition of different types of firms operating in this market is elaborated in Appendix 7.

Key features of this data include:

- Between 1995 and 2011 there have been 395 current account products offered by 72 firms, which are owned by 65 parent firms. In total there are 21,827 monthly observations of current account details and prices.
- Of the 395 personal current accounts, 269 provided overdraft facilities. These accounts were offered by 46 firms, which were owned by 39 parent firms. This amounts to 14,525 monthly observations.
- There are 126 personal current account products without overdraft facilities offered by 59 firms, which are owned by 54 parent firms; in total 7,302 monthly observations.
- Of the personal current accounts without overdraft facilities, 32 are basic bank accounts. These basic bank accounts are offered by 21 firms owned by 20 parent firms; in total 1,884 monthly observations.

- There are 120 packaged current accounts. These accounts are offered by 29 firms, which are owned by 22 parent firms and include 4,885 monthly observations.
- On average, accounts have been offered for 55 months. The longest duration was 204 months (the entire sample period) and the briefest offering was of one month.
- In total there are 169 personal current accounts that can be classified as offering 'free-in-credit' or 'free banking'. These accounts are provided by 44 firms, which are owned by 37 parent firms. Personal current accounts classified as 'free banking' are assumed to include overdraft services and not packaged fees.
- These groups are not all mutually exclusive, with some current accounts changing characteristics and classification within the sample period.

Defining representative customers

To address the research questions, we need to determine if the customer costs of current account use are equally shared by all customers or otherwise. To facilitate this, we assess if customer costs of current account use vary for customers that use current accounts differently. To achieve this end, some US work (for example Stango and Zinman 2009; Fusaro 2008; Fusaro and Ericson 2010) has directly examined current account use through assessment of customer transactions data. This type of private and customer level transactions data, while optimal for such an examination, is very difficult to obtain in the UK as financial institutions are reluctant to release private customer details. Indeed the only use of such data, to the authors' knowledge, is by the OFT (2008). Alternatively, the market could be assessed by using accounting information derived from banks' annual reports and accounts to estimate levels of deposits and other values (for example Carbo-Valverde *et al.* 2011). This approach, while employing relatively widely available data, is highly vulnerable to the assumptions made when estimating the proportion of deposits formed by current account deposits and the costs that arise from payment service use. This type of assessment is undertaken annually at a bank level, cannot indicate if distinct types of customer incur different costs and employs accounting information constructed subject to varying assumptions.

This study adopts a third approach for determining the cost of current account services by using representative customers advocated and used in academic work (see Seldon and Solmer 1996; Morgan 1978), by regulators and in recent years by firms supplying this market. A range of representative customer profiles/scenarios or representative customers have been suggested by the OFT (2008), the Competition Commission (2007), the Independent Commission on Banking (2011),[6] the Central Bank of Ireland (2011) and within policy related work. Further, the OFT (2013) reports that many major banks have also been producing illustrative scenarios as to the costs of unauthorised overdraft use since 2010.

Following this approach the interest rates, fees and attributes issued for each current account service by individual banks are used to determine the customer costs for different levels of current account use. This approach enables all current account services offered by banks to be assessed and incorporates the often significant costs of post-contract current account service

DESCRIPTIVE REPRESENTATIVE CUSTOMER CLASSIFICATIONS

The OFT (2008) illuminated concerns with limited customer awareness where customers are defined as:

(a) unorganised and disengaged who pay little attention to their balance or money management;

(b) less organised yet aware who pay some attention to money management; and

(c) savvy customers who manage money with care and are organised money managers.

For newly banked customers, Ellison *et al.* (2010) classified current account customers as:

(a) mainstream-orientated copers;

(b) cash orientated credit averse;

(c) troubled mainstream strugglers;

(d) pressured working poor.

use (Central Bank of Ireland 2011; Ellison *et al.* 2011). A major drawback with this approach is that the determination of 'representative customer' groups is a subjective judgement. Therefore reference to both the types of current account pricing and demands for the current account services from different customer groups is required to inform this classification.

These profiles also vary from the descriptive classification of customer use derived from survey assessments, to applied assessments to illustrate the costs of hypothetical current account use. A challenge to adopting descriptive forms of representative customers is that the customer groups are inductively derived from questionnaire results that are not publicly available. Further, it is unclear if these classifications are constructed for the ease of communication and conceptual reasons, or to be representative of current account use. Subsequently it is impossible to relate such classifications to actual levels of current account use; essential for this project.

The second form of representative customer classification emphasises how customers use current accounts. An example would be the Competition Commission (2007) classification, which included customers that had:

(a) a balance in overdraft once a quarter;

(b) a balance in overdraft once a month;

(c) a balance in unauthorised overdraft one a quarter;

(d) a balance in unauthorised overdraft once a month.

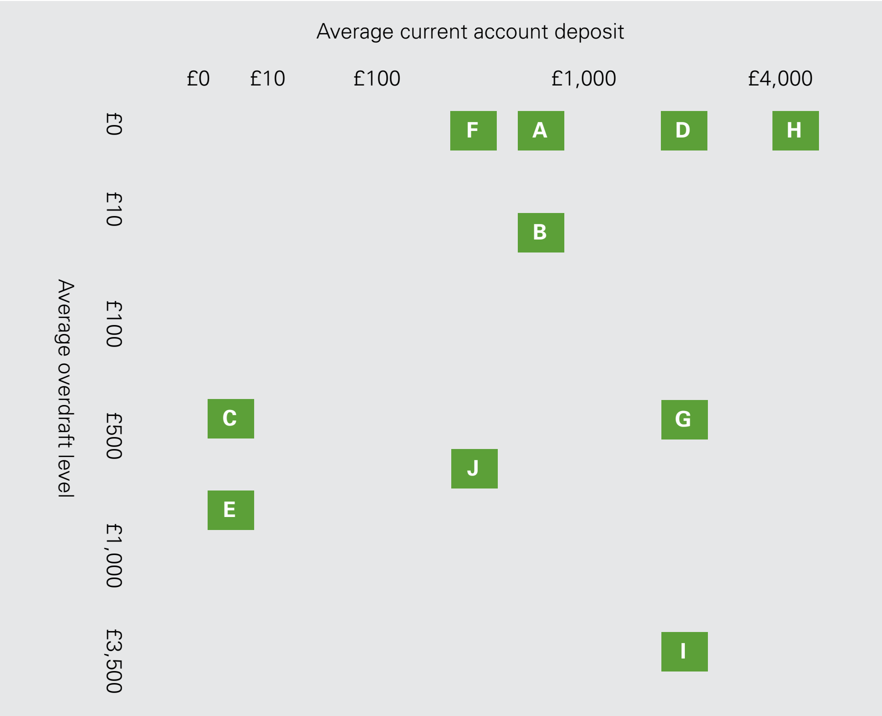

Figure 3.1
Forms of current account use assumed in the representative customer definitions (scales are not representative).

This classification was defined following interviews with bank representatives. A distinct applied representative customer classification was provided by the OFT (2008). This approach employed data on current account transactions from five banks to define six typical levels of usage.

In light of the limited available research on UK current account use, we adopt the OFT (2008) classification as a basis of the representative groups used in this study. To develop this classification we also followed the good practice of the Competition Commission (2007) by interviewing senior bankers with a remit for current account provision to test the plausibility of these representative customer classifications. Interviews were undertaken with four senior

ARE THE REPRESENTATIVE CUSTOMER DEFINITIONS PLAUSIBLE? WHAT THE BANKERS SAID

During two interviews with four bankers we were appraised that the distribution of current account use is highly dispersed. Some consumers, both with lower and higher incomes, were reported to use overdraft services very heavily. Often higher income customers accumulated high or 'jumbo' deposits in current accounts due to inattention. Many lower income customers were also reported to effectively manage current account deposits to ensure very low levels of deposit.

All bankers reported that many customers, irrespective of income group, do not always act rationally in how they manage their current account with the issue of inattention being a major factor. Overdraft use is not deemed to be restricted exclusively to lower income customers, with many middle and higher income customers using this service occasionally for large and surprise purchases. Lastly, a small proportion of low income customers were reported to use overdraft facilities on a day-to-day basis.

Table 3.1
Representative customer groups and use of current accounts.

Label	Group	Description	Credit balance (£)	Credit days	AOD balance (£)	AOD days	UOD balance (£)	UOD days	Number of charges levied annually
A	Typical customer without unauthorised overdraft	A typical average credit balance – never in debit and no overdraft use	830	365	0	0	0	0	0
B	Typical customer with unauthorised overdraft	A typical average credit balance and an unauthorised overdraft	830	345	0	0	40	20	4
C	Typical debit customer	Always in debit (authorised) yet never in unauthorised overdraft	0	0	500	365	0	0	0
D	High credit customer	A high credit balance and never in overdraft	2,000	365	0	0	0	0	0
E	High debit customer	Always in debit, with a large debit and enters unauthorised overdraft	0	0	800	315	100	40	6
F	Marginal credit customer	Stays just in credit, never in overdraft	400	365	0	0	0	0	0
G	High credit customer with overdraft use	A high credit customer for all except three weeks a year when an authorised overdraft is used	2,000	344	500	21	0	0	0
H	Jumbo credit customer	A customer with very high deposits. No overdraft use	4,000	365	0	0	0	0	0
I	Occasional high use of overdrafts	In debit yet with high earnings – one week in each month overdrawn. Two weeks in unauthorised overdrawn	2,000	281	3,000	84	500	14	6
J	Marginal customer with overdraft use	In credit for all except three weeks a year when an authorised overdraft is used	400	344	800	21	0	0	0

Note: AOD – authorised overdraft; UOD – unauthorised overdraft.

representatives from a very large and a small provider of personal current account services in the UK. The questions considered within these interviews are outlined in Appendix 8.

After these interviews four additional representative customer groups are added to the existing OFT (2008) classification to reflect these forms of current account use. Details of these representative customers are provided in Table 3.1 and Figure 3.1. The values included in these definitions, such as £830 deposits or £40 borrowed, vary over time due to the effects of inflation. For example, when adjusted for retail price index, a value of £830 in 1995 was worth £1,309 in 2011 and a value of £40 in 1995 was worth £63 in 2011. Inflation corrected values employed are provided in the Appendix 9. In other cases the monetary values used in the analysis are adjusted to December 2011 prices, using the retail price index excluding mortgage interest and indirect taxes.

How representative are the representative customers?

In the previous section we defined 10 representative customer groups in terms of their current account use. The next section determines how the current account use assumed within the 10 representative customers can be linked to different levels of customer income. This process is challenging for two reasons. First, many customers are reluctant to discuss personal financial matters (Competition Commission 2007) and second, past research in this area links customer demographics to the use of individual financial services, such as the level of savings or having a current account, rather than how such an account is actually used. Further, these determinations are liable to change (Central Bank of Ireland 2011).

There are a limited number of generally agreed points that assist in linking current account use to the level of customer income:

- Customers with lower levels of savings will on average have current account deposit balances with lower levels of accumulated savings.
- The lowest paid consumers and consumers from lower socio-economic groups have lower levels of savings and therefore on average will have lower balances in current account deposits.
- Low deposit balances in current accounts can reflect a rational use of current account services, with customers sweeping excess deposits from current accounts into other savings accounts.
- Overdraft lending may be triggered by inattention or mistakes and overdraft services are used by many different socio-economic groups (OFT 2008). Younger customers and customers of a higher social class (A, B and C1 groups particularly) are reported to use overdraft services more frequently (Competition Commission 2007).
- Low income households are also reported to use overdraft services frequently due to financial need and financial fragility. Overdraft finance is the most important source of finance for low income consumers in the UK and is used by 27 per cent of such

households and by 41 per cent of low income households which are already credit users (Ellison *et al.* 2011). Demand for overdraft services by low income households is driven by limited savings (Ellison *et al.* 2011). While occasional overdraft use can be associated with all except the wealthiest of customers, chronic levels of overdraft use are more commonly associated with lower socio-economic groups and consumers with lower levels of income and saving.

- Overdraft charges for refused payments are significantly influenced by levels of savings. For consumers with less than £1,000 in savings, 31 per cent incur such charges relative to 8 per cent for consumers with more than £1,000 savings.

A portion of the evidence informing these statements, from the OFT (2008) and Competition Commission (2007), is provided in the Appendix 10.

These insights are collated and linked to the representative customer groupings. In Appendix 11 we detail the proportion of current account customers reflected in the different representative customer classifications using figures from the OFT. For each type of behaviour we are aware of the proportion of customers undertaking such an action. While the different customer groups are not necessarily mutually exclusive and inference as to their scale is problematic, the size of these groups can be estimated by considering the key attributes of current account service use reflected in each classification. While some representative customer groups would clearly represent a small proportion of all current account customers (for example B, G, and I), other groups (for example A, F, H and J) reflect substantial customer groupings.

Lastly, to embed these determinations as to the relationships between customer use of current accounts and the income of customers, we also calculate the representative customer costs by considering how the current account is being used (with or without overdraft facilities) and also the monthly income and annual salary levels required to access individual current accounts. Three income groups are defined as:

- Lower income customers: Monthly income less than or equal to £1,500 and an annual salary of £30,000 or less. This group applies to representative customers C, E, F and J.

- Middle income customers: Monthly income less than or equal to £3,000 and an annual salary of less than £60,000. This grouping is applied to representative customers A, B and D.

- Higher income customers: This group can access all accounts except for basic bank accounts, without any restrictions on income, savings or annual salary. This classification applies to representative customer groups G, H and I.

Further details on these definitions are provided in Appendix 12 where the types of accounts considered for each representative group are detailed. The distribution of salary, funding and income requirements are summarised in Table 3.2. In this table we observe that most personal

Table 3.2
Funding and income requirements on current accounts.

Funding requirement for current account		*Minimum income required to hold the account*	
(£)	*% of all current accounts*	*(£)*	*% of all current accounts*
0	79	0	80
1–999	8	1–29,999	17
1,000–2,999	12	30,000–60,000	2
3,000–6,000	1	>60,000	1
>6,000	1	Salary or pension needed	21

current accounts are available to all customers and a significant minority (4,720 observations or 21 per cent of all observations) have specific demands related to income and salary.

Actual and implicit costs of current account use

Three methods are used to quantify the representative customer costs of using current accounts. These costing procedures include:

(a) The actual or net customer cost of current account use – this involves the calculation of the direct customer costs from using current account services.

(b) The implicit customer costs of using current accounts – the actual costs of current account use are considered relative to the cost of overdraft and deposit services being provided at the base rate level.

(c) The implicit customer costs of using current accounts – the actual costs of current account use are considered relative to the costs and benefits of providing low value unsecured lending and instant access deposit services by the same firm offering the current account.

Within this three-stage costing approach we initially calculate the net costs of current account use, referred to above as method (a). In this determination, overdraft costs plus packaged fees are a cost and deposit interest is recorded as income. This approach has the advantage of reporting what the customer is directly charged. A drawback of just considering actual or net costs is that the full costs of current account deposits are not entirely reflected in this measure.

EXAMPLE CALCULATION: ACTUAL COSTS

For representative customer A the benefit of depositing £830 in a current account over the year is a small income, recorded as a negative cost. Added to this cost will be any additional fees that are attached to the account, such as fees associated with packaged current accounts.

The second costing approach, referred to above as method (b), compares the average annual costs borne by representative customers relative to the cost of providing the deposit and overdraft services at base rate costs. The base or policy rate provides a measure of the interest charged on overnight deposits by banks and indicates the wholesale cost of funds for banks. This approach has the benefit of reflecting the interest costs of holding a deposit within a current account, as well as acknowledging that the provision of overdraft facilities is not a costless activity. The use of the base rate or money market cost of providing credit to other financial institutions is also employed in international work (for example Stango and Zinman 2009) to estimate implicit costs, and does not suffer from concerns with other measures such as LIBOR, which more directly quantify banks' marginal costs (see Abrantes-Metz *et al*. 2012).

EXAMPLE CALCULATION: IMPLICIT COSTS RELATIVE TO THE BASE RATE

Representative customer D has an average deposit of £2,000 in their current account, held over the year. The benefit of this current account use to the customer is calculated in the first stage of the costing assessment. In the second stage, interest costs of providing this £2,000 deposit at the base rate are also calculated. Through comparing the difference between the costs of obtaining this deposit at base rate costs, with the benefits accruing to customer by holding this deposit in a current account, the implicit cost of the deposit for the customer is calculated.

Disadvantages of this approach include the measurement of costs relative to the base rate. This measure is set by the Bank of England to influence monetary and economic conditions in the UK and its level is therefore hostage to monetary policy decisions. The level of the policy rate as a representative measure of wholesale costs of funds has become problematic in recent years as base rates have descended to a historic low, in order to encourage economic growth. This approach is also hypothetical – in practice most customers will not be able to borrow, or for most of the sample period deposit funds, at the base rate cost which reflects a lower wholesale costs of funds unavailable to most customers.

Lastly, referred to above as method (c), we report the average annual costs of current account use relative to the costs of the bank providing the current account, also providing an instant access deposit and low value unsecured loan services independently from the current account. This enables comparison of the costs of a customer choosing to deposit funds in an average deposit account offered by the same bank, rather than accumulating funds in the current account. We therefore accommodate the cost of the customer not sweeping excess funds from a current account into a convenient deposit account providing a higher level of return. For overdrafts, we compare the costs of overdrafts (including both interest and fee costs) relative

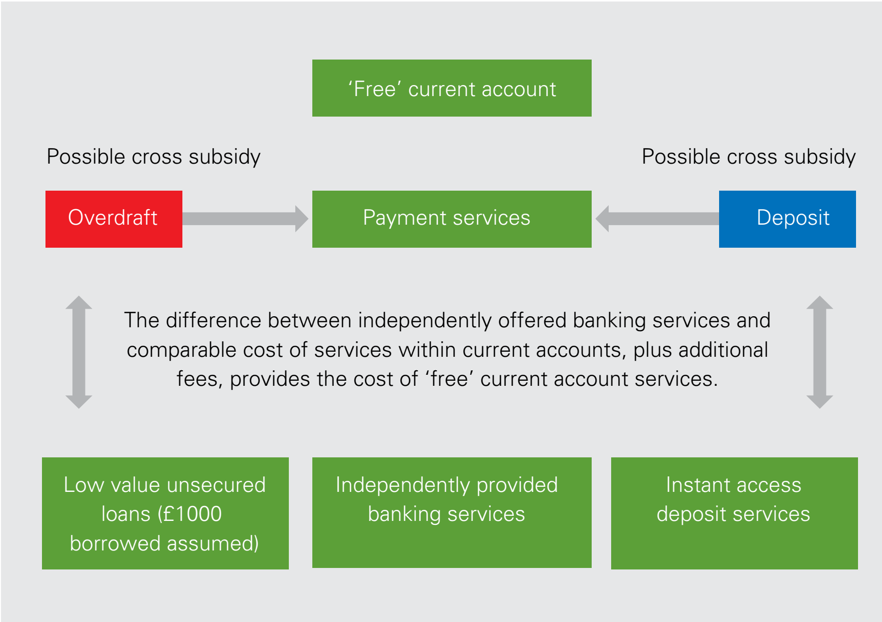

Figure 3.2
The implicit cost of 'free banking' current account services.

to the average costs of obtaining an unsecured loan within the same bank (the interest costs of £1,000 borrowed for a 'prime' customer is assumed in all cases).[7] This form of costing is described in Figure 3.2.

The benefit of these implicit costing approaches is that customer costs of using a current account are more complete as low returns on current account deposits are acknowledged. This approach is also consistent with current regulatory proposals from the Independent Commission on Banking (2011) and is acknowledged in other regulatory studies (for example OFT 2008). Further, the provision of an overdraft loan is not a costless activity for a bank, with a range of administrative and risk based costs associated with such low value lending. The comparison of current account costs to the average costs of deposit and unsecured lending services also provides costs of actions that a customer could actually undertake, rather than hypothetical costs. Lastly, and as indicated in Figure 3.2, the accumulated costs of using current account deposit and overdraft services, after considering some measure of the costs of providing these services, approximates how much access to payment services is costing customers.

Despite the benefits of using implicit costing approaches, drawbacks also exist. Initially this approach assumes the markets for deposits and unsecured lending are relatively competitive and provide a reasonable representation of the benefits and costs of depositing and borrowing money. In cases where the firm providing the current account can exercise market power within the deposit and/or unsecured loan markets, these estimates of implicit customer costs could be biased downwards. Second, the financial services compared are different. Current account deposits involve more transactions and need to be integrated with more payment services than a conventional deposit account. Further, short-term and low value unsecured lending is not the same as overdraft lending, where loans should be even more short-term in nature, are repayable on demand, and could provide higher risks of non-repayment for the bank. In summary all three methods of estimating customer costs of using current account services have their benefits and drawbacks. All are useful to a degree, as they examine different aspects of how costs affect current account customers, yet none are optimal for this role.

In calculating implicit customer costs with method (c), we also employ two additional datasets, also obtained from Moneyfacts PLC and covering the same sample period 1995 to 2011. This data has been previously employed in academic studies (for example Ashton and Hudson 2008) and provides nearly complete coverage of the population of deposit and unsecured lending services offered in the UK. The omissions in this data include a limited number of very small deposit accepting institutions and smaller sub-prime lenders, institutions that do not offer current accounts. Not all firms offering current accounts also offer unsecured loans, leading to some omissions; these observations are dropped from the analysis.

- The deposits data set contains 56,909 monthly observations, with 1,200 instant access deposit accounts offered by firms over the 1995 to 2011 period.
- The loans data has 13,159 observations with 271 products offered over the sample period.
- From both data sets monthly averages of the interest rates on instant access deposit account for six different interest tiers (>£1, >£500, >£1,000, >£2,500, >£5,000 and >£10,000) and for a £1,000 unsecured loan were recorded at the parent firm level. These averages are linked with all personal current account monthly observations.

Once the three forms of actual and implicit customer costs have been derived for the 10 representative customers, we analyse the data and report results in Chapters 4, 5 and 6. In Chapter 4 we consider the features of the current account data set and the operation of the UK current account market. In Chapter 5 we address research question A and in Chapter 6 we address research question B.

Cross-subsidy measurement and cross-subsidies in banking

Cross-subsidies are a persistent feature of industries with large networks or substantial common costs and their measurement has long exercised economists. Measurement of cross-subsidies over time and across different industries has also varied substantially, from the consideration of theoretically optimal forms of measurement (see Faulhaber 1975, 2005; Faulhaber and Levinson 1981) to an empirical literature measuring cross-subsidies and/or firm behaviour consistent with a cross-subsidy. Historically, cross-subsidy measurement has focused on the analysis of accounting data which was assumed to represent a range of constructs derived from economic theory. In recent years this long-accepted optimal form of identifying subsidy-free pricing (Faulhaber 1975), where prices should be set between incremental costs and stand-alone costs,[8] is increasingly being re-assessed. This re-evaluation is not in terms of the robustness of this theory, yet frustration with the limited availability of appropriate accounting data to apply and test this theory. Subsequently there has been a movement towards considering the conditions consistent with cross-subsidies, rather than the traditional measurement of whether an individual price is free from subsidy or otherwise. Reviews of cross-subsidy measurement are provided by Fjell (2001) and Heald (1996, 1997).

In light of past experience it is plausible to argue that 'conventional' forms of accounting based cross-subsidy measurement are challenging, if not impossible, to undertake in banking. Banks do not normally hold accurate records of common costs, are generally organised around product groups and often adopt complex holding company structures with a variety of subsidiaries (Cremers *et al*. 2010) making traditional accounting based forms of cross-subsidy measurement impractical. Further, we are also confident bank employees will be reluctant to admit to circumstances with possible legal and financial consequences. Therefore customer costs of using current accounts are assessed.

How cross-subsidy measurement has previously been undertaken in banking is also illuminating. Cross-subsidies, the internal flow of funds from one service to another (rather than an external flow of funding or subsidy), have long been alleged for banking services (Chiappori *et al*. 1995) and in recent years many new cases have been reported. This reflects the growth in joint sales of banking services internationally (European Commission Directorate-General for Competition 2006) and the relative ease with which banks can use cross-subsidies when operating in markets with varying competitive intensity ([Australian] Senate Economics References Committee 2011). Examinations of cross-subsidy increasingly involve investigation of both pricing and service characteristics through which conditions consistent with cross-subsidy can be identified, rather than testing directly for cross-subsidy using conventional economic techniques. Indeed, in recent UK cases the examination of pricing and profitability of services appears to be preferred over traditional accounting based approaches due to concerns with the veracity of accounting data produced by banks for the purpose of cross-subsidy measurement.

The examination of customer costs is also useful for assessing if conditions consistent with cross-subsidy exist in a market or otherwise. If there are no cross-subsidies within 'free banking' current accounts, for example, we would expect the customer costs of using these accounts to be similar to the customer costs of using other types of current account. Conversely, if 'free banking' current accounts have facilitated such a cross-subsidy between different types of customers, the customer costs of using these accounts would be distinct and significantly different from other types of current account. Second, if there is a distributional cross-subsidy flowing from lower income to other customers, we would expect significant differences to exist between the customer costs of using personal current accounts identified for lower income representative customers relative to other customers. Again, if no such cross-subsidy were present then these differences would not be expected to be significant. Through examining the customer costs of current account use over time we may also determine if any identified cross-subsidies are temporary or persistent features of this market and whether their scale is increasing or declining over time. We further examine if differences in customer costs could reflect differing quality of current account services. This is undertaken by considering what payment services are offered on different current accounts and the methods, such as the branch, telephone and internet, through which current account services can be accessed by customers.

In testing for these differences in customer costs we examine different income groups as indicated by the representative customers and also current accounts available to customers from lower, middle and higher income groups. This assessment is undertaken descriptively,

PAST EXAMPLES OF CROSS-SUBSIDIES IN BANKING

A US cross-subsidy case exists in the credit card market (see Schuh *et al*. 2012, Semeraro 2009). It was argued that, as credit card firms charge merchants' fees, which until recently US merchants could not declare or pass on to customers, the price increases occurring affected all customers. Customers without credit cards were therefore cross-subsidising customers using credit cards. This cross-subsidy could not be measured using traditional 'subsidy free' pricing approaches (Faulhaber 1975) due to a paucity of appropriate data and therefore was investigated using large scale pricing studies as to whether prices were raised by the introduction of merchants' fees (for example Carlton and Frankel 1995).

The recent UK payment protection insurance (hereafter PPI) case also involved allegations of cross-subsidy from customers purchasing PPI to those customers that did not. The Competition Commission (2009) identified cross-subsidies in three ways:

- The Competition Commission interviewed staff within firms and some suppliers acknowledged pricing was operated on a cross-subsidy basis.
- The profitability of unsecured lending and PPI markets was measured and whether this profitability was consistent with cross-subsidy conditions was assessed.
- The Competition Commission assessed a costing model provided by an industry source and using a range of internal accounting figures of costs involved in the production and sale of PPI and unsecured lending. While evidence inconsistent with a cross-subsidy from PPI to unsecured personal lending was provided, this was met with reservations by the Competition Commission. These included concerns as to the internal accounting systems and accounting data employed by banks.

graphically and also using T tests, which can establish if these differences between average values are statistically significant. We freely acknowledge that this form of testing for conditions consistent with cross-subsidy is not as robust as testing for subsidy free pricing directly and can be influenced and biased in a range of regards. For example some types of current accounts, such as basic bank accounts, could be subsidised by banks due to their social potential. Also, current accounts as a whole could be effectively subsidised by other services. Further, while we determine the customer costs of using these accounts, the exact firm costs of providing current accounts can be extensive depending on how these costs are defined. For example if these were to include the provision of branch networks, which, without doubt, are important to current account customers (see Independent Commission on Banking 2011), such an external subsidy to current accounts would appear to exist. Notwithstanding these drawbacks, this approach of examining conditions consistent with cross-subsidy can provide an indication of whether these cross-subsidy conditions appear to exist or otherwise and are consistent with recent academic and regulatory examinations of cross-subsidy.

Chapter 4

Personal current account products, payment services, providers and pricing

SUMMARY

In this chapter we examine features of the UK personal current account market from 1995 to 2011, including which firms offer personal current accounts, what payment services are provided and how customers can access current accounts.

We observe a high level of market churn where current accounts are frequently introduced and withdrawn by their supplying firms.

The quality of current account services is measured by how customers can access their accounts and what payment services are offered within different current accounts. It is apparent that different types of current account and different types of current account supplier are associated with some differences in the payment services provided and also how customers may access current account services.

'Free banking' and packaged personal current accounts offer a stronger set of payment services and access to current account services through a wider range of distribution channels.

High street banks appear to offer a wider range of methods of accessing current accounts.

The pricing of current account services contains considerable complexity and lacks transparency.

In this chapter we examine two general features of the UK personal current market. First, we examine which firms are providing personal current accounts and what are the characteristics of these current accounts? Within this discussion we examine the different types of current account and payment services offered in the UK and the different channels through which customers may access current account services. Further, we consider how many current accounts are offered by different firms and the turnover of current account services launched by firms supplying this market.

Second, we examine how pricing of personal current accounts is undertaken. This examination includes an assessment of interest rates for deposits, the charging of fees and interest costs for overdrafts, how packaged fees are levied and the issue of additional charges for missed payments and other circumstances triggering a fee payment.

Personal current account providers, the number of current accounts and current account characteristics

In this section we examine the range, number and forms of personal current account offered in the UK between 1995 and 2011. We outline the providers of these services, what payment services are provided on current accounts, how customers can access current account services and how these current account characteristics can vary by different types of firm, distinct types of current account and over time.

The proportion of all firms offering current accounts between 1995 and 2011 is illustrated in Figure 4.1. The firms supplying this market include all the major high street banks (for example Lloyds, HSBC and Barclays – 10 in total) in addition to a wide range of other firms operating in this market (or previously operating in this market), including building and friendly societies (for example Nationwide, Coventry – 11 in total), international banks and insurers (for example Bank of Cyprus, Bank of China – 19 in total) and small banks often providing financial services for more wealthy clientele (e.g. Charterhouse Bank, Hoare and Co. – 16 in total). Four of the current account suppliers are insurance companies and seven are the now-defunct converted building societies. Overall the largest four banks in the UK supply 77 per cent of personal current accounts (Independent Commission on Banking 2011), making this is a highly concentrated market, a trend we also observe in the number of current accounts offered by high street banks – 209 in total. Further details of the definition of these groups and their scale are included in Appendix 13.

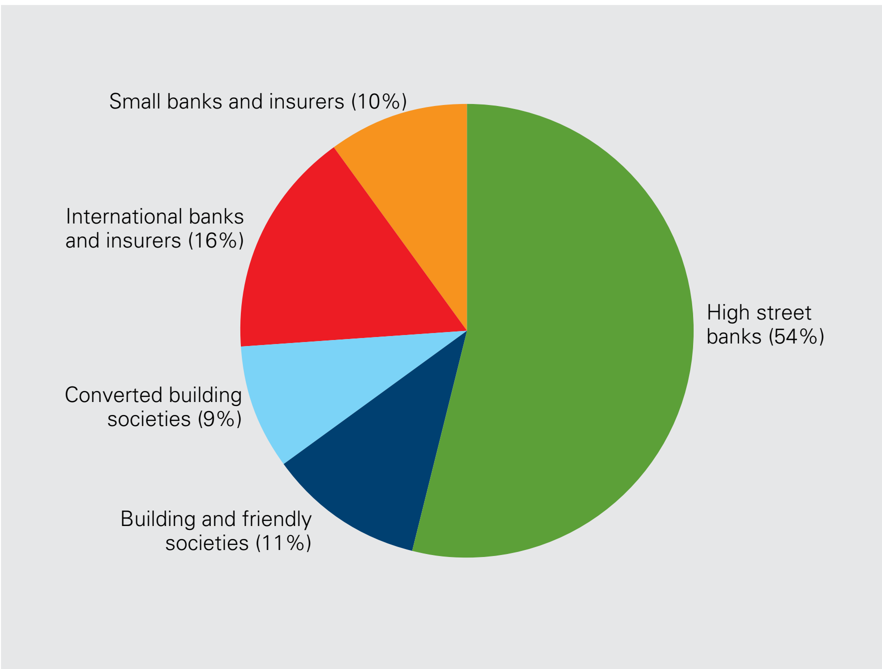

Figure 4.1
The percentage of current accounts offered by different types of firm. Over half of all UK current accounts are provided by 10 high street banks.

Table 4.1
The market entrants, leavers and market churn in the personal current account market.

	New products	*Discontinued products*	*New entrants*	*Firms leaving the market*
1995–96	12	8	1	2
1996–97	22	8	2	2
1997–98	12	7	1	5
1998–99	12	10	2	3
1999–00	36	11	6	1
2000–01	9	12	3	3
2001–02	14	18	1	9
2002–03	49	23	1	1
2003–04	17	31	2	0
2004–05	12	18	1	3
2005–06	19	11	0	0
2006–07	16	10	0	1
2007–08	32	26	1	1
2008–09	9	20	5	3
2009–10	15	13	0	1
2010–11	44	31	4	1

The firms offering current accounts in the UK also vary over time with firms entering and exiting this market throughout the sample period. This process is observed in Table 4.1, where it is reported that 30 firms have entered and 36 firms have withdrawn from this market between 1995 and 2011. These changes include both firms merging with other companies, ongoing trends of consolidation in UK banking (see DeYoung *et al.* 2009) and firms withdrawing from this market. The effect of these changes would have been to increase the level of concentration in a market already served by a limited number of firms. The firms supplying personal current accounts in the UK offer, collectively, 107 personal current accounts each month on average with a maximum of 139 and a minimum of 78 personal current accounts in any individual month. The number of current accounts offered at any one time by an individual firm varies from a single personal current account, to an average of 2.5 accounts and a maximum of 16 accounts.

In Table 4.1 the numbers of new personal current account products introduced and withdrawn for each year of the sample period are also reported. Over time considerable turnover of current accounts is observed, with new products introduced and existing products discontinued frequently. In total 330 new current accounts, including different variants are introduced and 257 current accounts are withdrawn over the sample period. This frequent introduction and withdrawal of current accounts, while enhancing customer choice to a degree, has also been associated in other financial services markets with constraining customer learning and making consumer decision making more challenging (Carlin and Manso 2010).

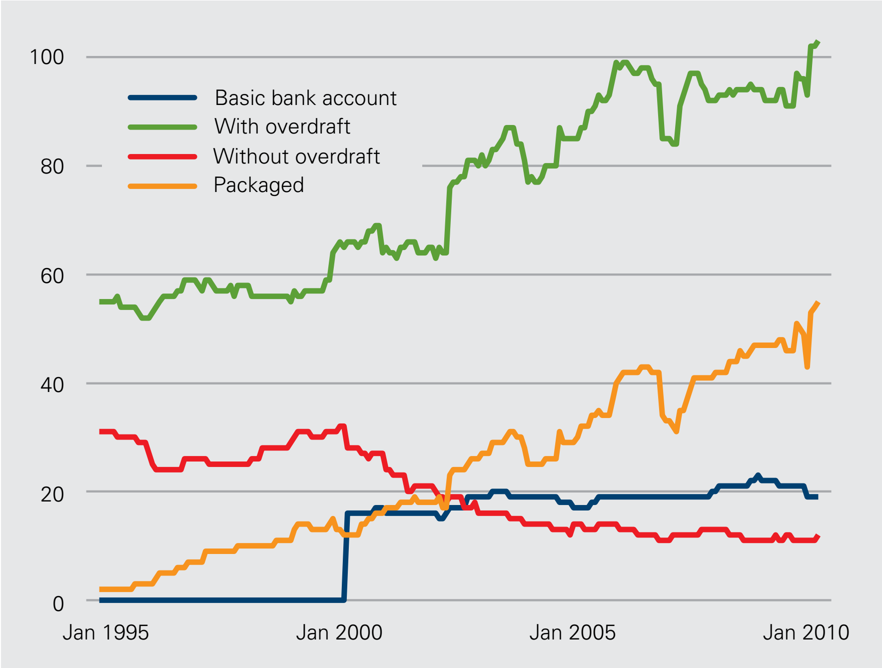

Figure 4.2
The number of personal current account products offered over time. The number of current accounts offered in the UK has risen throughout the sample period.

Further details of the number of current accounts and firms operating in this market are provided in Appendix 14. The number of current accounts offered in the UK is also illustrated in Figure 4.2 for different types of current account.

In addition to considering firms, we also examine parent firms, which can own different subsidiaries (or firms) and offer in total an even wider range of current accounts. The number of accounts offered at a single time by a parent firm varies from a minimum of one to a maximum of 33 personal current accounts, with an average of 3.4 current accounts. The number of current accounts offered or the length of the product line increases over the sample period from firm and parent firm averages of approximately 2 and 2.5 accounts respectively in the 1995–1998 period, to 3.5 and over 4.5 accounts respectively in the 2008–2011 period.

Lastly, the current accounts examined over the sample period also display a range of differing characteristics. When a personal current account is a packaged account, we record the fee which will be payable at the stated frequency of payment (monthly, quarterly, annually). The current account offered may also be affected by income, funding or savings requirement (approximately 20 per cent of all current accounts). We also record features of different current accounts, such as how the current account can be accessed by the customer, for example through a branch network or over the internet or telephone. Further, different current accounts also possess different payment services, including account sweeping, the provision of cheque books and cheque cards and ability to use standing orders and direct debits. Average characteristics for the current accounts considered in this study are summarised in Figure 4.3.

These characteristics have also varied over time. Some forms of accessing current accounts have either been very successful, such as internet delivery (in 2011 some 93 per cent of current accounts could be accessed through this distribution channel), or less successful, such as digital TV, which has been offered on some accounts in the sample period yet failed to spread

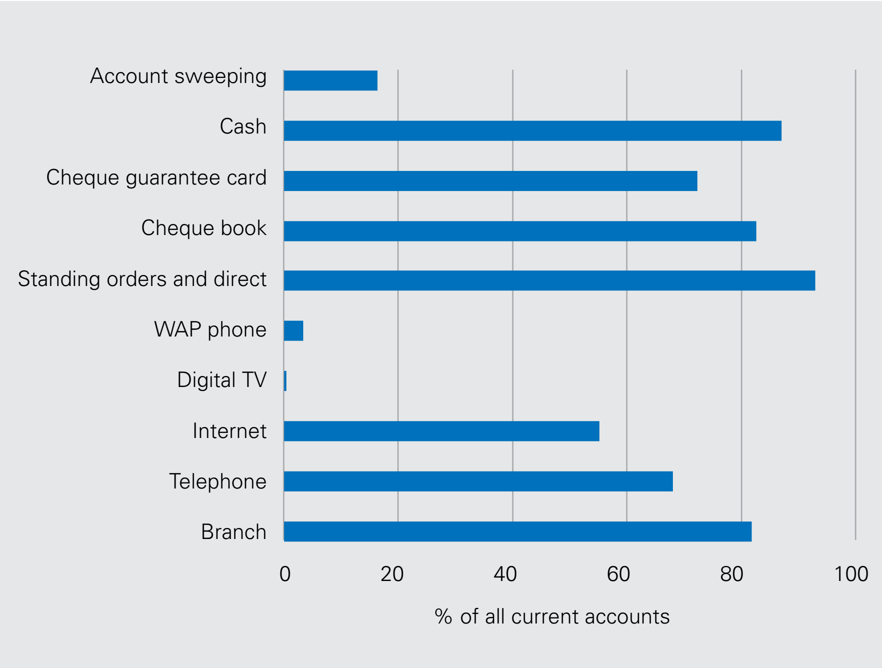

Figure 4.3
How current accounts can be accessed by customers, and what payment services are provided. Most personal current accounts are distributed through branches or by telephone and offer services including standing orders, direct debits, cheque services and access to cash.

to a significant proportion of accounts. Access through branches has fallen overtime and the proportion of current accounts offering some payment services such as cheque books and cheque guarantee cards has also declined. Further details of how these characteristics of current accounts have changed over time are recorded in Appendix 14.

The payment services included with, and methods customers use to access, current accounts also vary by type of current account offered and by the type of firm offering these services. Figures 4.4 and 4.5 illustrate these differences in payment services provided and ways in which current accounts can be accessed.

In Figures 4.6 and 4.7 we illustrate how current account services and methods of accessing current accounts vary by the type of firm supplying the current account. In Figure 4.6 we observe that personal current accounts with fewer payment services tend to be provided by small UK banks and insurers. Beyond this descriptive generalisation little systematic differences between the type of firm supplying current accounts and the payment services provided is apparent. In Figure 4.7 how personal current accounts can be accessed is examined for the different types of firm supplying this market. We observe that the high street banks tend to offer access more frequently through more distribution channels, including the internet and telephone banking, relative to other firms. Again, there is not an obvious difference between the methods through which customers can access current accounts.

The pricing of personal current accounts

The pricing of current accounts is complex, with many different interest rates and fees accorded to current account deposit and overdraft services and other fees levied for other circumstances. For current account deposit services we record four different tiers or levels of interest payable for a range of sums deposited including:

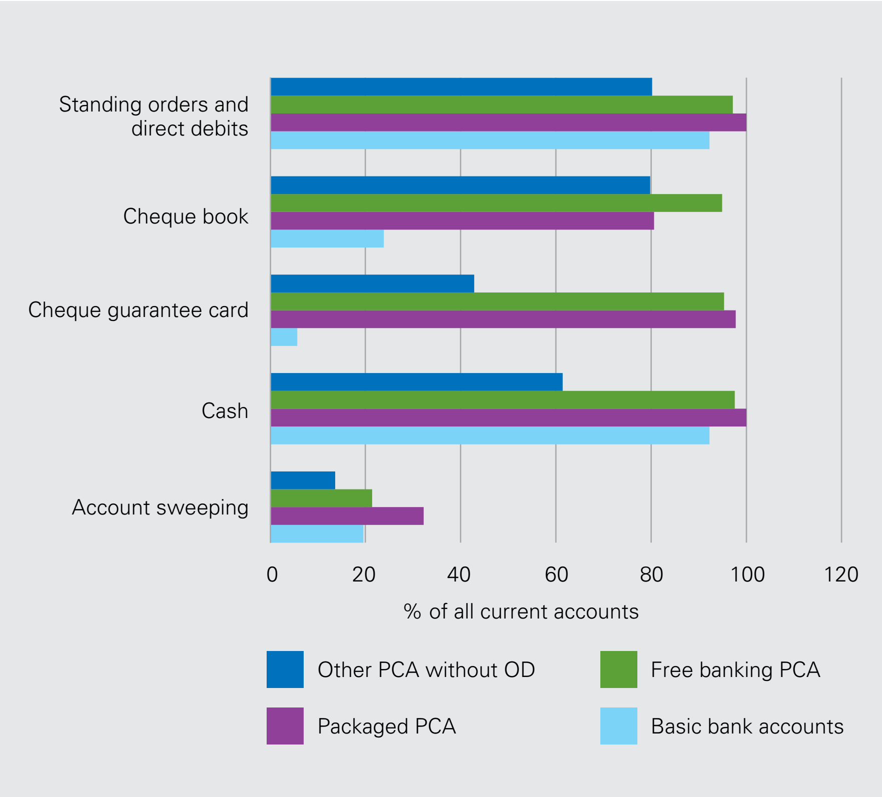

Figure 4.4
Current account characteristics by product type. The provision of payment services such as account sweeping and access to cheque books varies by the type of current account. Free banking current accounts and packaged current accounts have a wider range of payment services, whilst basic bank accounts and other current accounts without overdrafts have a lower provision of services.

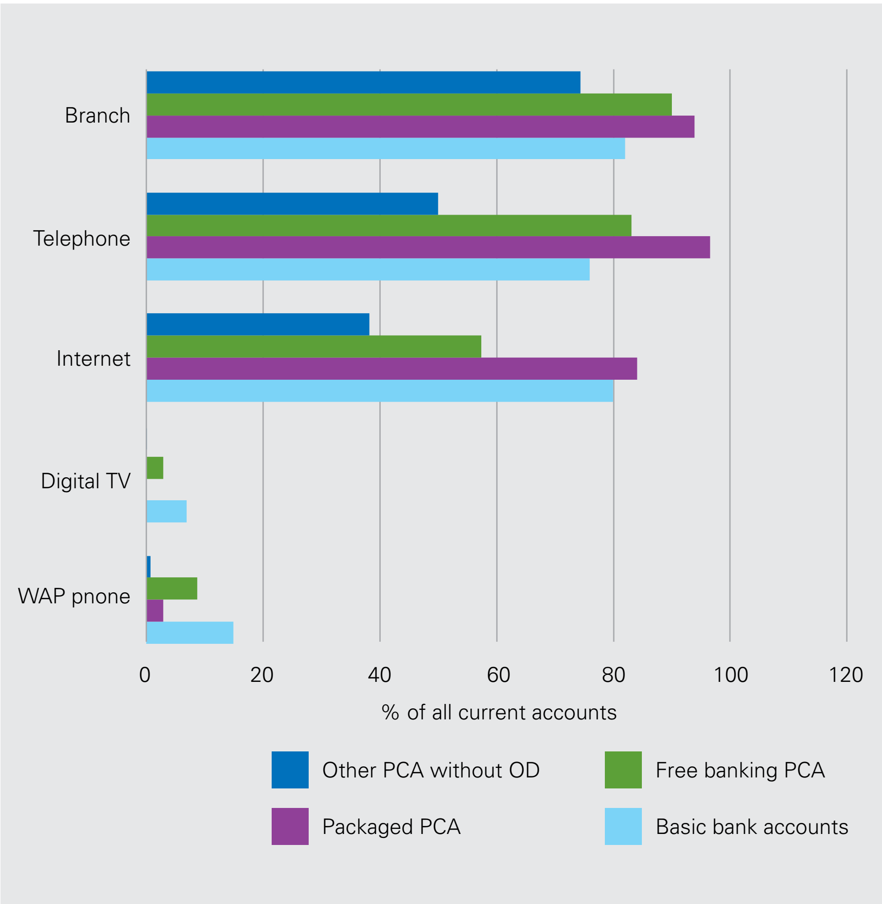

Figure 4.5
How current accounts may be accessed by customers, by current account type. On average, packaged and free banking current accounts can be accessed through more distribution channels than other types of current account. Free and packaged accounts have the most frequent access to telephone and internet banking. Other current accounts without overdrafts are accessed through relatively fewer channels.

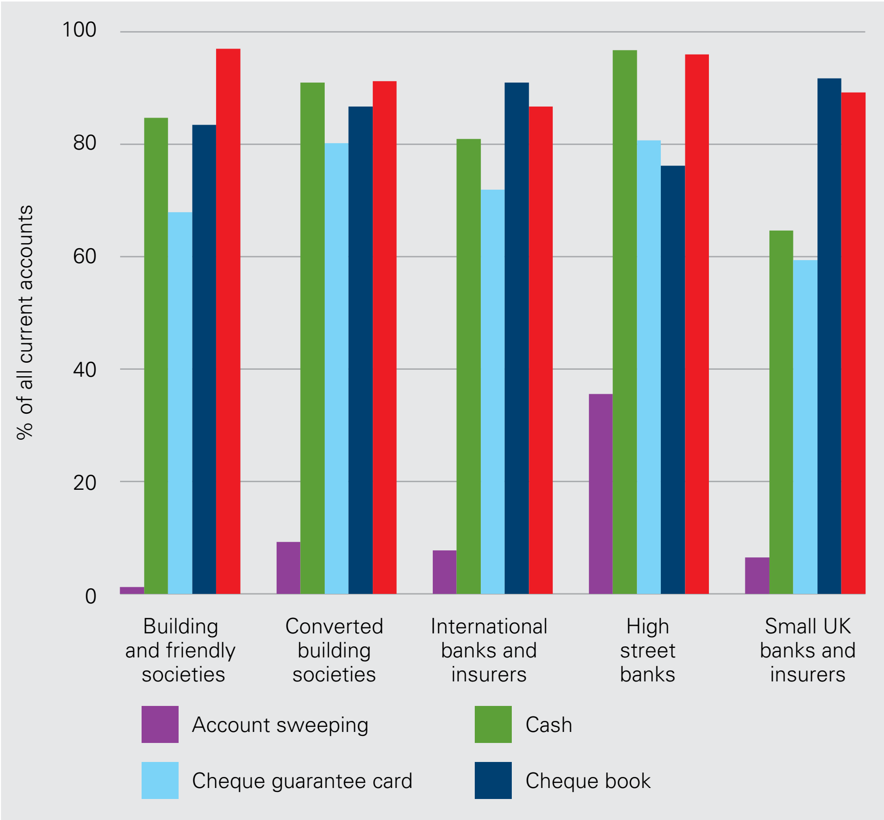

Figure 4.6
Distribution of payment services by firm type.

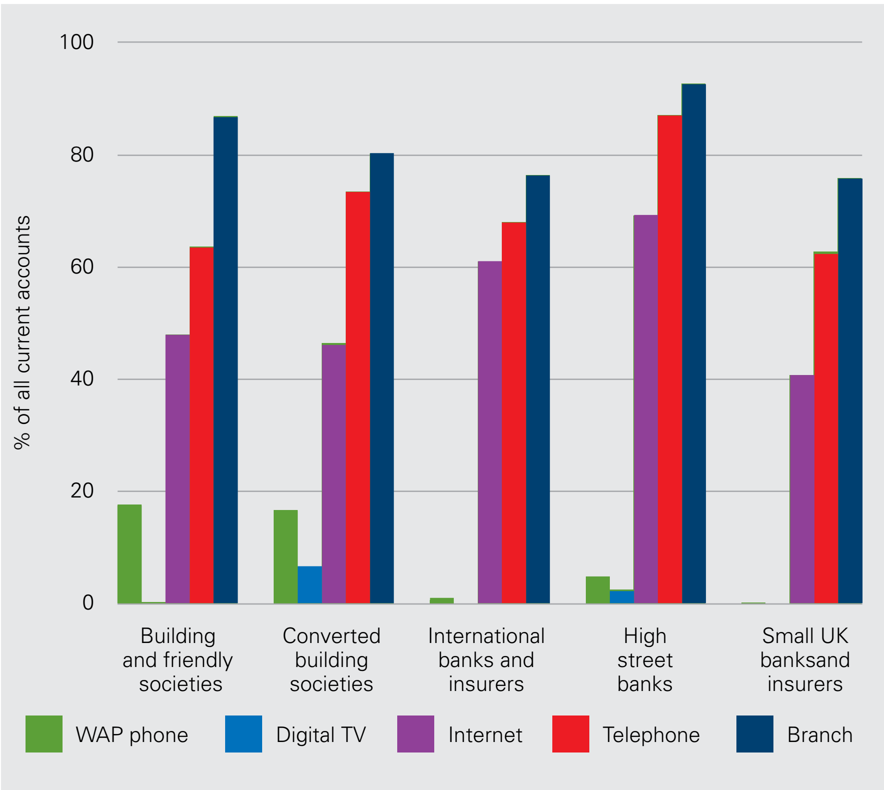

Figure 4.7
Methods of accessing current accounts by firm type.

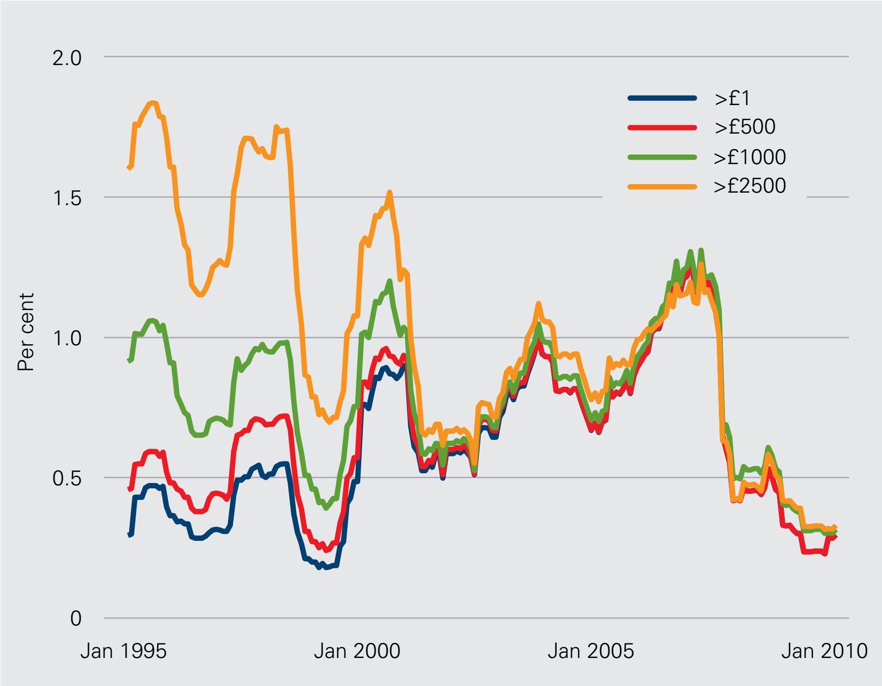

Figure 4.8
Average interest rate offered on personal current account deposits over time. Differences between interest rates offered on different sums deposited have declined over time.

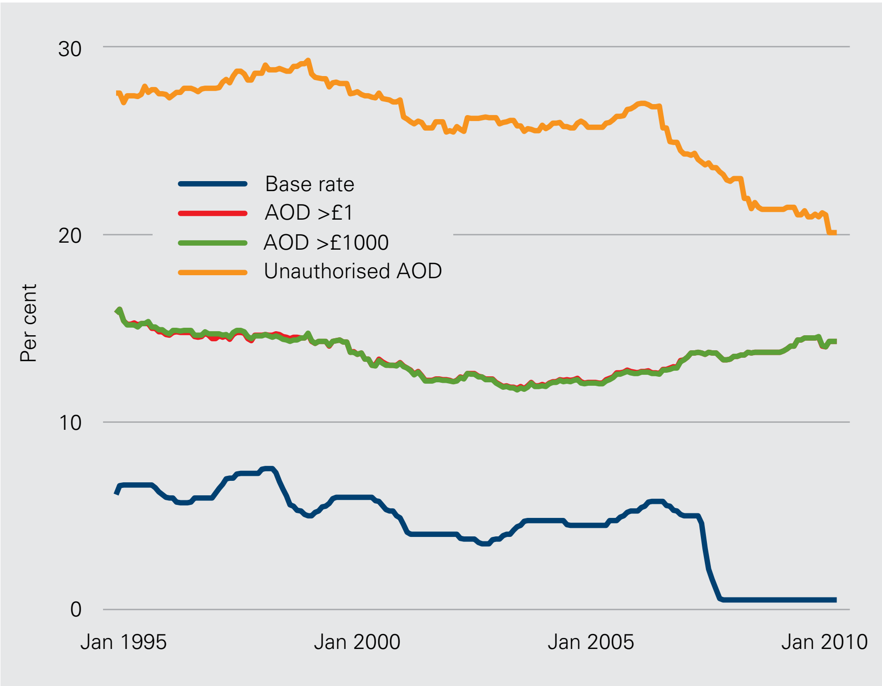

Figure 4.9
Average interest (per cent) charged on authorised and unauthorised overdrafts over time. Unauthorised overdraft interest rates have remained persistently high. Authorised overdraft interest rates have been relatively constant over time.

(i) Equal to and greater than £1 deposited and less than £500.

(ii) Greater than or equal to £500 deposited and less than £1,000.

(iii) Greater than or equal to £1,000 and less than £2,500.

(iv) Greater than or equal to £2,500 and less than £5,000.

While some current accounts offer higher rates of interest for sums greater than £5,000 deposited, these are not recorded consistently. The frequency of interest rate payment is also recorded and is used to ensure the calculations undertaken match the frequency used within the accounts (i.e. monthly, quarterly and annually). The average levels of interest paid on deposits within current accounts are low relative to the base rate and also vary over time. Interest rates for larger sums deposited have declined at a relatively greater rate than interest rates for smaller deposits. These trends are illustrated in Figure 4.8.

The data on overdraft services interest costs includes interest rates for:

(i) Between £1 and £1,000 authorised overdraft.

(ii) Between £1,000 and £5,000 authorised overdraft.

(iii) Above £5000 authorised overdraft.

(iv) A single interest rate for unauthorised overdrafts.

These interest costs are assumed to be levied daily on the amounts borrowed through overdraft facilities. From Figure 4.9 it is apparent unauthorised overdraft interest rates are very high and have declined in recent years. Interest rates for different tiers of authorised overdrafts are similar and appear indistinguishable (for an average figure) and have remained fairly constant over time. It is noted that the levels of authorised overdraft interest rates have not declined in recent years with the falling base rate, despite a corresponding fall in the interest paid on deposits.

In addition to interest costs, fees are charged on overdrafts and these differ for authorised and unauthorised overdrafts. For authorised overdrafts, fees recorded include arrangement fees, which can be fixed for the entire overdraft, represent a percentage of the sum overdrawn or can be levied each time an overdraft is increased. In some accounts authorised overdraft usage fees are used and may involve a fee payable at a certain frequency such as monthly or quarterly for using this authorised overdraft facility.

For unauthorised overdrafts a range of fees are levied. Usage fees for unauthorised overdrafts are calculated as a fixed fee or as a percentage of the overdraft (or both) with the frequency of payment (monthly, quarterly etc.) specified for each individual account. Unauthorised overdraft fees also include, in some accounts, a daily fee for using this facility. All these fees and the frequency of payment recorded on individual accounts are used in the calculation of overdraft costs when appropriate. The variation in the levels of these fees over time is illustrated in Figure 4.10.

When an unauthorised overdraft is rejected by a bank, fees may also be levied on different outcomes. We acknowledge there are fees for some circumstances not covered in the analysis, yet to simplify the costing of current account use we consider only fees that arise from cheques which fail to clear and letters sent in relation to rejected direct debits. This selective treatment of additional fees could underestimate the costs of current account use for some customers. For both authorised and unauthorised overdrafts, some current accounts offer ‘buffers’. These buffers indicate a range of authorised and/or unauthorised overdraft borrowing for which

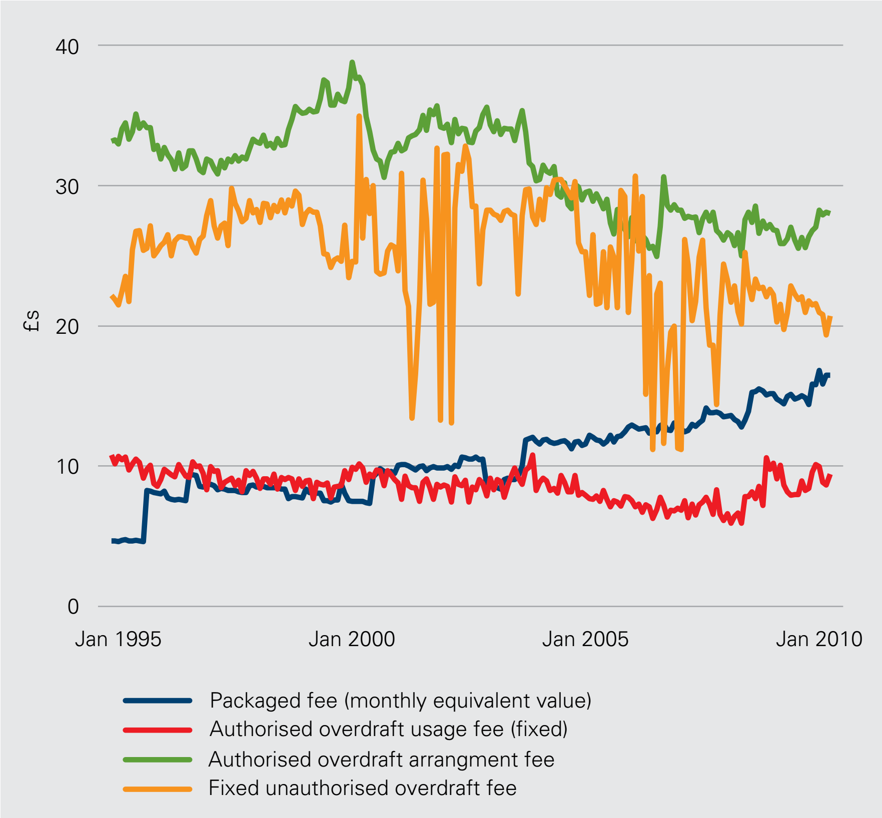

Figure 4.10
The average cost of selected current account and overdraft fees over time. Packaged fees, authorised arrangement and usage fees and unauthorised overdraft fees have remained costly throughout the sample period.

either interest is not charged or fees are not levied. Though the use of buffers does provide benefits to customers in fewer charges and costs, the form of pricing is altered and develops non-linear characteristics, potentially causing confusion as to when and if fees and interest is levied for overdraft use.

A summary of the features of pricing and their frequency in the UK current account market is presented in Appendix 15.

To conclude, this review of personal current account suppliers, current account characteristics and pricing reveals there is significant 'market churn' where current accounts are frequently introduced and withdrawn. The quality of current account services represented by how customers can access their accounts and what payment services are offered within current accounts indicates current accounts differ in what is offered to customers. In particular 'free banking' and packaged current accounts appear to offer customer access to these current account services through a wider range of distribution channels. Further, on average, small UK banks and insurers offer a narrower range of payment services. Lastly we report considerable complexity and limited transparency in the pricing of current account services. Further, the cost of overdrafts is high. While changes to the Lending Code enabling customers to opt out from unauthorised overdrafts is a positive step in light of these costs, we also recommend that customers should actively opt in to use such overdraft services.

Chapter 5
The customer costs of using personal current accounts

SUMMARY

In this chapter we address the first research question: What are the customer costs of current account use, and how do these costs vary between firms and types of current account? This question is addressed through considering the average annual customer costs of current account use, how these costs are dispersed and the constituents of these costs. In this discussion we examine the customer costs of current account use and how these vary for different types of current account, distinct current account suppliers and over time. This assessment considers the three forms of actual or net costs and implicit costs for the 10 representative customer groups. From this assessment we report:

- The customer costs of using current account services are highly dispersed with a large range between the highest and lowest cost accounts.
- These customer costs vary between 'free banking' current accounts, packaged accounts, basic bank accounts and 'other bank accounts without overdrafts', and also between types of current account supplier.
  - Packaged current accounts are expensive for all types of customers and all types of current account use. We acknowledge we cannot estimate the customer benefits of all the additional add-on services provided with these accounts.
  - High street banks are the highest cost providers of current account services overall and building and friendly societies and the now-defunct converted building societies are the least expensive providers of current account services.
- The customer costs of current account use have been increasing over time. This increase in the costs of current account use is persistent and long-term rather than a temporary phenomenon.
- Overall in recent years average implicit costs for using a current account are generally over £100 annually and vary over time.

This chapter addresses the first research question: What are the customer costs of current account use, and how do these costs vary between firms and types of current account? This is undertaken through examining how the customer costs of current account use can vary over a range of dimensions including: between different types of current account use, by the firms providing these services and by the type of current account and over time. Discussion of how customer costs vary over these dimensions will be undertaken in turn.

Actual or net costs of current account use by representative customers

When assessing the average annual actual costs of current account use, a range of features can be identified. These costs are illustrated in Figure 5.1, which considers the 10 representative customers A to J, defined in Chapter 3, representing a range of customer behaviours. From this figure we identify that different forms of personal current account use have distinct costs; we observe a large dispersion of costs from an average annual gain of £25.78 for customer H to an annual cost of £329.10 for customer E.

Drawing from Table 5.1, we observe the level of packaged fees incurred by only a minority of current accounts increases the average annual or net cost of current account use for all accounts. The level of packaged fees also varies by the representative customer, reflecting the different samples of current account used. Deposit income also varies with the amounts deposited and the length of deposit. Considering the scale of actual or net current account costs we also observe:

- The representative customers signifying middle income customers (A, B, and D) have relatively lower costs. This reflects the moderate use of current account deposit and overdraft services assumed in these representative customers.

- The representative customers signifying lower income customers (C, E, F and J) have high costs particularly for overdrafts, with longer durations and greater scale.

- High income representative customers (G, H and I) have current account costs that vary from a substantial benefit for the large deposit assumed in representative customer H, to the high cost where a large overdraft is present in representative customer I.

The range of actual or net current account costs is displayed in Figure 5.2 and is observed to be wide, particularly for representative customers where overdraft and deposit services are used more intensively (more overdraft use in representative customers C and E, more deposit use in representative customers D and H, both in representative customers J, G and I).

We may conclude that through examining the actual or net costs of current account use, the representative customers without overdrafts and holding low current account deposits benefit from how current account use is priced. There is also a substantial range of customer costs between current accounts performing the same services.

Implicit costs of current account use relative to base rate costs

In this section we examine the implicit customer costs of current account use relative to the base rate cost of providing deposits or overdrafts.

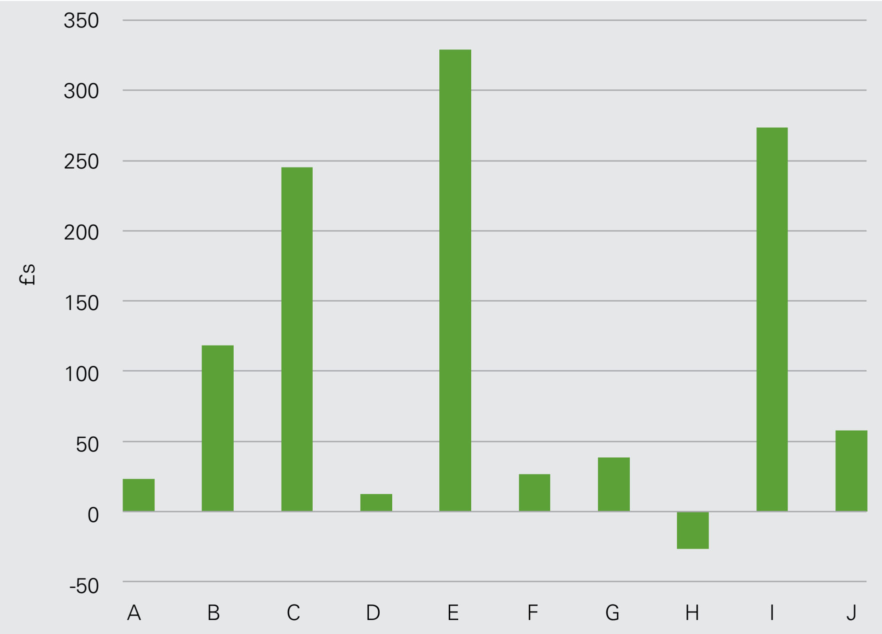

Figure 5.1
Annual personal current account costs incurred by representative customers. The cost of overdraft services (representative customers B, C, E, G, I and J) are particularly large when overdrafts are unauthorised or of a long duration (customers C and E).

Table 5.1
Annual personal current account costs incurred by representative customers (£).

Representative customer	*Average*	*Standard deviation*	*Range*	*Average deposits cost*	*Average overdraft cost*	*Average packaged fees cost for all accounts*
A	23	68	835	–5	0	28
B	118	78	468	–7	81	44
C	245	89	594	0	198	47
D	12	75	974	–16	0	29
E	329	123	891	0	285	44
F	27	68	776	–2	0	29
G	39	82	525	–22	13	48
H	-26	122	1139	17	0	36
I	274	96	663	–18	244	48
J	50	68	344	–3	12	41

Relative to the actual average annual costs and benefits we observe in Figure 5.3 and Table 5.2, the implicit annual average costs of current account deposits is now a loss to the customer. This form of implicit costing also affects the overdraft calculations. In all cases this implicit cost is lower than the actual cost. Overdraft costs are reduced through considering the base rate costs. When representative customers use both deposit and overdraft services, costs increase, reflecting the implicit cost of deposit use. The levels of packaged fees are not influenced by this costing approach so therefore remain unchanged. The range of implicit current account costs relative to the base rate is reported in Figure 5.4.

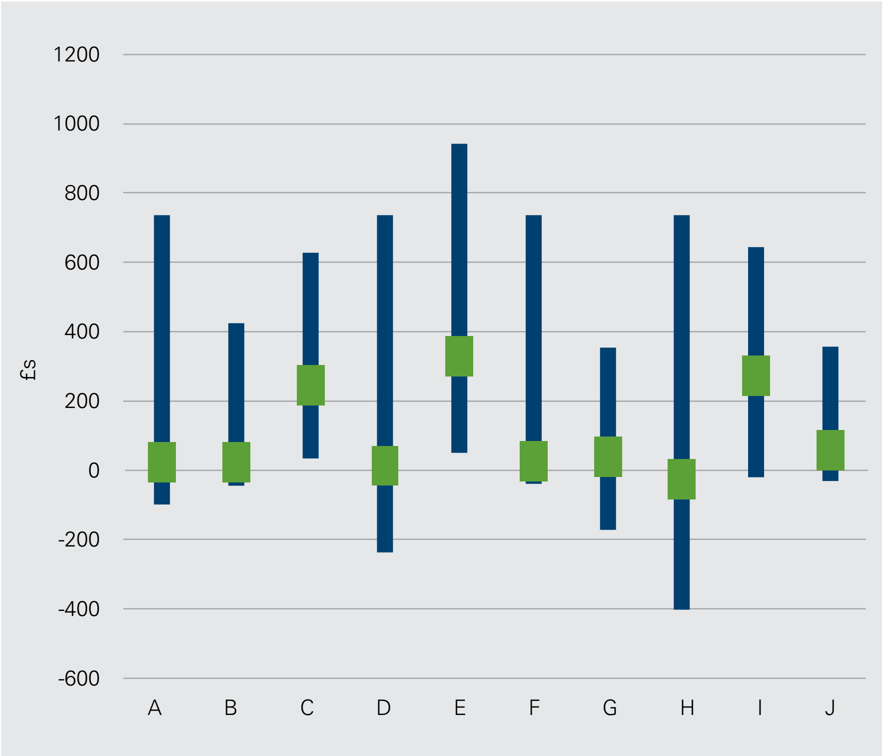

Figure 5.2
Range of annual personal current account costs incurred by representative customers. The range of costs is wide, varying between in the £100s for most representative customers to £1,139 for customer H (a large £4,000 deposit). It is troubling that identical current account use can lead to such a variance in costs in this market.

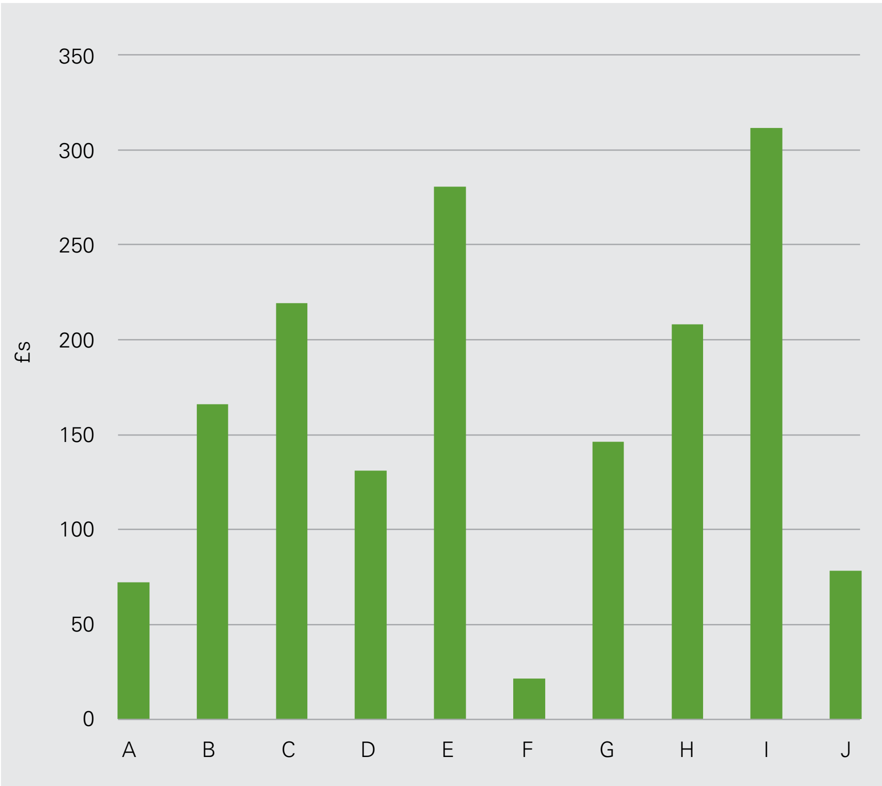

Figure 5.3
Annual personal current account 'implicit' costs. The costs of current account use are highly variable. The level of implicit costs varies between different forms of current account use from an annual cost of £22 for customer F (with a deposit of £400) to a cost of £312 for customer I (large deposit and overdraft).

Table 5.2
The costs of current account use relative to base rates (£).

Representative customer	*Average*	*Standard deviation*	*Range*	*Average deposits cost*	*Average overdraft cost*	*Average packaged fees cost for all accounts*
A	72	66	814	44	0	28
B	166	80	465	41	81	44
C	219	87	622	0	173	47
D	131	81	922	103	0	29
E	281	114	845	0	236	44
F	22	13	78	22	0	29
G	146	88	602	87	11	48
H	208	128	913	172	0	36
I	312	100	698	71	193	48
J	78	70	385	20	14	44

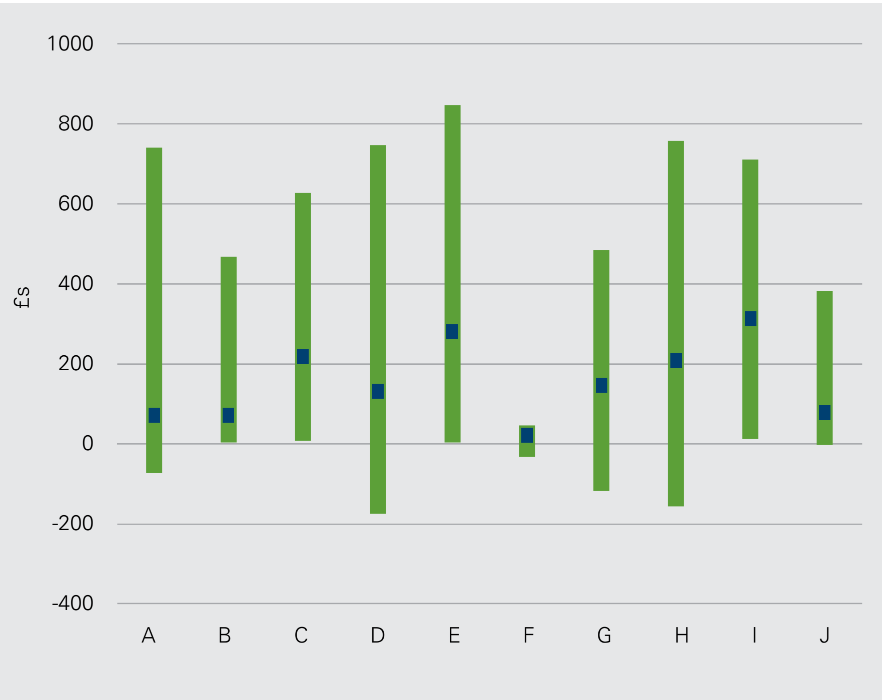

Figure 5.4
The range of annual personal current account 'implicit' costs relative to base rate. The range of costs of current account use increases when the implicit costs of deposit and overdraft use are considered. The range of costs is wide for a number of representatives with higher levels of overdraft and deposit use.

Implicit costs of current account use relative to the costs of deposit and lending services from the firm supplying the current account

Previously we incorporated the base rate cost of funds to reflect the implicit costs of providing deposit and overdraft services. We now incorporate the average interest costs the same parent firm offering the current account offers or charges for instant access deposits and low value

Table 5.3
Current account usage costs relative to the cost of providing deposit/lending services independently (£).

Representative customer	*Average*	*Standard deviation*	*Range*	*Average deposits cost*	*Average overdraft cost*	*Average packaged fees cost for all accounts*
A	42	70	819	14	0	28
B	141	79	488	17	81	44
C	151	99	683	0	104	47
D	68	79	934	40	0	29
E	154	133	796	0	110	44
F	7	8	75	7	0	29
G	91	84	593	35	8	48
H	96	135	1132	60	0	36
I	147	120	692	28	71	48
J	59	73	403	7	8	44

unsecured lending services, offered independently of current accounts. These customer costs are presented in Table 5.3.

How this costing approach affects the costs of current account use varies over the sample period. In the earlier part of the sample period base rates were higher than the levels of interest provided on instant access deposit accounts. This situation has altered in the last few years when base rates have been at a historic low and some deposit accounts have offered levels of interest above the base rate. Therefore, in the main we would expect the implicit cost of holding current account deposits to be reduced relative to base rate costs, yet not in recent years.

The influence of this form of implicit costing is even more marked for overdraft lending. This occurs as the average costs of providing low value unsecured loans is often high and relatively much higher than the base rate costs of undertaking this activity. If a customer wished not to undertake an overdraft loan yet decided to obtain an unsecured loan from their bank, quite substantial costs would be incurred reflecting the risks and administration costs of such an action for the bank. This reduces the implicit costs of overdrafts relative to base rate costs quite sharply in most cases.

Overall, through examining the average annual actual costs and two forms of implicit costs of current account usage we can report:

- The level of implicit costs for deposits, while perhaps exaggerated through reference to base rate costs in costing method (b), are substantial.

- Actual overdraft costs are high compared with other low value unsecured lending.

- The dispersion of current account costs is very large, with some substantial differences between the 'best' and 'worst' current accounts for customers. This dispersion of costs even exists when the customer behaviour is identical.

Further details of the annual costs of current account use by type of current account are recorded in Appendix 16.

Personal current account costs for different types of current account

In this section we examine how the customer costs of current account use vary with the type of current account. Further details of these customer costs are provided in Appendix 9. The levels of current account costs are illustrated for different types of current account in Figure 5.5 and indicate 'free banking' accounts have significant actual usage costs. The annual actual costs vary from –£45 for representative customer H (large deposit) to £320 for representative customer E (high overdraft)

While the costs of using 'free banking' current accounts are very low for representative customers with little overdraft and current account deposit use (for example representative customers A, D, F, and J), the costs of packaged current account use are substantial for all forms of current account use.

The average costs of current account use relative to the base rate and costs of using deposit and unsecured lending services, from the same firm providing the current account, are displayed

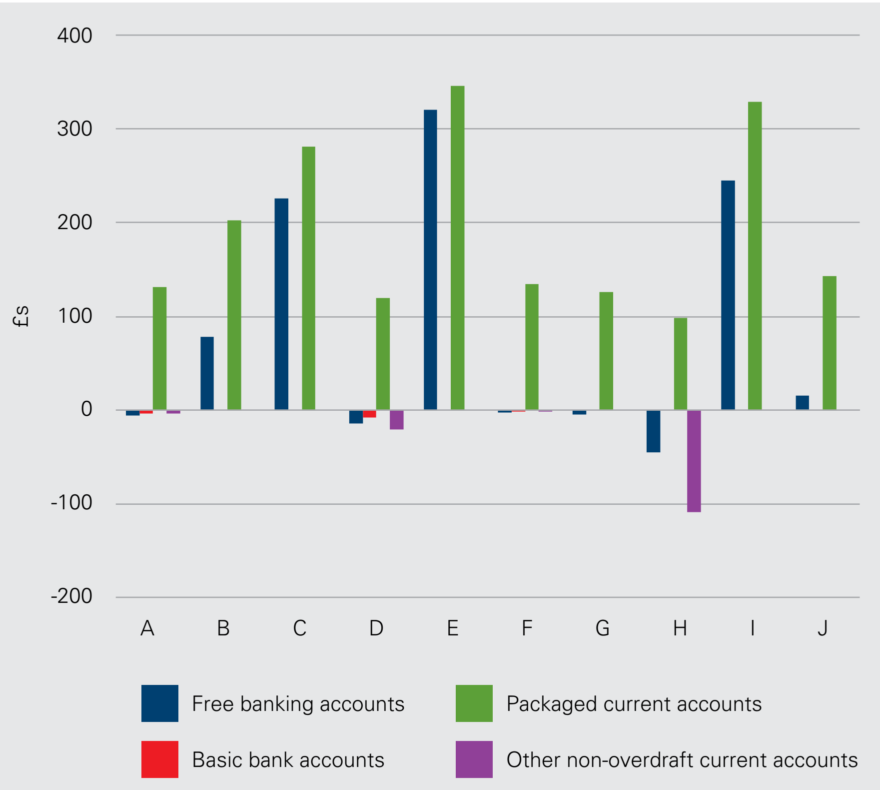

Figure 5.5
Personal current account actual or net costs of different types of current accounts. The actual or net costs of packaged current account are higher than that seen for other accounts. Average actual costs for packaged accounts vary from £99 annually for customer H (large deposit) to £346 annually for customer E (large overdraft).

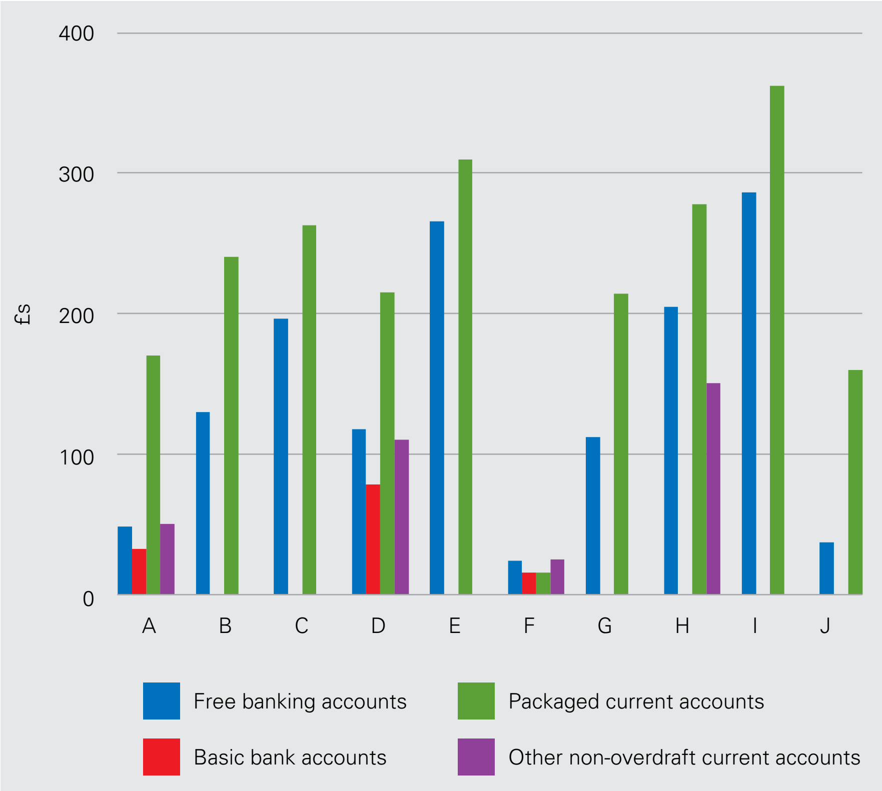

Figure 5.6
Personal current account implicit costs of different types of current accounts relative to base rate costs. In comparison with base rate costs, deposit services offered with free banking and packaged accounts (customers A, D, F and H) are expensive relative to other types of current accounts.

Figure 5.7
Personal current account implicit costs of different types of current account relative to independent provided deposits/ unsecured loans. While packaged current accounts ensure all customers pay something for access to a current account, costs for packaged accounts follow a similar distribution to free banking accounts, yet with higher overall costs for the majority of customers due to the application of additional fees.

in Figures 5.6 and 5.7 respectively. In the three representative customers where basic bank accounts and 'other current accounts without overdrafts' are considered (A, D and F), basic bank accounts are relatively costly when large deposits are present. In all of the representative customer groups 'other current accounts without overdrafts'[9] are viewed to be the most competitive form of current account. Overall, the implicit costs relative to the costs of using deposit and lending services provided independently vary from £7 for customer F (low deposit) to £131 for customer E (large overdraft). Further details of the annual costs of current account use by representative customer and type of current account supplier are provided in Appendix 17.

Costs of current account use for representative customers over time

In this section we examine how customer costs of using current accounts have varied over time. The annual average customer costs of using current accounts are provided for the three forms of costing for each of the 10 representative customers and are illustrated in Figure 5.8. A range of features are observed:

- The distribution of costs for many representative customers is narrowing towards the end of the sample period. This is a function of the historically low levels of base rates.

- For many of the representative customers we observe a rise in the annual costs of using a current account over time.

- While some falls in the cost of current account use can be seen in the mid-2000s, these falls have been reversed in recent years. Most of this increase can be attributed to the effect of a limited number of packaged current accounts on the overall average.

- The relationship between actual or net costs and the two forms of implicit costs of overdraft use varies between different representative customers.

- In recent years as base rates and deposit interest rates have declined, overdraft fees and charges have remained fairly static and have become relatively more prominent within the overall costs of current account use. While all customers can incur overdrafts, if most overdraft users are customers with lower incomes this trend affects lower income customers disproportionately.

- The cost of using current accounts has not declined over the sample period. Indeed we do see some increases in the customer costs of using personal current accounts. This trend is persistent rather than temporary between 1995 and 2011.

When we consider representative customers where overdraft cost is more intensive (representative customers B, C, E, G, I and J), the implicit costs of overdrafts relative to unsecured lending have declined for much of the sample period, rising only in recent years (i.e. representative customers C, E, G, and I).

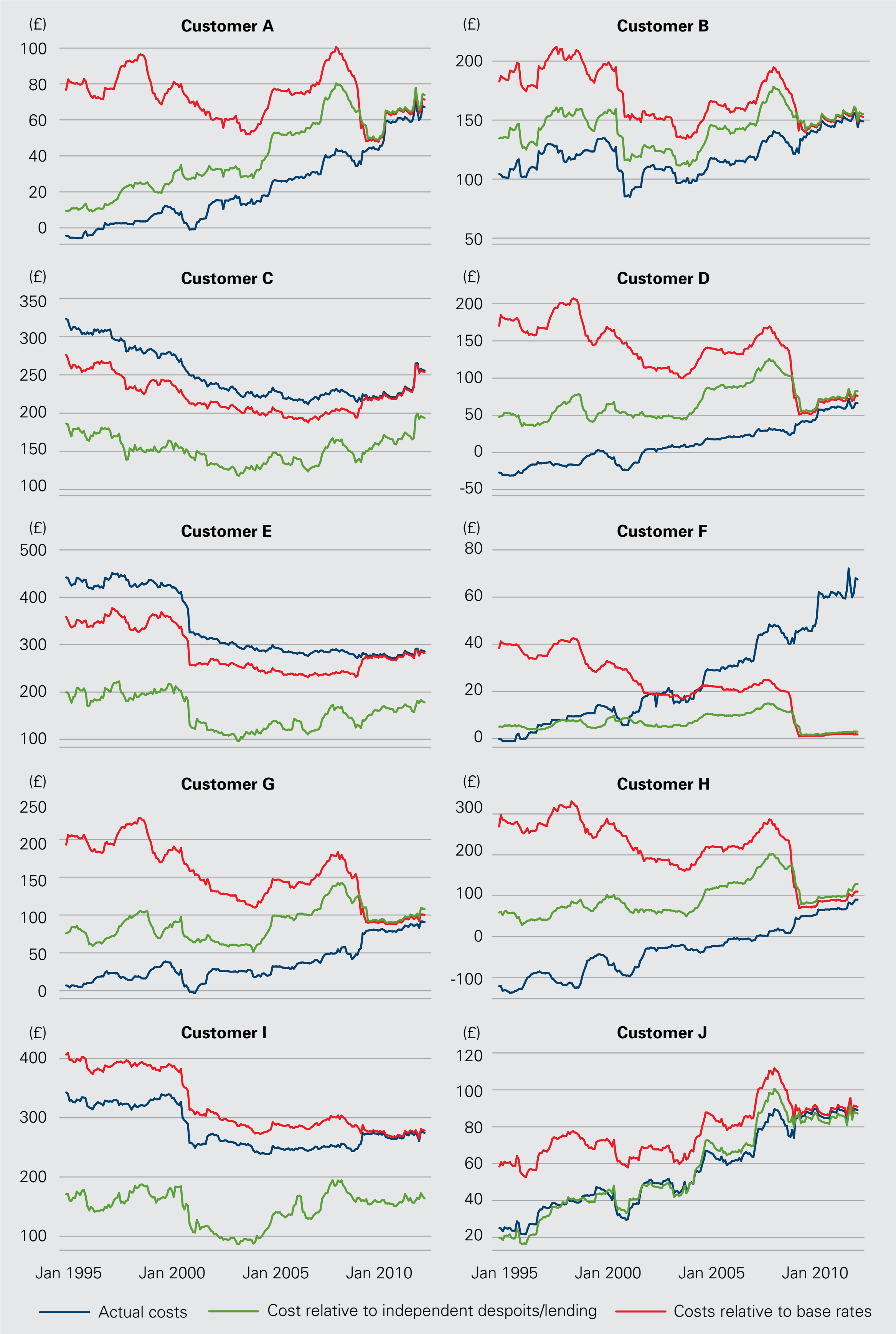

Figure 5.8
Cost of current account use by representative customer over time. The figure indicates how the three forms of current account cost have changed over time for the 10 representative customers, representing different types of current account use.

THE EFFECT OF LOW BASE RATES ON CURRENT ACCOUNT COSTS

In recent years, following the decline in base rates, all deposit interest rates have moved closer towards zero; a movement that has also reduced the costs and benefits of deposit use. For actual customer costs, the negative values (representing the income the deposit provides the customer) all increase towards zero, indicating that the benefits of holding deposits have been reducing.

The implicit costs of using current account deposit services also fall sharply, reflecting the low base rate. This recent decline in the actual benefit and implicit costs of holding current account deposits is distinct from most of the sample period. The implicit costs of holding current account deposits have been substantial for most of the 1995 to 2011 period and even increased slightly in the 2005 to 2007 period. For further discussion of the link between base rates and retail interest rates see Fuertes *et al.* (2010).

In summary, answers to research question A, 'What are the customer costs of current account use, and how do these costs vary between firms and types of current account?', are numerous. How a current account is used has a significant influence on these costs. Also, the dispersion of the customer costs of using personal current accounts is substantial even for identical forms of current account use, an issue reflecting the complexity and diversity of pricing in this market. We also identify that how usage costs are defined is critical in this assessment. If we consider the implicit costs of deposits and the cost of alternative banking services as advocated by many commentators (see Chapter 3) we have considerably different costs imposed on customers than if actual or net costs are only considered to be a cost to the customer. Further, the measures used to define implicit costs, be these the base rate, or different deposit and credit services also offered by the firm supplying the current account, can influence customer costs significantly. Lastly, we can report that the customer costs of using current accounts are not declining, and in some cases have risen.

Chapter 6
Is there a distributional cross-subsidy in the UK personal current account market?

SUMMARY

In this chapter we examine the second research question: Are the customer costs of using personal current accounts consistent with cross-subsidies flowing from low income customers to other customers? This assessment is undertaken in four stages.

Initially, we examine if a difference exists between current accounts in how they can be accessed by customers and the range of payment services available. This assessment is undertaken by determining if those current accounts available to customers from lower, higher and middle incomes vary. It is reported that no meaningful differences exist between these current accounts.

Second, we consider if the customer costs of using current accounts vary for the 10 representative customers associated with lower, middle and higher income customers. It is reported that any potential cross-subsidy observed is dependent on how the customer costs of using current accounts are defined. If we emphasise actual or net costs and focus primarily on the costs of overdraft use, customer costs are consistent with a cross-subsidy from lower income to other customers. Alternatively, if implicit costs are incorporated in the measurement of customer costs this cross-subsidy is not present.

Third, we examine if accounts available to lower, middle and higher income customers vary in the average customer costs of using these accounts. No significant differences are identified.

Lastly, we examine if ‘free banking’ accounts have higher costs for lower, middle and higher income customers, than other types of current account. This difference is not statistically significant.

Overall, there is weak evidence supporting a cross-subsidy and we can observe that such a claim is contingent on how the customer costs of using current accounts are estimated.

In this chapter we examine research question B, ‘Are the customer costs of using personal current accounts consistent with cross-subsidies flowing from low income customers to other customers?’ We answer this question in a number of stages. First we examine if the payment services and methods to access current account services offered to customers with lower,

Table 6.1
Distribution of current account services offered to different income groups.

	Lower income (%)	*Middle income (%)*	*Higher income (%)*
Account sweeping	21.7	21.4	21.7
Access to cash	88.5	88.8	88.5
Cash guarantee card	74.5	75.3	74.5
Cheque book	81.5	81.7	81.5
Standing orders and direct debits	95.3	95.4	95.3
WAP phone	6.3	6.1	6.3
Digital TV	1.8	1.8	1.8
Internet	61.2	60.5	61.2
Telephone	77.6	77.4	77.6
Branch	86.1	86.2	86.1

middle and higher incomes differ significantly or otherwise. Second, we identify whether the current account usage costs for representative customers associated with different income groups differ in a manner consistent with the presence of a cross-subsidy from lower to other customers. Third, we consider if the customer costs of using current accounts available to customers from different income groups vary in a manner consistent with cross-subsidy. Finally, we examine if 'free banking' accounts, the subject of perhaps most criticism in this market, are higher priced than other current accounts. Throughout, these differences are initially examined graphically and descriptively. This assessment is undertaken overall, relative to different current accounts, relative to different firms supplying this market and lastly over time. We then test whether differences in customer costs of using current accounts differ for lower income and other representative customers using T tests. These tests examine if the averages from one set of costs are statistically significantly different from the averages from another.

This assessment is helpful in answering the research question by determining if conditions consistent with a cross-subsidy exist. If such a cross-subsidy existed we would expect to observe higher levels of current account costs for a static level of current account quality. Quality, while impossible to fully quantify, is represented by the range of payment services provided by individual current accounts and methods available for customers to access current accounts. Alternatively if no cross-subsidy existed we would expect no significant differences in the costs of lower, middle and higher income customers, for a constant level of current account quality. Further, a cross-subsidy could also be present if the services offered to lower income customers were of lower quality than those received by higher income customers, for a static level of customer costs.

Differences in current account quality for customers with different income levels

In this section we examine if the payment services offered within current accounts and how customers can access these accounts varies with the current accounts available to customers from different income groups.[10] The findings are reported in Table 6.1. We observe that there are minimal differences in terms of service quality or forms of distribution existing between current accounts offered to different income groups. We can therefore state that customers from different income groups are not offered current accounts of significantly different quality, in terms of the narrow definition of quality employed in this assessment.

Costs of current account use for customers with differing levels of income

In this section we examine the customer costs of current account use for the 10 representative customers. To undertake this measurement, the costs of current account use for the representative customers are averaged overall and for lower, middle and higher income customers. From this assessment, illustrated in Figure 6.1, we report that while the actual or net costs of current account use are mostly borne by representative customers with lower incomes, this reflects the costs of overdrafts, without considering the implicit costs of deposit use.

In Figure 6.1 we also observe lower income representative customers incur the lowest implicit costs. Higher income customers using deposit services more intensively incur the highest implicit costs. If we emphasise overdraft use, the actual or net costs paid by lower income

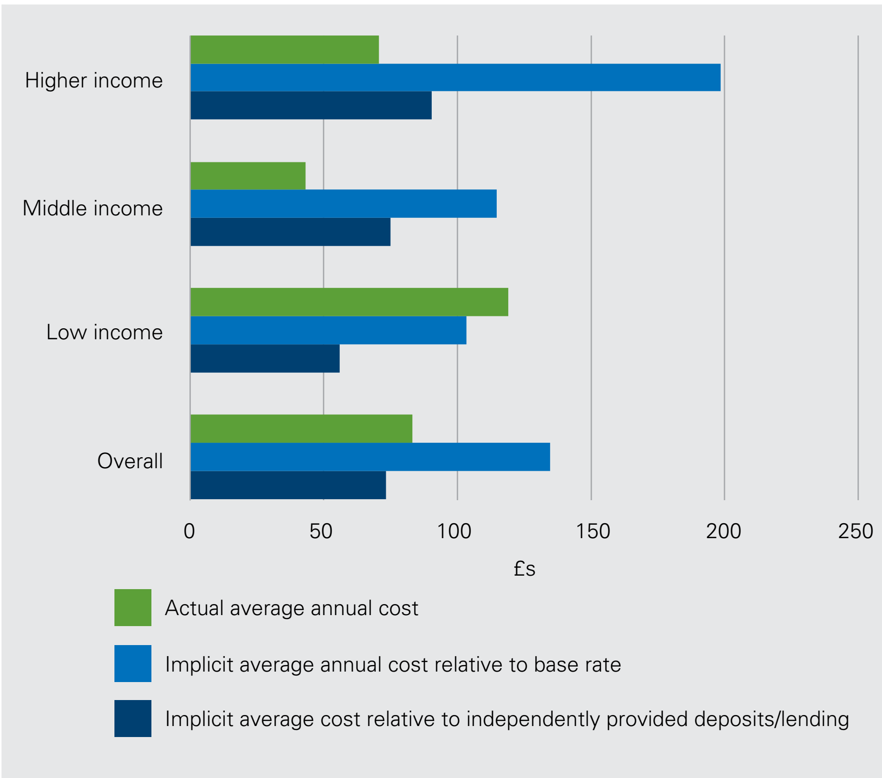

Figure 6.1
Overall annual costs of current account use, by customer income. The form of actual and implicit costing changes the costs incurred by representative customers from distinct income groups. When the implicit costs of current account use are assessed, the relative costs incurred by different income groups are reversed.

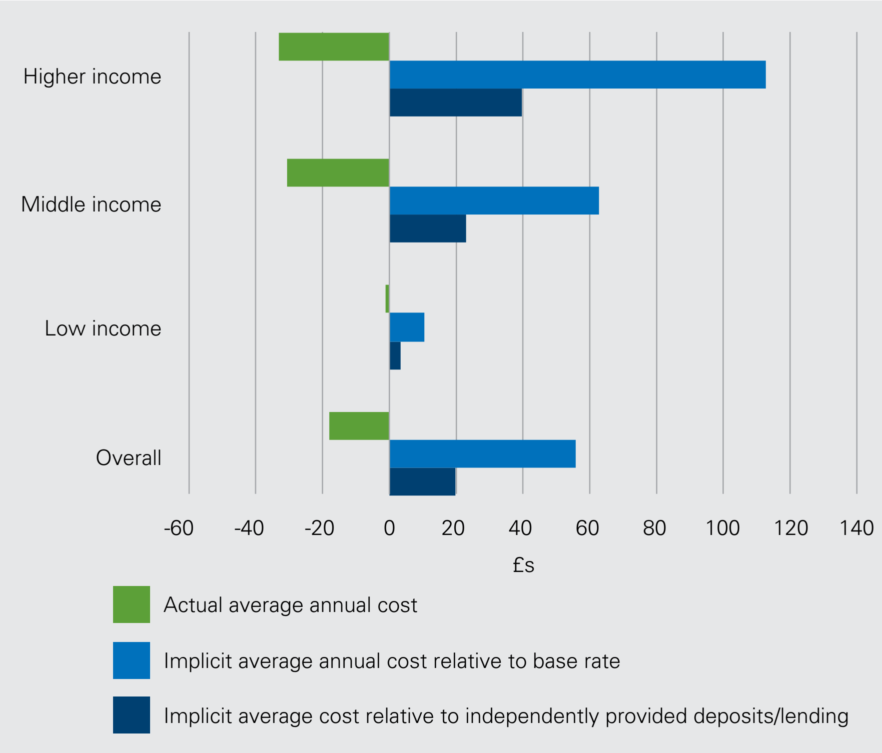

Figure 6.2
Current account deposit costs by customer income. Higher and middle income representative customers face higher costs than lower income customers for current account deposit use.

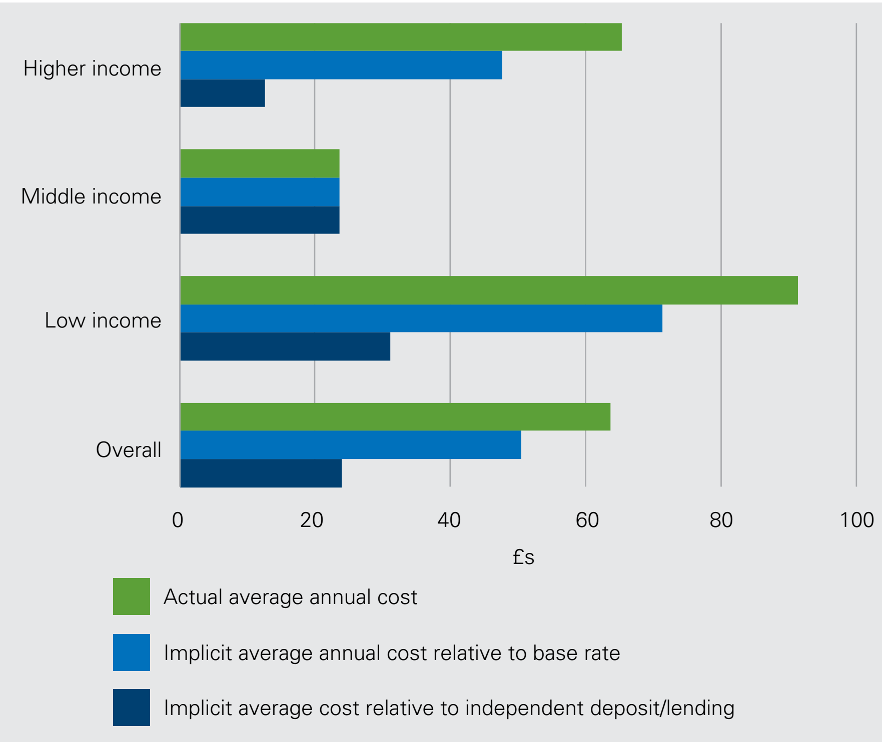

Figure 6.3
Overdraft costs by customer income. Low income customers incur the highest costs of overdraft use in all cases.

groups appears excessive. If we emphasise deposit use, the implicit costs paid by higher income groups are large. Illustrations of the constituents of these costs (Figures 6.2 and 6.3, which consider deposit and overdraft costs respectively) also support this perspective.

We also examine how the cost of current account use varies with different types of current account for the three income groups in Figures 6.4, 6.5 and 6.6 for lower, middle and higher income customers respectively. Both basic bank accounts and ‘other current accounts without

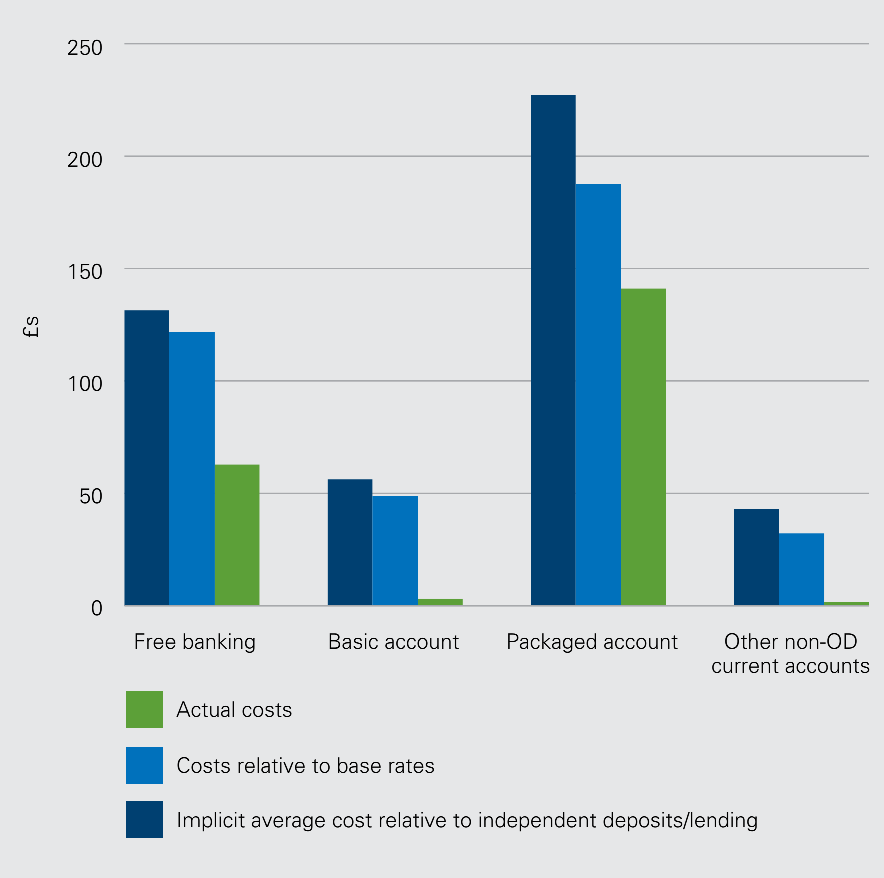

Figure 6.4
Costs of current account use by product type for lower income customers. For lower income customers, packaged accounts are expensive relative to all other types of current account. Actual or net costs of packaged current account are over £225 annually and implicit costs relative to the firms' costs are £141 annually. Free banking accounts have relatively lower costs of current account use with actual costs of £131 annually and implicit costs relative to the firms' own costs of £62.

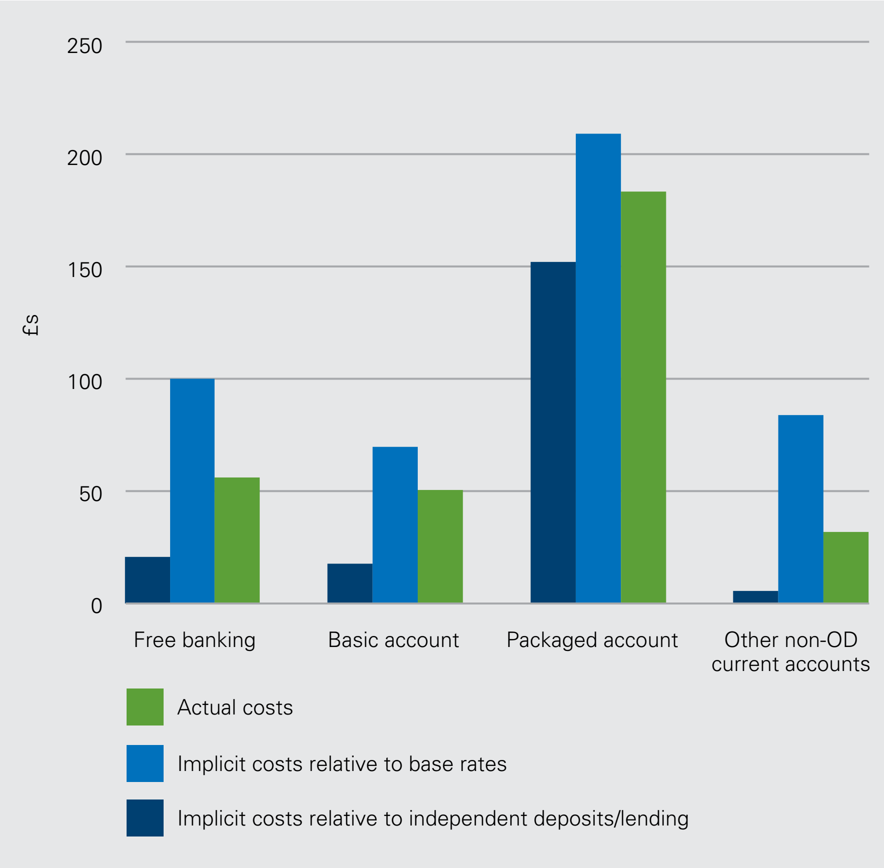

Figure 6.5
Costs of current account use by product type for middle income customers. Middle income customers pay most for current account use when using packaged current accounts. Costs of these services are over £150 annually in actual or net costs, and over £180 annually, relative to the firms' own costs. The actual or net and implicit costs of using free banking accounts is higher than 'other current accounts without overdrafts' and slightly higher than basic bank accounts.

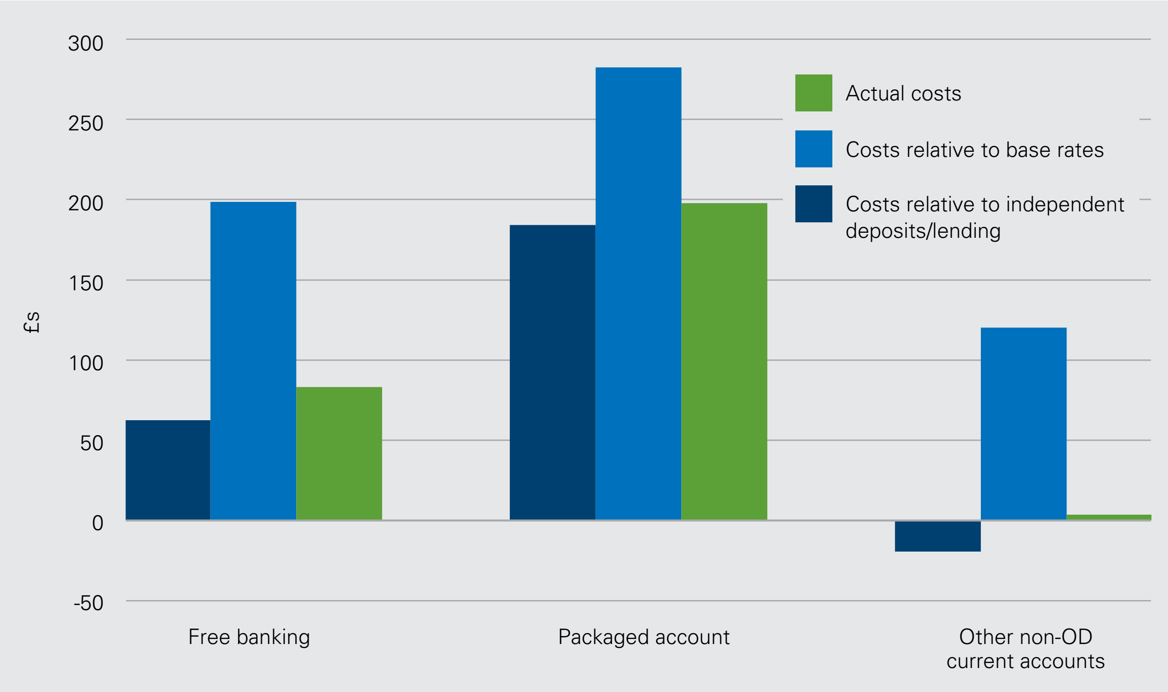

Figure 6.6
Costs of current account use by product type for high income customers. Packaged current accounts have the highest average annual costs for higher income customers (actual costs of £184 and implicit costs of £198). Free banking accounts have the second largest usage costs (annual actual or net costs of £62 and implicit costs relative to independently provided deposits and unsecured lending of £83 annually). 'Other current accounts without overdrafts' are the least expensive type of current account, reflecting the limited services offered. Actual or net annual costs are -£19 and implicit costs relative to independent deposits/lending costs are £3.69.

overdrafts' offer relatively competitive products for lower income customers. These annual or net actual costs are £56 and £43 respectively and implicit costs of current account use relative to the firms' own costs of providing deposit and lending services are £3.18 and £1.65 annually. Clearly, using a current account that does not provide overdraft facilities has significant benefits for lower income customers. This said, we do acknowledge that the option of not using overdrafts is not open to all customers.

In Figure 6.5 we observe that middle income representative customers incur small yet not insignificant costs when using basic bank accounts, with actual annual or net costs of £18 and implicit annual costs relative to the firms' own of £50 per annum. Implicit costs of using 'other current accounts with overdrafts' are the least expensive, with actual or net costs of £5.75 annually and implicit costs when compared to the firms' own costs of £32 annually. Overall we can report:

- Packaged accounts are the most expensive type of current account. This determination does not include the benefits of added extras included in such accounts. If these additional aspects of current accounts are useful for customers, this cost may be justified. These actual annual costs are £195 and implicit annual costs relative to the independently provided deposit and unsecured lending services are £173.

- 'Free banking' is a relatively expensive form of current account, particularly for lower income groups and relative to current accounts that do not allow overdraft use. Overall annual actual or net costs of 'free banking' account use are £73 and the implicit annual cost relative to the firms' own costs is £65.

- Current account costs from basic bank accounts and 'other current accounts without overdrafts' are lower, reflecting both the different payment services offered and also a different pricing model. The actual or net annual costs are £36 and £14 respectively, and implicit costs relative to firms' own costs are £31 and £12 respectively.

Overall we can state that there is substantial dispersion in the costs of current account use by current account type.

Current account costs by type of supplier and customer income

In this section we examine the customer costs of current account use by the type of current account supplier. The firms supplying current accounts are classified relative to their scale, origin and function into five groups: high street banks; small UK banks and insurers; international banks and insurers; converted building societies; and building and friendly societies. The average costs for lower, middle and higher income representative customers for these different firms are displayed graphically in Figures 6.7, 6.8 and 6.9. Further details of

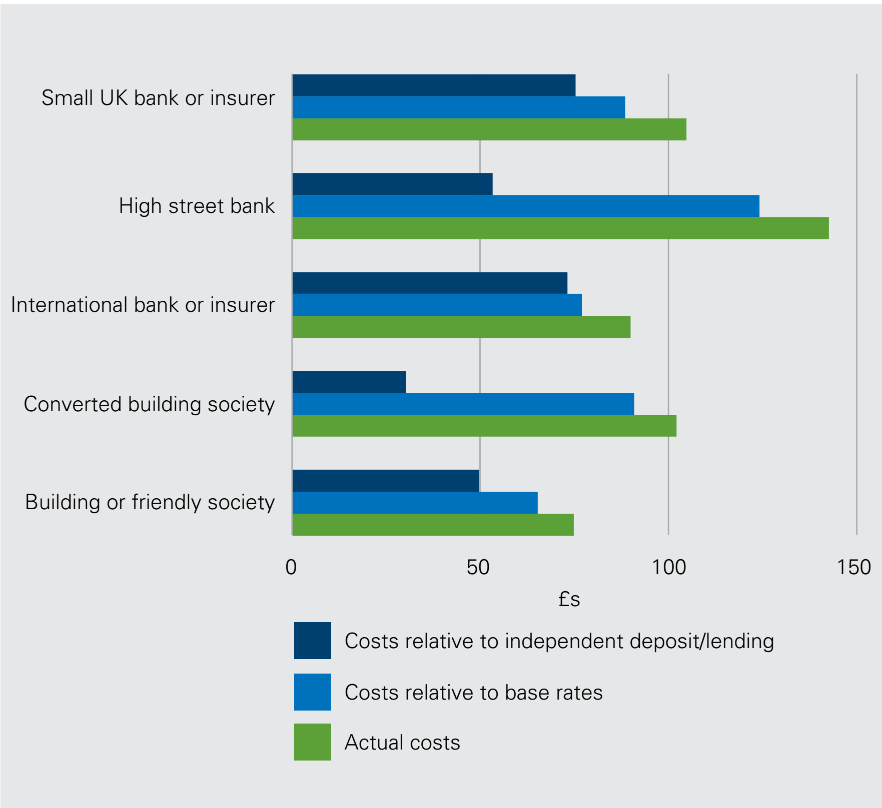

Figure 6.7
Lower income customer costs by firm type. Actual or net annual costs for high street banks are £143, costs relative to base rates are £124 and relative to independent deposits/lending are £53. Building and friendly societies and converted building societies are the lowest cost providers for lower income customers with actual costs of £75 and £102 respectively and implicit costs (relative to independent deposit/lending costs) of £50 and £30 respectively.

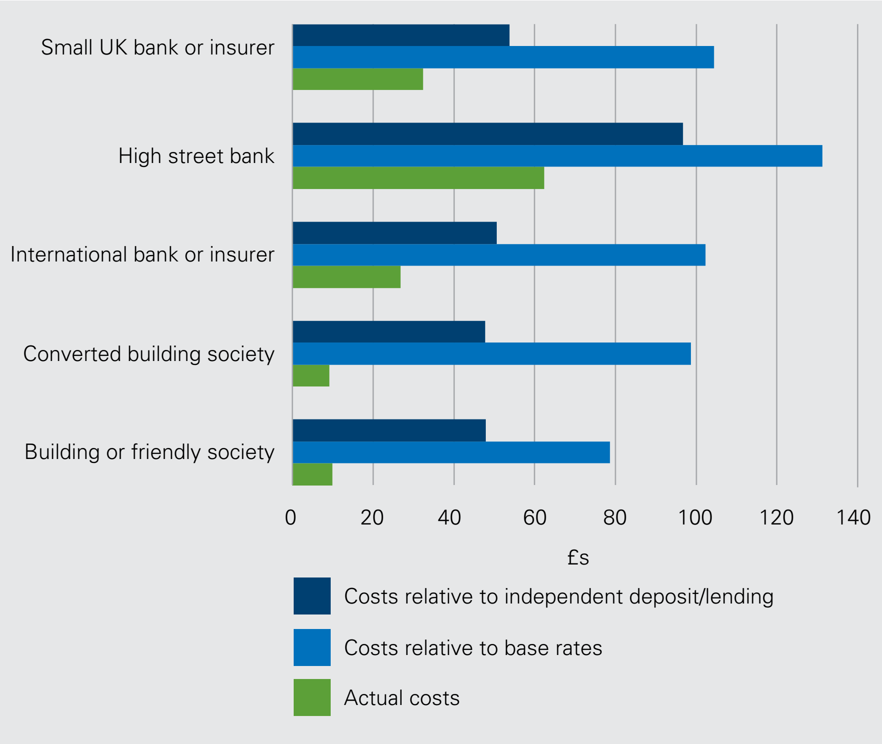

Figure 6.8
Middle income customer costs by firm type. High street banks have high actual or net costs of current account use (£62 annual costs). Building and friendly societies and converted building societies have some of the lowest customer costs for current account use (£10 and £9 respectively).

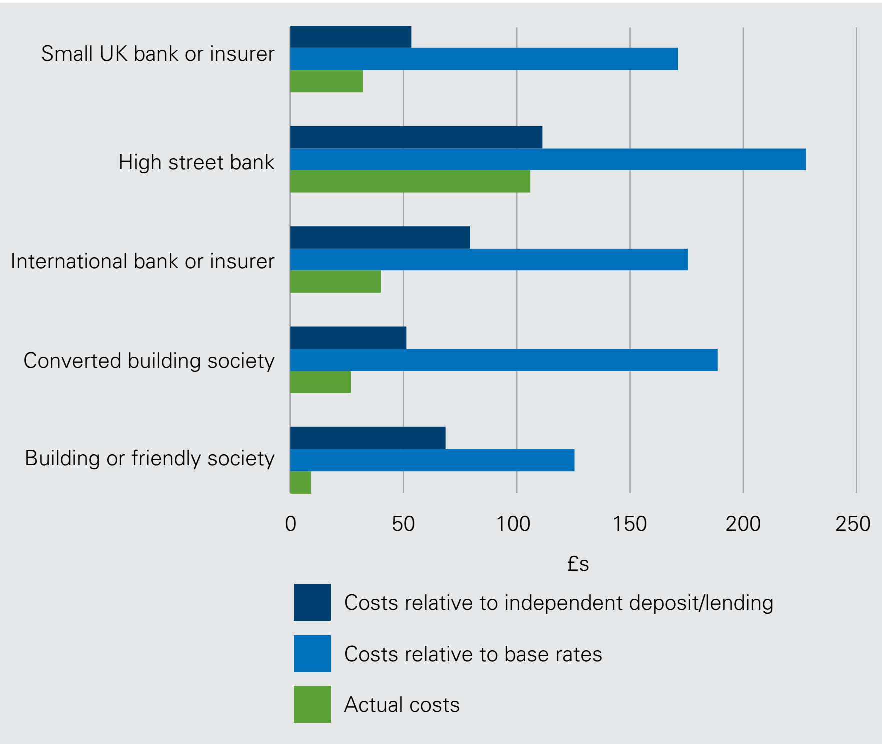

Figure 6.9
Higher income customer costs by firm type. Building and friendly societies and converted building societies are the lowest cost providers of current accounts for higher income customers.

representative customers with different levels of income are provided in Appendix 18 and for the annual costs of current account use by type of current account in Appendix 19.

We can observe for lower income representative customers (Figure 6.7) that the highest cost current account providers are high street banks, small UK banks and insurers and international banks and insurers. The least expensive suppliers of current accounts are building and friendly societies and the now-defunct converted building societies. Again, these suppliers can be ranked differently when costs are estimated in distinct ways. When considering actual or net costs, building and friendly societies are relatively the least expensive type of provider. When considering costs relative to services provided independently, converted building societies were relatively the least expensive type of provider.

For middle income customers (Figure 6.8), high street banks are the highest cost supplier of current accounts for all costing measures. For higher income customers (Figure 6.9), high street banks are again the highest cost providers of current account services, with annual actual or net costs of £106, relative to base rate costs of £228 and relative to independent deposit and lending costs of £112.

Overall and considering all customers, high street banks are the highest cost providers of current account services. The average actual or net annual cost of using a high street bank current account is £109. Building and friendly societies and converted building societies were the least expensive type of provider of current account services over the sample period with actual or net costs of £34 and £52 annually.

Costs of current account use by customer income over time

In this section we consider the costs to customers of current account use over time. We observe in Figure 6.10 a steady rise in actual or net customer costs over time. We also report high implicit costs of current account use for most of the sample period. These implicit costs have declined in recent years following the fall in base rate levels. The implicit costs relative to independently provided services vary over time, rising in the 2007 period and falling in 2008–09 before rising again in 2011. Overall we can report that customers with lower incomes appear to pay the highest actual costs for current account services. When the implied costs of current account use are considered, the costs of current account use are greater for higher income customers, reflecting more use of current account deposit services by these customers. Therefore representative customers with the highest incomes face falling implicit costs of current account use and customers with lower incomes face rising actual or net costs of current account use. Middle income representative customers have faced a rise in actual and implicit costs of current account use in recent years, albeit from lower levels.

Tests of conditions consistent with cross-subsidy

In the last section of the chapter we test for differences between (1) the customer costs for different income groups and (2) the costs of different types of current account. If the costs of using current accounts are higher for lower income customers relative to other customers, these are conditions consistent with cross-subsidies occurring. Further, we test between the costs of different types of current account, as cross-subsidies in this market have been particularly associated with the use of ‘free banking’ current accounts.

When testing between the customer costs of current account use we consider two approaches. Initially we examine the differences in costs for current account use by customers through comparing the costs of lower, middle and higher income customers using current accounts relative to each other. Pairwise T tests are employed to consider these differences between the costs of current account use. These results are displayed in Table 6.2 where significant differences are reported between the average values of current use for lower, middle and higher income groups. The actual costs of current account use are significantly higher for lower income customers than for other customers. Therefore, when considering actual or net costs a cross-subsidy is present. Further, for actual or net costs higher income customers have significantly greater costs of using current accounts than middle income customers. This is, of course, not the entire story.

When we consider the implicit costs of current account use relative to base rates or independently provided deposit and lending services, the cost of current account use for lower income customers is significantly lower than that incurred by middle and higher income customers. Higher income customers also have significantly higher current account costs than middle income customers. Overall, the occurrence of a distributional cross-subsidy between customers of different levels of income is a function of how customer costs of current account use are defined. If we only emphasise actual or net costs, this cross-subsidy from lower income to other customers does occur. If we use implicit costs then the direction of this cross-subsidy between lower and higher income customers is reversed.

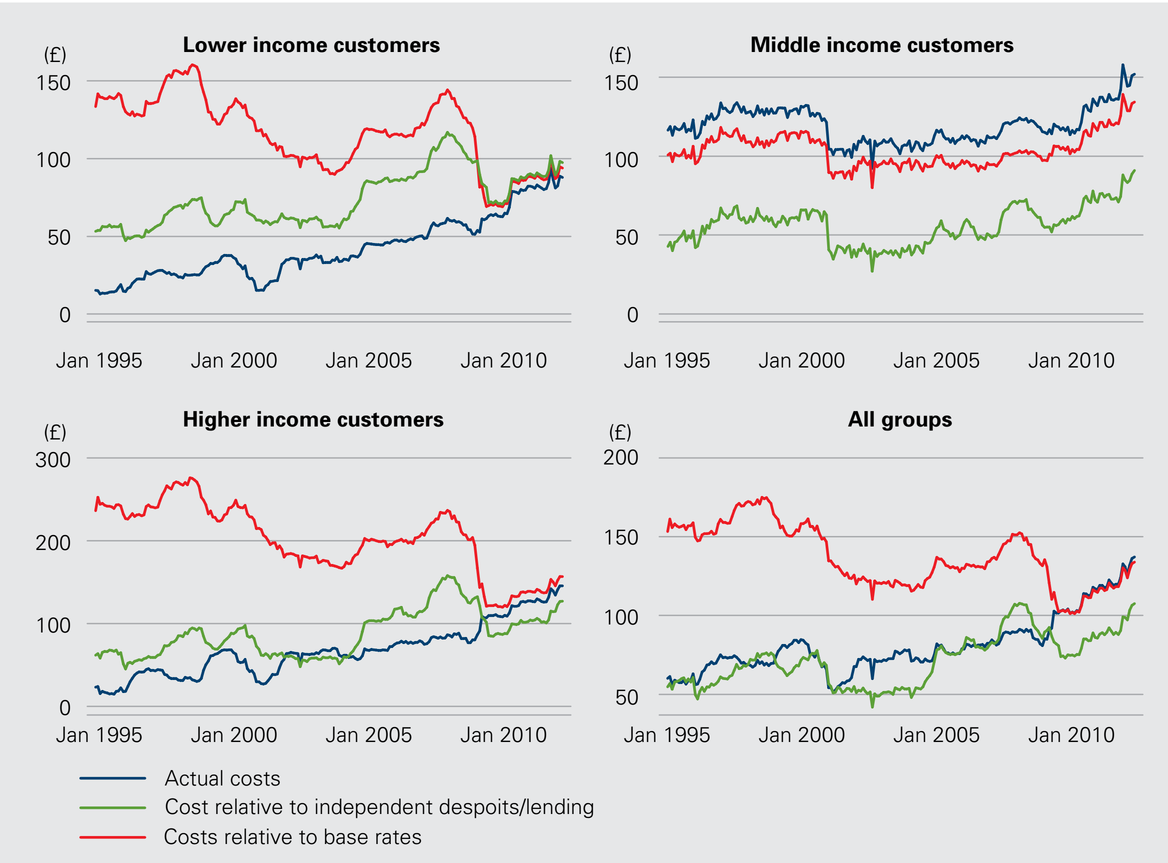

Figure 6.10
Average current account costs by customer income and overall.

Table 6.2
Comparison of costs of lower, middle and higher income representative customers
(* denotes significance at 99%confidence).

			T tests		
		Average values (£)	*Lower income*	*Middle income*	*Higher income*
Actual or net costs	Lower income	119	–	–180.1*	143.3*
	Middle income	44		–	–59.1*
	Higher income	65			–
Costs relative to base rate	Lower income	10	–	25.5	–179.3*
	Middle income	115		–	–194.2*
	Higher income	194			–
Costs relative to independently provided deposits/lending	Lower income	56	–	39.8	–60.9*
	Middle income	75		–	–24.7*
	Higher income	85			–

A second approach to examining differences between current account usage cost is through examining differences in the average customer cost of using personal current accounts derived from an average of all representative customers costs, for the accounts available to lower, middle and higher income customers. The T test results for this procedure are displayed in Table 6.3. Unlike the T tests conducted in Table 6.2, here we consider independent T tests.

We can report significant T tests in all cases. For all measures of cost, current account use by higher income customers is more expensive relative to current accounts assumed not to be used by these customers. This may reflect the assumed non-use of basic bank accounts by higher income customers. It may be stated that for lower and middle income groups the available accounts are not significantly more expensive than all other accounts; indeed, these accounts have significantly lower costs of customer use. These findings are consistent with no cross-subsidy existing in this market.

Lastly, we examine if the costs of using 'free banking' current accounts are different from other types of current account. This is undertaken because much of the criticism of current accounts and in particular claims of a distributional cross-subsidy have focused on 'free banking' accounts. This assessment is undertaken for customer costs of using 'free banking' current accounts relative to other types of current account. The results are reported in Table 6.4.

In all cases statistically significant results are reported indicating that 'free banking' current accounts are less expensive than all other types of current accounts. We speculate that these results are strongly influenced by packaged current accounts, which we have seen to be relatively expensive. Again, this is evidence that is consistent with cross-subsidies not existing in this market.

Overall, in answering the question 'Are the customer costs of using personal current accounts consistent with cross-subsidies flowing from low income customers to other customers?', we report 'not really'. When considering the influence of overdraft lending and not the implicit costs of current account use, some evidence of a cross-subsidy is present. When considering implicit costs of current account use a cross-subsidy is not present. Clearly, how the customer costs of using current accounts are defined is central to this determination. Further, there are few differences in the quality of current account services provided to lower income and to other customers.

Table 6.3

Difference in averages between accounts used by lower, middle and higher income groups (* denotes significance at 99% confidence).

		Average costs (£)	*Difference in means (£)*	*T test*	*Sig.*
Accounts available to lower income customers relative to all other accounts	Actual or net costs	80	–16	–12.0*	0.0
	Costs relative to base rate	134	–5	–4.1*	0.0
	Costs relative to independently provided deposits/ lending	70	–18	–13.8*	0.0
Accounts available to middle income customers relative to all other accounts	Actual or net costs	82	–74	–15.0*	0.0
	Costs relative to base rate	134	–62	–13.3*	0.0
	Costs relative to independently provided deposits/ lending	73	–48	–10.2*	0.0
Accounts available to higher income customers relative to all other accounts	Actual or net costs	88	51	26.2*	0.0
	Costs relative to base rate	140	63	34.9*	0.0
	Costs relative to independently provided deposits/ lending	77	46	24.7*	0.0

Table 6.4
Differences between 'free banking' and other current accounts by customer income group (* denotes significance at 99% confidence).

	Income group	*Average cost 'free banking' account (£)*	*Average other accounts (£)*	*T test*	*Sig*
Actual costs	Lower	140	222	–61.62*	0.00
	Middle	19	145	–123.92*	0.00
	Higher	64	182	–95.72*	0.00
	Overall	73	91	–15.69*	0.00
Costs relative to base rates	Lower	131	184	–44.33*	0.00
	Middle	98	206	–88.42*	0.00
	Higher	200	286	–50.22*	0.00
	Overall	133	136	–2.54*	0.01
Costs relative to independent deposits/ lending	Lower	69	137	–51.77*	0.00
	Middle	55	178	–114.67*	0.00
	Higher	84	199	–78.02*	0.00
	Overall	65	80	–14.71*	0.00

Chapter 7
Conclusions

SUMMARY

This report examines the customer costs of current account use and whether lower income customers cross-subsidise other customers in this market. Specifically two research questions are addressed.

A What are the customer costs of current account use, and how do these costs vary between firms and types of current account?

B Are the customer costs of using personal current accounts consistent with cross-subsidies flowing from low income customers to other customers?

Key results for question A include:

- Dispersion of the costs of current account use varies significantly by type of use, type of account, type of supplier and by income group. This dispersion is linked to the considerable pricing complexity and diversity in this market.
- The costs of overdraft use are high for low income groups.

Key results for question B include:

- Cross-subsidy between customers of different incomes is a function of how costs are estimated. If just the actual costs of current account use are considered, emphasising overdraft costs, packaged fees and considering deposit interest as a benefit, evidence consistent with a cross-subsidy from lower to other customers is present.
- If we consider the implicit costs of current account use and acknowledge holding deposits in current accounts and providing overdraft services has costs for customers and banks respectively, a cross-subsidy from lower to other customers is not present.

This chapter provides a summary of the study results and then gives suggestions for improving the pricing of current account use, including simplification, standardisation and greater clarity in charging for current account services.

In this study we provide a detailed and long-term assessment of the customer costs of current account use in the UK. Specifically we examine two questions:

A What are the customer costs of current account use, and how do these costs vary between firms and types of current account?

B Are the customer costs of using personal current accounts consistent with cross-subsidies flowing from low income customers to other customers?

These questions are addressed through an examination of a large data set of current account interest rates, product features and fees for the UK over the period 1995 to 2011. To analyse this data we employ three forms of costing current account use by customers, reflecting both actual or net costs and the implicit customer costs of using current account services. Further, we consider the use of current accounts by employing 10 representative customers. The customer costs and the wider features of this market are examined over time, for different suppliers of these services and by the types of current account considered.

For research question A we can report:

- The dispersion of current account customer costs is wide, with some large differences between the 'best' and 'worst' current accounts for the customer. Indeed, for some of the representative customers the range of costs is indicative of limited competition in this market. Customers can achieve substantial benefits through shopping around for the best deal and switching current accounts if a lower cost alternative is identified. This degree of price dispersion also reflects the considerable complexity and diversity of pricing approaches employed in the current account market.

- Packaged current accounts are consistently observed to be the most expensive form of current account offered in the UK. These accounts are costly for all customers, irrespective of how these current accounts are used, with additional packaged account fees being a substantial element of total current account costs. We acknowledge that the benefits or otherwise of add-on services included with packaged accounts are not quantified and are not included in the analysis.

- High street banks are the most expensive providers of current accounts, and particularly so for middle and higher income customers. Building and friendly societies, and also the now-defunct converted building societies, are/were the least expensive providers of current accounts. These differences in customer costs may reflect many influences, from market power to the often superior branch networks offered by high street banks. Also, we report that current accounts provided by high street banks may be accessed from more distribution channels, such as the branch or over the telephone or internet, than from other suppliers.

- We identify that the customer costs of current account use have been rising over time, and the costs of overdraft use (including both authorised and unauthorised overdrafts) have risen in particular. This increase in costs is persistent and occurs throughout the sample period. As the sample period (1995 to 2011) is a time when international evidence reports that the costs of payment services are low and have been consistently declining, why the costs of using current accounts have risen in the UK is unclear. It is speculated that such an outcome may arise from increased market concentration and limited buyer power in current account markets and is an area where future research would be welcomed.

Key results for research question B include:

- Cross-subsidy between customers of different incomes is a function of how costs are estimated. If just the actual or net costs of current account use are considered, emphasising overdraft costs and packaged fees and considering deposit interest as a benefit, evidence consistent with a cross-subsidy from lower to higher income customers is present.

- If we acknowledge the implicit costs of current account use (that holding deposits in current accounts has a cost and overdraft services are provided at a cost to the banks), a cross-subsidy from lower to higher income customers is not present.

- Through assessment of three forms of actual or net costs and implicit costing, it is apparent that the costs to customers of using current account deposit services are much higher than previously reported. Pricing in these markets is also seen to be highly complex, particularly for overdraft lending, and lacks transparency, particularly for current account deposit services.

From this assessment of the customer costs of current account services we can state there is not a simple cross-subsidy from lower income to higher income customers. Lower income customers and all customers that use current account deposit and overdraft services intensively are cross-subsiding other current account customers. Indeed, changing one aspect of current account pricing, such as a reduction in overdraft fees, may shift customer costs from customers that use overdrafts intensively to customers that use deposit services. It appears that if a distributional cross-subsidy does exist this is not limited to just ‘free banking’ current accounts – it is also observed for packaged current accounts, where higher costs of current account use associated with more overdraft and current account deposit use is also apparent. Beyond these conclusions we forward a range of suggestions to improve the pricing within this market:

- It is important to assess the benefits and wider utility of additional services provided within packaged current accounts. To date, information on these services is not collected systematically and a greater comprehension of these increasingly complex packaged current accounts is important for customers.

- Current accounts incorporate a range of different financial services, including payment services, credit services, deposit services, and increasingly add-on services seen in packaged current accounts such as travel insurance. These complex bundled financial services have been the focus of attention from multiple regulators due to the separation of regulatory responsibilities. These regulators,[11] due to their specified focus of activity, have considered different aspects of this market. For example, the OFT has made strides in altering methods of pricing in the unauthorised overdraft sector, while the Financial Services Authority has examined the bundled sale of insurance policies with packaged current accounts. These regulatory arrangements have led to piecemeal regulation and oversight and influenced how the pricing of current accounts has been assessed in past legal judgements (Whittaker 2011). Overall there is a case for regulating current accounts in their entirety, at a product level, rather than regulating the distinct lending, deposit and add-on services and functions offered with these bundled financial services separately.

- Determining how customers actually use current accounts is to a greater degree unexplored in the UK. Further research in this area is long overdue. Increasing access to such data in a controlled and confidential manner would be a positive step in further comprehending personal current account markets.

- It is essential for all customers to be aware that overdrafts are a high cost form of borrowing and should be avoided if possible. These short-term loans are even costlier than unsecured lending offered by the same banks providing current account services. The changes in the Lending Code, developed through negotiation between the OFT and the major current account suppliers to enable customers to opt out of unauthorised overdrafts (see OFT 2011, 2013), is certainly helpful in reducing the use of unauthorised overdraft services inadvertently. Further steps to assist customers to reduce their use of unauthorised overdrafts would also be welcome. For example, access to unauthorised overdrafts could be further restrained if customers have to actively opt to use these services, as has been proposed in the USA under Regulation E (Federal Register 2010).

- When customers accumulate large deposits in current accounts, the costs of this action can be high in terms of interest foregone. It is suggested that customers persistently accumulating very large current account deposits could be offered 'sweeping' facilities, whereby excess funds above a certain agreed value would automatically be moved to a deposit account offering a higher rate of interest. Sweeping arrangement are already offered on some current accounts and extending this facility to customers that may accumulate large deposits should reduce the customer costs of using current accounts.

- The UK current account market has numerous products and offers a high level of choice. While some choice is welcomed, it is not far fetched to indicate that this market suffers from product proliferation and for some providers the number of current accounts offered could be reduced to improve customer decision making and ease the costs of searching for new accounts. Such a suggestion reflects the increasing recognition that excessive choice may actually constrain customer decision making (see Iyengar and Lepper 2000; Kamenica 2008).

- The presentation of the costs of current account use needs simplification. While the use of representative customer groups is a useful tool to illustrate the costs of using current accounts, the presentation of pricing would benefit from a process of standardisation – the pricing of current accounts and overdrafts particularly could be undertaken with fewer fees that are calculated in a common and accepted manner. Movement towards a situation where customer costs of using current accounts reflect how much deposit, overdraft and payment services actually cost the banks to provide, plus a transparent margin, would be optimal for this market. At present this situation doesn't appear to exist. A process similar to that undertaken by the Sergeant review (2012) for other financial services would be beneficial for the personal current account market. This could facilitate the use of simpler forms of personal current account pricing. We acknowledge such a change would not be welcomed by all, as some product features, such as interest and fee buffers, for example, do provide benefit to those able to effectively search the market and discover the pricing model that best suits their needs. This said, many customers are unable to or lack the time to undertake such a product search and are therefore unable to ensure they receive optimal current account benefits: they would benefit from greater simplicity in product design and, critically, pricing approaches in this market and it is these customers for which the status quo may pose the greatest challenges and costs.

- In any movement to reduce the costs of payment services, it is important to consider not just customer costs but also the costs of retailers in providing payment services. If pressure is placed on banks to reduce customer costs of payment services, these costs could be transferred to retailers who could potentially pass these new costs onto customers through higher prices.

In this assessment we report that there is only limited evidence that lower income customers cross-subsidise other customers in the UK personal current account market. The presence of cross-subsidies between customers from different income groups in this market are seen to be a function of the form of costing used to quantify the customer costs of using personal current accounts. Despite such a qualified rejection of the notion of this specific cross-subsidy being present, it is apparent that distributional concerns do exist. Customers using deposit and overdraft services intensively are paying a lot for these current account services. We conclude that these concerns with the customer costs of current account use are substantial and persistent and require on-going attention and analysis.

Notes

1 A seven-day switching regime for UK current accounts was introduced in September 2013.

2 Social costs are defined as 'the costs to society, reflecting the use of resources in the production of payment services; that is, the total cost of production excluding payments' (Schmiedel *et al.* 2012: 6).

3 There is insufficient data on student current accounts to include this type of personal current account in this assessment.

4 This point is disputed by some commentators.

5 It is acknowledged this may provide a wider financial stability benefit for all people, rather than just a specific benefit for banks. It is currently unclear how the 'ring fence' between retail and investment banking proposed by the Independent Commission on Banking (2011) will influence this benefit for the UK.

6 The Independent Commission on Banking (2011) employed representative customer definitions to describe customer use of current account services. Details of the banks considered, the number of accounts employed or how the groups are defined are not reported in the Final, Interim or Issues reports issued by the Commission, beyond a definition of 'type B' customers as 'consumers who keep a moderate balance in their account and do not make extensive use of unarranged borrowing', with no other definitions provided; this limited level of detail makes any further assessment or replication of this work impossible. This analysis was also restricted to one level of current account deposits of £1,000, and a limited sample of current accounts.

7 Anecdotally, around two-thirds of loans are prime; interest rate costs of sub-prime loans are unavailable and can be viewed as proprietary information reflecting an individual firm's credit policy.

8 Incremental costs and stand-alone costs are both measures developed in economic theory and are assumed to reflect existing accounting data. Problems arise as accounting data has rarely conformed to such theoretical expectations (see Heald, 1996, 1997 for further discussion).

9 'Other current accounts without overdrafts' encompass a diverse range of current accounts including those aimed at higher income customers, such as the Leopold Joseph Instant Access Account, or accounts offering limited payment services yet often with a higher interest rate such, as the Leeds and Holbeck Albion Cheque Account. These current accounts are generally supplied by relatively small institutions.

10 The definition of current accounts offered to customers from different income groups is provided in Chapter 3.

11 Deposit and banking services are currently regulated by the Financial Conduct Authority, overdraft credit concerns are regulated by the Office of Fair Trading and payment system concerns are overseen by the Payments Council.

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Appendices

Appendix 1: Unresolved complaints made to the Financial Ombudsman Service between 1999 and 2011

	Total current account complaints	*% of new cases about current accounts*	*Current accounts as % of all banking and credit complaints*	*Different sources of current account complaints*				
				Direct debits and standing orders	*Financial hardship*	*Business bank charges*	*Charges*	*Debit cards*
2011	19,944	10	30	571	9,713	1,359		
2010	25,252	15.5	35	737	13,213	2,265		
2009	13,682	11	25	725	2,394	2,194	2,736	
2008	39,263	32	57	562			31,618	
2007	8,061	8.5	40	336			3,285	380
2006	3,543	3	26	278				337
2005	2,521	2.3	24	235				156
2004	2,106	2.2						
2003	1,602	2.6						
2002	1,280	3.0						
2001	793	2.5						
2000	416							
1999	371							

Note: Figures are taken from editions of the Financial Ombudsman Service Annual Review between 1999/2000 and 2010/11. The format of reporting the types of current account complaint has changed overtime.

Appendix 2: Selected changes to the Lending Code (2011) affecting personal current account overdrafts

Full details of the Lending Code are available from the Lending Standards Board (www.lendingstandardsboard.org.uk/).

Presale information

- All customers should 'receive clear, fair and not misleading information as to the availability of the overdraft'.
- 'The customer must be provided with details of any charges payable' with further details when appropriate.
- When a firm providing current accounts provides an account with an ability to opt out of unauthorised overdrafts, 'Details of such accounts must be provided to customers'.
- If a customer requests an account with an opt out from unauthorised overdrafts, they will not be offered a basic bank account, unless this is suitable.
- The information should be provided in plain English.

Point of sale

- If an authorised overdraft is offered it should be stated that it is repayable on demand.
- If an opt out from unauthorised overdrafts is introduced on a current account this needs to be communicated to all customers using this account.
- If a firm offers a current account with an opt out from unauthorised overdrafts, all customers that incur an unauthorised overdraft should be informed of this facility when first incurring any fees.
- Implications of having an opt out from unauthorised overdrafts need to be provided to customers using this facility.
- The decision to opt out from unauthorised overdrafts should not affect the customers' credit rating.

Proactive contact

- If the firm becomes aware that a customer is at risk of financial difficulties, they need to inform the customer to outline their approach to financial difficulties, encourage the customer to contact to the firm, offer the customer options to reduce the risk of deterioration, and provide signposts to independent free money advice.

Appendix 3: Weekly income and the percentage of UK households using current accounts and basic accounts

	<£100 (%)	*£100 and <£200 (%)*	*£200 and <£300 (%)*	*£300 and <£400 (%)*	*£400 and <£500 (%)*	*£500 and <£600 (%)*	*£600 and <£700 (%)*	*£700 and <£800 (%)*	*£800 and <£900 (%)*	*£900 and <£1,000 (%)*	*>£1,000 (%)*
Current accounts											
1998–99	69	65	81	92	96	98	99	99			
1999–00	68	66	79	92	96	98	98	99			
2000–01	73	66	79	90	96	96	98	98	99	99	98
2001–02	75	69	81	91	95	98	98	98	98	98	98
2002–03	76	69	81	90	95	96	98	97	98	97	97
2003–04	78	72	82	91	94	97	97	97	98	98	98
2004–05	76	83	91	94	96	96	98	98	98	98	98
2005–06	81	77	83	90	93	95	97	97	97	98	97
2006–07	82	75	83	88	94	94	95	96	96	97	97
2007–08	86	78	84	89	93	95	95	96	97	96	97
2008–09	83	81	83	89	93	94	96	97	97	98	97
2009–10	86	81	85	90	94	95	96	96	97	96	97
2010–11	84	84	87	90	95	96	96	97	97	98	98
Basic accounts											
2003–04	1	2	3	3	3	3	3	4	2	3	3
2004–05	4	3	4	5	6	7	7	7	7	8	11
2005–06	6	6	6	6	5	5	5	5	4	5	5
2006–07	6	7	7	7	7	7	6	7	8	8	8
2007–08	7	6	6	7	7	8	7	8	7	7	8
2008–09	7	6	6	6	7	8	6	6	7	6	7
2009–10	5	6	6	7	6	8	7	6	7	9	7
2010–11	6	6	6	8	7	7	7	6	6	6	7

Source: Household Resources Survey.

Appendix 4: Current account use by family type

	Pensioner couple (%)	Single male pensioner (%)	Single female pensioner (%)	Couple with children (%)	Couple without children (%)	Single with children (%)	Single male without children (%)	Single female without children (%)
1998–99	85	69	67	92	94	61	79	83
1999–00	86	73	68	92	93	61	78	83
2000–01	87	72	69	92	94	64	80	83
2001–02	88	78	72	94	94	68	82	85
2002–03	88	77	74	93	94	70	81	84
2003–04	90	81	74	94	94	77	82	86
2004–05	90	81	79	95	95	80	82	86
2005–06	91	83	81	94	94	81	82	86
2006–07	91	82	81	93	94	78	82	86
2007–08	92	86	83	94	94	81	83	86
2008–09	92	84	85	94	94	82	83	85
2009–10	94	87	87	95	94	85	83	86
2010–11	95	90	88	96	96	85	85	87

	Self-employed (%)	Single or couple all in full time work (%)	Couple, one in full time work, one part time (%)	Couple, one in full time work, one not working (%)	Couple, one or more in part time work (%)	Head or spouse aged 60 or over (%)	Head or spouse unemployed (%)	Head or spouse disabled or sick (%)
1998–99	95	93	97	95	84	73	55	50
1999–00	95	93	97	94	86	75	53	49
2000–01	95	93	97	94	86	76	55	49
2001–02	95	94	97	96	90	79	65	52
2002–03	95	93	96	95	88	79	64	56
2003–04	95	94	96	95	91	81	69	59
2004–05	96	93	97	95	90	82	73	63
2005–06	95	93	96	95	91	85	70	65
2006–07	94	93	95	93	89	84	72	62
2007–08	95	92	96	94	90	86	71	68
2008–09	95	93	95	94	90	87	74	68
2009–10	94	93	95	94	92	89	75	
2010–11	96	94	97	95	92	90	79	

Source: Household Resources Survey.

Appendix 5: The firms supplying personal current accounts used in this study

Abbey National
AIB Bank
Airdrie Savings Bank
Alliance and Leicester
AMC Bank
American Express
Bank of China
Bank of Cyprus
Bank of Ireland
Bank of Scotland
Barclays
Beneficial Bank
Bristol and West
Britannia
Brown Shipley
Butterfield Private Bank
Cahoot
Caledonian Building Society
Cater Allen Private Bank
Charterhouse Bank
Chelsea Building Society
Citibank
Clydesdale Bank
Co-operative Bank
Coutts & Co
Coventry BS
Cumberland Building Society
Dao Heng Bank
First Direct
First E
First Trust Bank
Fleming Premier Banking
Frizzel Bank
Halifax
Hoare and Co
Intelligent Finance
Investec Bank
Julian Hodge Bank
Kleinwort Benson
Laiki Bank/Marfin Laiki Bank
Leeds and Holbeck/Leeds Building Society
Leopold Joseph & Sons Ltd
Lloyds
Metro Bank
Midland/HSBC
Moneyway
Nationwide Building Society
Natwest
Northern Bank
Northern Rock
Norwich and Peterborough
Overseas Trust Bank
Portman Building Society
Robert Fleming / S&P
Royal Bank of Scotland
Santander
Schroder
Secure Trust Bank
Smile
State Bank of India
Sun Banking Corporation
Tridos Bank
TSB
Turkish Bank
Ulster Bank
Weatherbys Bank
Wesleyan Savings Bank
Western Trust
Whiteaway Laidlaw Bank
Woolwich
Yorkshire Bank
Zurich Bank

Appendix 6: The parent firms supplying personal current accounts used in this study

Abbey National
AIB
Airdrie Savings Bank
Alliance and Leicester
American Express
Arbuthnot Banking Group
Bank of China
Bank of Cyprus
Bank of Ireland
Bank of Scotland
Banque d'Escompte
Barclays
Bristol and West
Britannia
Butterfield Private Bank
Caledonian Building Society
Cater Allen Private Bank
Charterhouse Bank
Chase
Chelsea Building Society
Citibank
Co-operative
Coventry Building Society
Cumberland
Danske Bank
Dao Heng Bank
Dresdner Benson
Fleming Premier Banking
Halifax
HBOS
HFC Finance (Household International)
Hoare and Co
HSBC
Investec Bank
Julian Hodge Bank
KBL
Kleinwort Benson
Laiki Bank/Marfin Laiki Bank
Leeds and Holbeck Building Society
Leopold Joseph & Sons Ltd
Liverpool Victoria Friendly Society
Lloyds
Manchester Building Society
Metro Bank
National Australia Bank
Nationwide Building Society
Natwest
Northern Rock
Norwich and Peterborough Building Society
Portman Building Society
Royal Bank of Scotland
Santander
Schroder
State Bank of India
Sun Life of Canada
Tridos Bank
TSB
Turkish Bank
Weatherbys
Wesleyan Assurance Society
Western Trust
Whiteaway Laidlaw Bank
Woolwich
Yorkshire Building Society
Zurich Financial Services Group

Appendix 7: The classification of parent firms by function and origin

Institution	*Obs.*	*% of total*	*Institution*	*Obs.*	*% of total*
High street banks	**11571**	**53.99**	**Building and friendly societies**	**2332**	**10.88**
Bank of Scotland	296	1.38	Caledonian BS	9	0.04
Barclays	1284	5.99	Chelsea BS	229	1.07
HBOS	639	2.98	Coventry BS	291	1.36
HSBC	1194	5.57	Cumberland BS	219	1.02
Lloyds	2320	10.83	Leeds and Holbeck BS	331	1.54
National Australia Bank	1979	9.23	Liverpool Victoria Friendly Society	26	0.12
Natwest	517	2.41	Manchester BS	48	0.22
Royal Bank of Scotland	2474	11.54	Nationwide BS	509	2.38
Santander	857	4.00	Norwich and Peterborough BS	466	2.17
TSB	11	0.05	Portman BS	198	0.92
Small banks and insurers	**2120**	**9.89**	Yorkshire BS	6	0.03
Airdrie Savings Bank	41	0.19	**International banks and insurers**	**3482**	**16.25**
Arbuthnot Banking Group	147	0.69	AIB	857	4.00
Cater Allen Private Bank	38	0.18	American Express	38	0.18
Charterhouse Bank	70	0.33	Bank of China	34	0.16
Co-operative	803	3.75	Bank of Cyprus	4	0.02
Dresdner Benson	36	0.17	Bank of Ireland	1017	4.75
Fleming Premier Banking	177	0.83	Banque d'Escompte	28	0.13
Hoare and Co	167	0.78	Butterfield Private Bank	94	0.44
Julian Hodge Bank	121	0.56	Chase	25	0.12
Kleinwort Benson	41	0.19	Citibank	396	1.85
Leopold Joseph & Sons Ltd	191	0.89	Dao Heng Bank	21	0.10
Metro Bank	4	0.02	Household International	42	0.20
Schroder	43	0.20	Investec Bank	228	1.06
Weatherbys	26	0.12	KBL	294	1.37
Wesleyan Assurance Society	209	0.98	Laiki/Marfin Laiki Bank	136	0.63
Whiteaway Laidlaw Bank	6	0.03	Sun Life of Canada	82	0.38
Converted building societies	**1925**	**8.98**	State Bank of India	29	0.14
Abbey National	628	2.93	Tridos Bank	104	0.49
Alliance and Leicester	693	3.23	Turkish Bank	33	0.15
Bristol and West	12	0.06	Western Trust	14	0.07
Britannia	25	0.12	Zurich Financial Services Group	6	0.03
Halifax	200	0.93			
Northern Rock	254	1.19	Total	21,430	100
Woolwich	113	0.53			

Appendix 8: Questions posed to senior bankers in the semi-structured interviews

A key issue is the link between a representative customer grouping and demographic factors. What are your thoughts?

We can talk through the classification of representative customers used – is this plausible? Are there any elements you would change?

How do you feel the costs of overdraft use vary by demographics?

What are the actual causes of overdraft use – is this mistakes as academic studies generally indicate or more a lack of funds by individuals as much policy work suggests.

How could you describe the use of current account services by an average customer of your bank?

What do you see as future changes in the current account market?

What are the future challenges?

A lot of criticism has been applied to the popular free banking model – is this model useful to your bank?

Appendix 9: Variation in the real value of deposit and loan quantities

Year	*Change in Retail Price Index*	*Quantity deposited or borrowed*								
		£40	*£100*	*£400*	*£500*	*£800*	*£830*	*£2,000*	*£3,000*	*£15,000*
1995	3.5	£40	£100	£400	£500	£800	£830	£2,000	£3,000	£15,000
1996	2.4	£41	£102	£410	£512	£819	£850	£2,048	£3,072	£15,360
1997	3.1	£42	£106	£422	£528	£845	£876	£2,111	£3,167	£15,836
1998	3.4	£44	£109	£437	£546	£873	£906	£2,183	£3,275	£16,375
1999	1.5	£44	£111	£443	£554	£886	£920	£2,216	£3,324	£16,620
2000	3.0	£46	£114	£457	£571	£913	£947	£2,283	£3,424	£17,119
2001	1.8	£46	£116	£465	£581	£929	£964	£2,324	£3,485	£17,427
2002	1.7	£47	£118	£473	£591	£945	£981	£2,363	£3,545	£17,723
2003	2.9	£49	£122	£486	£608	£973	£1,009	£2,432	£3,647	£18,237
2004	3.0	£50	£125	£501	£626	£1,002	£1,039	£2,505	£3,757	£18,784
2005	2.8	£51	£129	£515	£644	£1,030	£1,069	£2,575	£3,862	£19,310
2006	3.2	£53	£133	£531	£664	£1,063	£1,103	£2,657	£3,986	£19,928
2007	4.3	£55	£139	£554	£693	£1,109	£1,150	£2,771	£4,157	£20,785
2008	4.0	£58	£144	£576	£721	£1,153	£1,196	£2,882	£4,323	£21,617
2009	–0.5	£57	£143	£574	£717	£1,147	£1,190	£2,868	£4,302	£21,508
2010	4.6	£60	£150	£600	£750	£1,200	£1,245	£3,000	£4,500	£22,498
2011	5.2	£63	£158	£631	£789	£1,262	£1,310	£3,156	£4,734	£23,668

Appendix 10: Frequency of overdraft usage behaviours and demographics factors from OFT (2008) and Competition Commission (2007)

Consumer type	*% consumers 'rarely not incurring an overdraft'*	*Age*	*% consumers 'rarely not incurring an overdraft'*	*Annual frequency of refused payments*	*Savings <£1000*	*Savings >£1000*
All	60%	16–24 years	72%	None	89%	63%
<£1000 savings	88%	25–34 years	76%	Once	4%	9%
>£50,000 savings	42%	35–44 years	70%	2 or 3 times	4%	12%
Free banking account	57%	45–54 years	60%	4–10 times	2%	10%
Packaged account	73%	55–64 years	51%	>10 times	1%	6%
		65+ years	29%			

Age profile and social grade of charged groups compared with general population of PCA holders (%)

Age band	Charged customers – unauthorised OD	General population of PCA holders
18–34	45.4	32.6
35–44	28.6	21.4
45–54	17.6	17.2
55+	8.4	28.8
Social grade	Charged customers – unauthorised OD	General population of PCA holders
AB	24.0	19.8
C1	39.8	32.7
C2	21.3	22.5
DE	14.9	25.0

Appendix 11: Proportion of current account consumers within the representative customer groups

Label	*Group*	*Income group*	*Key attributes*	*Percentage of UK consumers displaying this behaviour*
A	Typical customer without unarranged overdraft	Middle income	No authorised OD No unauthorised OD Typical deposit (£500–£2,000)	68% 74.26% 30%
B	Typical customer with unauthorised overdraft	Middle income	Low (<£50) unauthorised OD Typical deposit (£500–£2,000) 4 charges	7.02% 30% 6%
C	Typical debit customer	Low income	<£500 authorised OD <£500 deposit	22.72% 49%
D	High credit customer	Middle income	No unauthorised OD No authorised OD High (£2,000+) deposits	74.26% 68% 21%
E	High debit customer	Low income	Low (<£500) authorised OD High (>£100) unauthorised OD Low (<£500) deposits 6 charges	22.72% 13.26% 49% 10%
F	Marginal credit customer	Low income	Low (<£500) deposits No authorised OD No unauthorised OD	49% 68% 74.26%
G	High credit customer with overdraft	High income	High (£2,000+) deposits High (>£1,000) authorised OD	21% 4.8%
H	Jumbo credit customer	High income	High (£2,000+) deposits No authorised OD No unauthorised OD	21% 68% 74.26%
I	Occasional high use of overdraft with high deposits	High income	High (£2,000+) deposits High (>£100) unauthorised OD High (>£1000) authorised OD 6 charges	21% 13.26% 4.8% 10%
J	Marginal customer with overdraft use	Low income	Low (<£500) deposits Low (<£500) authorised OD	49% 22.72%

Source: OFT, 2008.

Appendix 12: The types of accounts considered for each representative group

Used to incorporate type of current account and different income, saving and salary requirements.

Label	*Group*	*Type of account considered*	*Observations in each group*
A	Typical customer without unarranged overdraft	Personal current accounts with and without an overdraft facility Income =< £3,000 per month £60k annual salary or less £5,000 savings or less	17,746
B	Typical customer with unauthorised overdraft	Personal current accounts with an overdraft facility Income =< £3,000 per month £60k annual salary or less £5,000 savings or less	9,345
C	Typical debit customer	Personal current accounts with an overdraft facility Income =< £1,500 per month £30k annual salary or less £3,000 savings or less	9,208
D	High credit customer	Personal current accounts with and without overdraft facility Income =< £3,000 per month £60k annual salary or less £5,000 savings or less	17,746
E	High debit customer	Personal current accounts with an overdraft facility Income =< £1,500 per month £30k annual salary or less £3,000 savings or less	8,975
F	Marginal credit customer	Personal current accounts with and without overdraft facility Income =< £1,500 per month £30k annual salary or less £3,000 savings or less	17,589
G	High credit customer with overdraft	All personal current accounts with an overdraft facility excepting basic bank accounts	12,361
H	Jumbo credit customer	All personal current accounts excepting basic bank accounts	19,943
I	Occasional high use of OD with high deposits	All personal current accounts with an overdraft facility excepting basic bank accounts	12,361
J	Marginal customer with overdraft use	Personal current accounts with overdraft facility Income =< £1,500 per month £30k annual salary or less £3,000 savings or less	8,975

Appendix 13: Annual frequencies of firms operating in the UK current account market and frequency of current accounts offered

	1995	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*
Total products offered	90	88	93	95	97	122	119	109	146	132	126	134	141	147	136	139	168
Total number of parent firms	38	37	37	33	32	37	37	29	29	31	29	29	28	28	30	29	32
Overall average number of products per firm	2	2	2	2	3	3	3	4	4	4	4	4	5	4	4	4	4
Overall number of current accounts																	
Building and friendly societies	7	6	6	7	10	12	13	14	14	14	15	17	17	17	17	16	15
Converted building societies	13	11	12	12	13	26	26	15	24	15	8	7	9	7	1	1	1
International banks and insurers	15	13	13	14	13	22	19	13	15	15	21	24	22	20	22	20	26
High street banks	40	43	45	44	46	51	61	57	77	78	75	74	81	95	82	88	110
Small UK banks and insurers	13	13	14	14	11	11	10	9	15	13	10	10	10	12	12	12	14
Average number of current accounts per firm																	
Building and friendly societies	1	1	1	1	1	1	1	2	2	2	2	2	2	3	2	3	2
Converted building societies	1	1	2	2	2	3	4	4	3	3	4	4	4	3	1	1	1
International banks and insurers	3	3	3	3	4	3	4	4	4	4	3	3	4	3	2	2	2
High street banks	5	5	6	6	6	6	7	9	10	9	8	9	11	10	13	13	13
Small UK banks and insurers	1	1	1	1	1	1	1	2	2	2	3	3	2	2	2	2	2
Number of parent firms																	
Building and friendly societies	5	5	5	5	6	7	8	7	7	7	7	7	7	6	7	6	7
Converted building societies	7	7	6	5	5	6	6	4	4	4	2	2	2	2	1	1	1
International banks and insurers	9	9	9	9	8	13	11	8	7	8	9	9	8	8	11	11	12
High street banks	8	7	7	7	7	7	7	6	6	7	7	7	7	7	6	6	6
Small UK banks and insurers	10	10	10	8	7	7	6	5	6	6	4	4	4	5	5	5	6

Appendix 14: The changing characteristics of UK current accounts

Percentage of all current accounts offered in each year with certain distribution and service characteristics.

	Account sweeping	*Cash*	*Cash guarantee card*	*Cheque book*	*Standing orders and direct debits*	*WAP phone*	*Digital TV*	*Internet*	*Telephone*	*Branch*
1995		78.8	71.7	98.8	87.2				31.1	100
1996		82.0	81.4	98.5	91.1				39.6	99.7
1997		76.1	77.1	96.1	88.2				41.2	100
1998		82.2	84.0	95.5	92.1				52.3	98.6
1999		75.5	78.0	94.1	90.0				48.6	96.2
2000	6.9	76.5	74.2	91.5	91.2	2.8	1.2	26.5	60.8	87.1
2001	35.5	83.0	66.9	82.6	95.1	14.9	6.2	58.1	79.0	68.0
2002	33.6	86.9	70.5	82.6	94.3	16.3	7.4	60.8	81.8	75.1
2003	32.0	89.8	71.9	78.9	97.4	14.3	9.8	74.0	84.2	82.6
2004	29.8	91.9	73.9	76.8	99.2	6.4	5.5	81.4	85.4	81.9
2005	28.2	93.2	75.1	76.5	97.4	5.8	0.9	83.8	88.2	78.2
2006	32.2	94.6	77.8	77.9	97.5	4.1	0.8	85.8	90.9	81.9
2007	34.2	96.4	79.1	78.1	98.3	5.2	0.4	88.5	93.6	84.4
2008	28.4	96.7	77.1	74.3	99.2	8.9		89.7	95.1	84.8
2009	26.3	96.5	76.8	73.0	98.4	7.3		90.7	95.4	86.1
2010	23.7	96.3	75.3	71.7	98.3	4.5		92.1	95.7	88.7
2011	25.0	96.2	77.1	73.0	98.6	5.4		93.7	96.2	91.0
Overall	21.8	89.0	75.6	82.0	95.5	6.1	2.0	60.7	77.6	86.4

Appendix 15: Personal current account product features

	Observations	*Average*	*Standard deviation*	*Range*	*% of observations recorded*
Non zero deposit interest rates					
For £1 deposited	21,713	0.63	1.29	9.57	99.51
For £500 deposited	21,713	0.67	1.31	9.57	99.51
For £1,000 deposited	21,713	0.78	1.39	9.57	99.51
For £2,500 deposited	21,713	0.96	1.49	8.19	99.51
For £5,000 deposited	21,713	1.07	1.56	7.72	99.51
Overdrafts					
Authorised OD interest rate >£1	12,724	13.41	4.26	22.00	87.60*
Authorised OD interest rate >£1,000	12,724	13.40	4.25	21.74	87.60*
Authorised OD interest rate >£5,000	12,724	13.33	4.24	23.44	87.60*
Unauthorised OD interest rate	13,353	25.32	6.73	36.33	91.93*
Authorised OD arrangement fee fixed	4,940	£24.12	8.35	65.00	34.01*
Authorised OD usage fee	6,321	£6.73	£4.80	£29.25	43.52*
Unauthorised OD usage fee fixed	2,880	£18.61	£11.17	£48.00	19.83*
Unauthorised OD usage fee per day of overdraft	899	£7.13	£17.33	£209.60	6.19*
Overdraft buffer fees	7,403	£206.93	£356.32	£4999	50.97*
Overdraft buffer interest rate	5,653	£205.03	£202.70	£2495	38.92*
Other fees					
OD letter	6,437	£12.43	£4.91	£25.00	29.49
Unpaid cheque fee	19,230	£25.75	£6.09	£33.50	88.10
Packaged fees (per month equivalent)	4,876	£10.55	£6.64	£59.00	22.34
Stated funding requirement	4,649	£2,011	£7,026	£6,2499	32.01
Income requirement	4,343	£25,830	£86,979	£749,988	29.90

* % of observations for a personal current account with overdraft.

Appendix 16: Annual costs of current account use by type of current account (£)

		A	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*
Free banking accounts	Actual costs	–5.62	78.62	226.24	–14.19	320.40	–2.47	–5.23	–45.33	245.44	15.58
	Implicit cost B	48.74	130.12	196.26	117.30	266.15	23.96	111.81	205.08	286.19	37.48
	Implicit cost C	14.49	102.34	121.11	48.62	130.90	7.28	48.16	90.93	115.54	16.06
Basic bank accounts	Actual costs	–3.17			–8.23		–1.52				
	Implicit cost B	32.64			78.07		16.01				
	Implicit cost C	18.59			47.96		9.07				
Packaged current accounts	Actual costs	131.06	202.59	281.19	119.65	346.64	135.00	126.40	98.70	329.54	142.62
	Implicit cost B	170.50	240.77	262.93	214.69	309.65	15.88	214.57	278.13	362.43	159.89
	Implicit cost C	150.81	223.63	207.98	173.45	201.68	6.35	175.60	212.57	208.99	145.06
Other non-overdraft current accounts	Actual costs	–3.53			–20.52		–0.63		–109.01		
	Implicit cost B	50.29			110.01		24.94		150.66		
	Implicit cost C	11.44			26.61		5.70		–4.46		

Appendix 17: Annual costs of current account use by representative customer and type of current account supplier (£)

Representative customer	Building or friendly society	Converted building society	International bank or insurer	High street bank	Small UK bank or insurer
Actual costs of current account use					
A	–9	–10	9	42	21
B	65	74	116	137	80
C	183	213	248	249	208
D	–23	–29	–	31	3
E	245	307	312	332	280
F	–4	–3	12	46	25
G	–18	–17	47	57	33
H	–91	–84	–55	14	–85
I	204	222	276	298	235
J	9	13	75	68	56
Costs relative to base rates					
A	35	51	60	88	72
B	106	133	158	182	124
C	158	179	227	224	185
D	83	118	118	141	126
E	201	245	275	287	236
F	17	24	23	19	22
G	76	123	147	163	137
H	125	216	192	238	172
I	235	270	319	336	270
J	28	39	92	89	74
Costs relative to independent deposits/lending					
A	13	13	21	64	34
B	89	99	134	160	97
C	139	113	194	144	155
D	40	38	39	92	39
E	168	124	218	137	179
F	6	6	4	7	4
G	38	41	92	110	70
H	48	77	41	145	–17
I	173	82	222	140	159
J	15	13	79	68	60

Appendix 18: Descriptive statistics for representative customers with different levels of income (£)

		Actual average annual cost		*Implicit average annual cost relative to base rate*		*Implicit average cost relative to independent deposits/lending*	
	Representative customer	*Average*	*Range*	*Average*	*Range*	*Average*	*Range*
All costs	Lower income	119	824	103	656	56	788
	Middle income	43	878	115	849	75	877
	Higher income	71	1,025	198	856	90	1,151
	Overall	83	897	135	732	73	903
Deposits	Lower income	31	194	63	242	23	210
	Middle income	1	19	11	38	3	37
	Higher income	33	245	113	370	40	433
	Overall	18	73	56	205	20	207
Overdrafts	Lower income	91	343	71	345	31	436
	Middle income	24	106	24	106	24	106
	Higher income	68	242	50	245	15	296
	Overall	64	224	51	226	24	274
Packaged fees	Lower income	29	737	29	737	29	737
	Middle income	28	737	28	737	28	737
	Higher income	36	737	36	737	36	737
	Overall	33	737	36	811	33	737

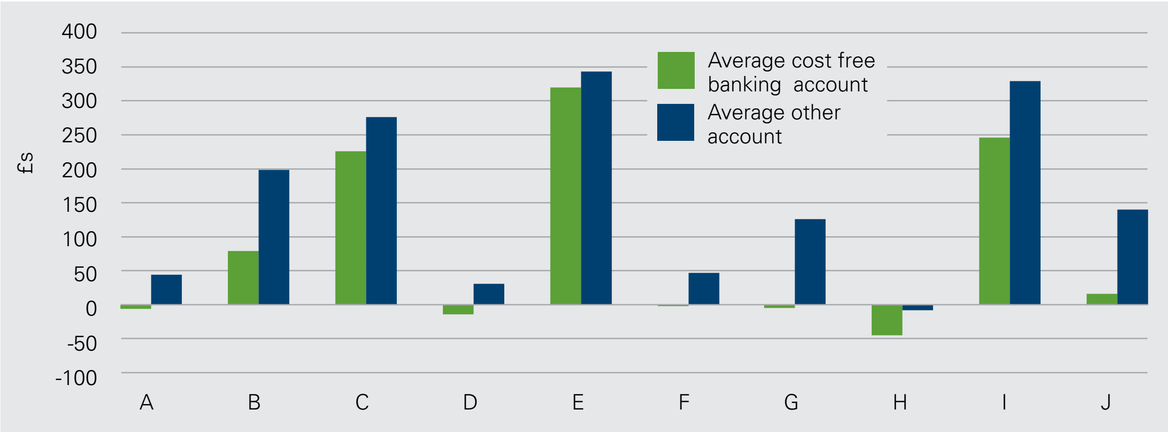
Appendix 19: Annual costs of current account use by type of current account supplier (£)

		Building or friendly society	*Converted building society*	*International bank or insurer*	*High street bank*	*Small UK bank or insurer*
Actual costs	Lower income	75	102	90	143	105
	Middle income	10	9	27	62	32
	Higher income	9	27	40	106	32
	Overall	35	52	59	109	61
Costs relative to the base rate	Lower income	65	91	77	124	88
	Middle income	79	99	102	131	104
	Higher income	126	189	175	228	171
	Overall	85	122	116	157	116
Costs relative to firm costs	Lower income	50	30	73	53	75
	Middle income	48	48	51	97	54
	Higher income	69	51	79	112	54
	Overall	54	43	70	86	64

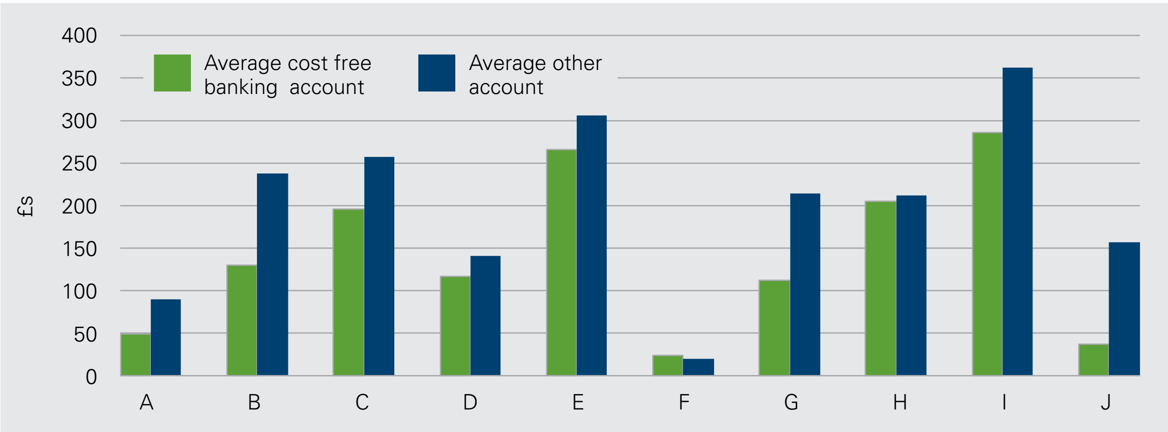
Appendix 20: Differences between the customer costs for 'free banking' accounts and other current accounts (£)

	Customer/ income group	*Average cost 'free banking' account*	*Average other accounts*	*T test*	*Sig*
Actual costs	A	–£6	£44	–51.41	0.00
	B	£79	£198	–99.98	0.00
	C	£226	£276	–25.73	0.00
	D	–£14	£31	–41.90	0.00
	E	£320	£343	–8.31	0.00
	F	–£2	£47	–51.30	0.00
	G	–£5	£126	–126.04	0.00
	H	–£45	–£8	–21.54	0.00
	I	£246	£329	–49.64	0.00
	J	£16	£140	–135.03	0.00
Costs relative to base rates	A	£49	£90	–42.51	0.00
	B	£130	£238	–79.30	0.00
	C	£196	£257	–33.19	0.00
	D	£117	£141	–19.77	0.00
	E	£266	£306	–15.83	0.00
	F	£24	£20	19.31	0.00
	G	£112	£214	–73.38	0.00
	H	£205	£212	–3.94	0.00
	I	£286	£362	–41.93	0.00
	J	£37	£157	–128.85	0.00
Costs relative to independent deposits/ lending	A	£14	£62	–47.67	0.00
	B	£102	£220	–95.43	0.00
	C	£121	£202	–39.86	0.00
	D	£49	£83	–28.93	0.00
	E	£131	£198	–23.48	0.00
	F	£7	£7	6.20	0.00
	G	£48	£175	–112.43	0.00
	H	£91	£101	–5.19	0.00
	I	£116	£208	–43.01	0.00
	J	£16	£142	–134.69	0.00

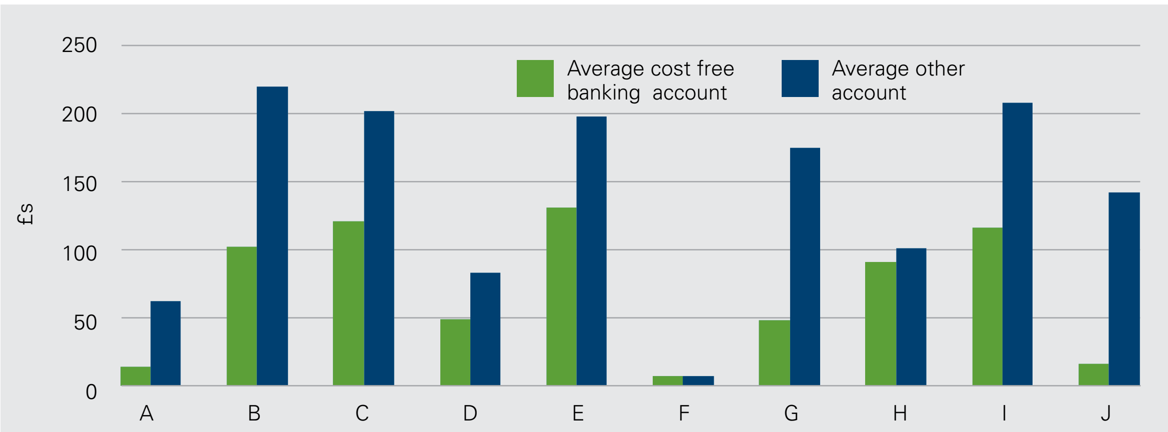
Appendix 21: Differences between the customer costs for 'free banking' accounts and other current accounts



Actual customer costs for free banking and other current accounts by representative customer.



Customer costs relative to base rates for free banking and other current accounts by representative customer.



Customer costs relative to independent deposits/lending for free banking and other current accounts by representative customer.