

Retail banking market investigation: provisional findings report

Appendix 5

Appendix 5.1: Personal current account market structure

Appendix 5.2: Personal current account revenue analysis

Appendix 5.3: Profitability of personal current account customers and products

Appendix 5.4: Personal current account pricing analysis

Appendix 5.5: Personal current account quality

Appendix 5.6: Innovation in personal current accounts

Personal current account market structure

Overview

1. This appendix sets out the provisional evidence on structure and concentration in the market for PCAs.
2. Where possible, we have calculated concentration estimates separately for each of the geographic markets of GB and NI. However, in some cases data limitations mean we have used UK-wide data.
3. The market shares presented in this section have been calculated primarily using data submitted by the banks in response to our information requests.¹ In some cases data is not available for all banks in all years. Whilst we have sought to cross-check our findings against those obtained from the GfK Financial Research Survey (FRS), we recognise that particular caution should be exercised in interpreting market shares where data on a market participant(s) is not available.

Background

4. Based on data submitted by the banks, we estimate that there were approximately 67 million active PCAs in GB in 2014,² and 1.7 million in NI (see Table 1). We find that in both GB and NI, around 70% of active accounts received average incoming monthly payments of more than £500. In 2014, approximately 5.9 million accounts per year were opened in GB and 130,000 per year in NI.

Table 1: Summary of GB and NI PCA markets

	'000s			
	GB		NI	
Accounts	2013	2014	2013	2014
Active accounts	65,772	67,331	1,712	1,754
Main accounts	47,003	48,980	1,200	1,237
New accounts	5,867	5,914	134	131

Source: CMA calculations based on data submitted by banks.

¹ An information request was sent to the following banking groups: AIB, Barclays, BoI, Clydesdale, Co-op, Danske, HSBCG, LBG, Metro, Nationwide, RBSG, Santander and TSB. In the case of Co-op and Metro, a shorter version of the information request was submitted to reflect the relative size of these banking groups' operations and the disproportionate resource impact that a full information request may have created.

² Defined as an account that has had at least one customer-generated payment or transfer (including SO and DD, but excluding charges and interest on the account) coming into, or leaving, the account in the previous 12 months.

5. New account opening in the UK has remained broadly constant since 2011 at around 6 million accounts per year (see Table 2). Approximately 4.5 million accounts were closed over same period such that the rate of net account opening was around 2% per year.

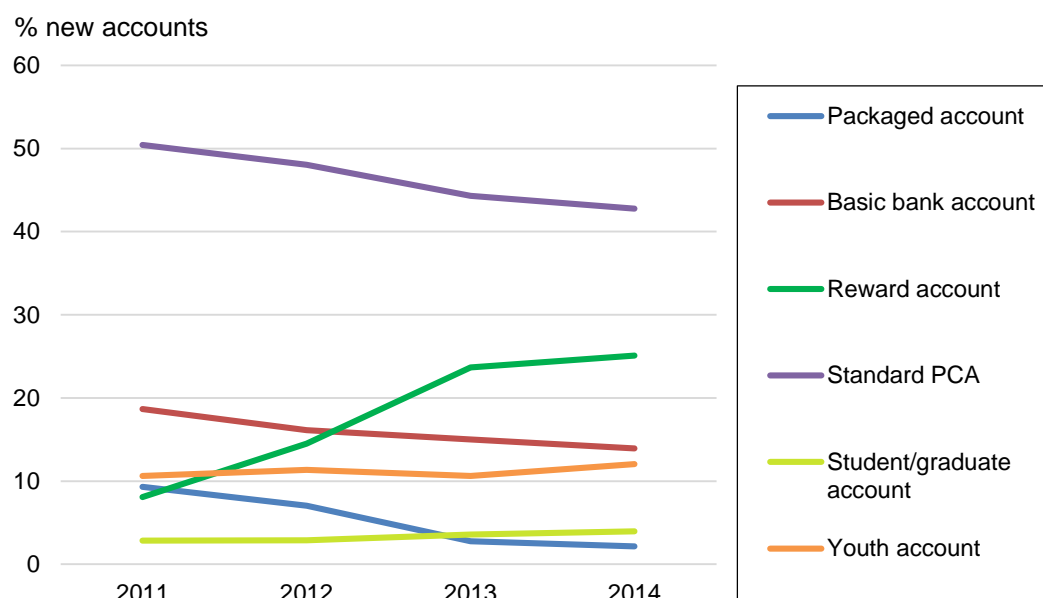
Table 2: Summary of UK net account opening

Accounts	2011	2012	2013	2014
Total accounts ('000s)	75,139	76,959	78,761	80,638
Accounts opened ('000s)	5,910	5,873	6,015	6,050
Accounts closed ('000s)	4,734	4,488	4,355	4,532
Net account opening (%)	2	2	2	2

Source: CMA calculations based on data submitted by banks.

6. Figure 1 plots the distribution of new PCAs by type of account.³ Around two-thirds of new accounts opened in the UK in 2014 were either standard or reward (interest-paying) accounts; nearly 15% were BBAs; and around 2% were packaged (added-value) accounts. The remainder of new accounts opened were either youth or student/graduate accounts. The proportion of new interest-paying (or reward) accounts has risen by over 15 percentage points since 2011 while the combined proportion of standard and added-value accounts has reduced by a similar amount. There has also been a slight reduction in basic accounts opening over the same period (around 5%).

Figure 1: Distribution of UK new PCAs by type of account



Source: CMA calculations using data submitted by banks.

³ Early in the investigation, we asked banks to identify student/graduate, youth, packaged or added-value (offering additional benefits, for example insurance, to account holders for a monthly fee) and interest-paying PCAs (pays interest on some or all accounts with less than £5,000 credit balance). We believe most PCAs identified as interest-paying are those that would be regarded as reward accounts. The remainder of PCAs were classified as 'standard'.

Evidence on market structure

7. Evidence from banks' internal strategy documents has indicated that competition in the PCA market has focused on acquiring and retaining the primary banking relationship with customers, ie on the PCA into which the customer's income is paid and from which direct debits and other payments are paid.⁴ In assessing market shares, we have therefore focused on such primary or 'main' accounts. When survey data is used a main account is defined as one which the survey respondent identifies as their main account; and when data from banks is used we define a main account as one where on average £500 or more is paid in per month.⁵
8. Our findings are not sensitive to the choice of account definition or source used, and market shares calculated using active accounts are very similar (for example, see Table 3 below).

Table 3: 2014 GB market shares calculated using different measures

Banking group	All accounts* GfK FRS data	Active accounts† CMA data	%	
			Main accounts CMA data	GfK FRS data
AIBG	[<]	[<]	[<]	[<]
Barclays	[10–20]	[10–20]	[10–20]	[10–20]
Bol	[<]	[<]	[<]	[<]
Clydesdale	[0–5]	[0–5]	[0–5]	[0–5]
Co-op‡	[0–5]	[0–5]	[0–5]	[0–5]
HSBCG	[10–20]	[10–20]	[10–20]	[10–20]
LBG	[20–30]	[20–30]	[20–30]	[20–30]
Metro‡	[0–5]	[0–5]	[0–5]	[0–5]
Nationwide	[5–10]	[5–10]	[5–10]	[5–10]
RBSG	[10–20]	[10–20]	[10–20]	[10–20]
Santander	[10–20]	[10–20]	[10–20]	[10–20]
TSB	[0–5]	[0–5]	[0–5]	[0–5]

Source: CMA calculations using data submitted by banks and GfK FRS data.

*CMA data not available.

†GfK FRS data not available.

‡Co-op and Metro only provided UK-level data. We calculated their GB market shares as follows:

(i) For Co-op, we weighted its account data using the ratio of total GB active/main accounts to total UK active/main accounts in 2014.

(ii) Since Metro does not have branches in NI, we assumed that the distinction between the UK and GB did not matter in its case.

Great Britain

9. Figure 2 plots the share of each banking group in the number of GB main PCA accounts since 2005 based on survey data from the GfK FRS.

⁴ Some customers may have two such accounts: for example, a joint account with their partner, from which joint expenses are paid, and an individual account, from which individual expenses are paid, with regular payments from one to the other.

⁵ More precisely, an account is defined as a main account if at least an average of £500 credit turnover in the previous 12 months (or since the account was opened if less than 12 months). About 70% of active accounts in both GB and NI received average incoming monthly payments of more than £500.

Excluding the impact of mergers and divestments, we find that market shares have remained fairly stable over this period.⁶

Figure 2: GB market shares by volume of main PCAs

[✂]

Source: CMA analysis of GfK Financial Research Survey.

10. Figure 2 plots the share of each banking group in the number of new GB PCAs opened (including accounts opened both by switchers and new to market customers).

Figure 2: GB market shares by volume of new PCAs

[✂]

Source: CMA analysis of GfK Financial Research Survey.

11. Data on net account opening (ie net of the number of accounts closed each year) is only available at the UK level (see Figure 3 below).

Figure 3: UK PCA net account opening in 2014

[✂]

Source: CMA calculations using data submitted by banks.

Northern Ireland

12. We note that the share of each bank in the number of main PCAs is similar to its share in active PCAs.
13. Table 3 below sets out the market shares of each banking group in the number of active and main PCAs in NI, using data submitted by the banks. We note that the share of each bank in the number of main PCAs is similar to its share in active PCAs.

⁶ We have based GB volume market shares on GfK FRS data as it is available over ten years. GB volume market shares for 2011–2014 using data from the banks were similar.

Table 3: NI PCA market shares

Banking group	Active PCAs		Main PCAs		New PCAs		%
	2013	2014	2013	2014	2013	2014	
RBSG	[20–30]	[20–30]	[20–30]	[20–30]	[20–30]	[10–20]	
Danske	[10–20]	[10–20]	[20–30]	[10–20]	[10–20]	[10–20]	
Santander	[10–20]	[10–20]	[10–20]	[10–20]	[20–30]	[20–30]	
AIBG	[10–20]	[10–20]	[10–20]	[10–20]	[5–10]	[5–10]	
LBG	[10–20]	[10–20]	[10–20]	[10–20]	[10–20]	[10–20]	
Bol	[10–20]	[10–20]	[10–20]	[5–10]	[10–20]	[10–20]	
Nationwide	[5–10]	[5–10]	[5–10]	[5–10]	[5–10]	[5–10]	
Barclays	[0–5]	[0–5]	[0–5]	[0–5]	[0–5]	[0–5]	
HSBCG	[0–5]	[0–5]	[0–5]	[0–5]	[0–5]	[0–5]	
Other	[0–5]	[0–5]	[0–5]	[0–5]	[0–5]	[0–5]	

Source: CMA calculations based on data submitted by banks.

14. While the set of PCA providers (and their corresponding market shares) differs from the GB PCA market, we find that overall levels of concentration are similar. For example, the HHI arising from shares in the number of main PCAs in NI was around 1,511 in 2014, compared with 1,550 in GB.

Personal current account revenue analysis

Overview

1. This appendix sets out the results of our provisional analysis of PCA net revenue.
2. In undertaking this analysis we have sought to gain an understanding of the primary sources of PCA net revenue (and how these have evolved over time). We have also undertaken comparisons of net revenue per main account to assess the degree of variability between banking groups.
3. The analysis in this appendix relates to banks' UK revenue, and includes results from banks operating across the UK (eg RBSG and Santander) as well as from banks whose UK operations are primarily in GB (eg Barclays and HSBCG), and banks whose UK operations are primarily in Northern Ireland (AIB, BoI and Danske). As such we consider the results are broadly applicable to both of the geographic markets we identified (GB and Northern Ireland).

Aggregate bank revenue per main personal current account

4. We have considered net revenue comprising the following:
 - (a) receipts from fees and interest charged on overdrafts;
 - (b) receipts from other charges and sources of PCA revenue, including interchange fees;
 - (c) **less** any interest paid to customers on credit balances together with any other payments made to customers (eg cashback); and
 - (d) **plus** the value that banks obtain from net credit balances (ie the value of funds from credit balances less the cost of funding overdrafts).
5. Table 1 summarises revenue (£ per main account) aggregated across all the banks providing data in response to our aggregate data request.¹

¹ AIB, Barclays, BoI, Co-op, Clydesdale, Danske, HSBCG (including First Direct and M&S Bank), LBG (including BoS and Halifax), Metro, Santander, TSB, RBSG (including NatWest and Ulster).

Table 1: Analysis of revenue (£ per main PCA per year*) from 2011 to 2014

Type of revenue	£ per main PCA				%
	2011	2012	2013	2014	2014
Arranged overdraft (O/D)	37.27	35.66	35.22	34.86	20
Unarranged O/D and unpaid item fees	29.30	28.83	26.74	24.45	14
Foreign ATM and debit card fees	9.85	8.68	8.60	8.67	5
Interchange fees (debit card)	15.47	15.77	16.43	17.01	10
Monthly account fees	29.74	25.91	23.42	21.24	12
Other receipts (net)†	3.97	2.16	2.69	3.53	2
Total receipts from charges and interest	125.61	117.00	113.10	109.76	62
Interest payments to customers	-8.19	-7.55	-11.95	-18.17	-10
Other payments to customers	-0.09	-0.81	-2.00	-2.99	-2
Net value of funds‡	97.84	85.38	80.56	88.03	50
Net revenue	214.94	194.02	179.71	176.62	100

Source: CMA calculations based on data submitted by banks in response to data requests.

*Aggregate revenue is divided by the average number of main PCAs at the start and end of the year.

†Other receipts consists of revenue from charges for failing to meet account criteria, revenue from charges for withdrawing cash from ATMs abroad, revenue from charges relating to cheques, revenue from charges relating to domestic payments, revenue from charges relating to foreign payments, revenue from account management charges, other revenue from account holders and other revenue which is not from account holders.

‡Banks' own assessment of the value of funds from PCA credit balances less cost of funding PCA debit balances (except for Clydesdale, Co-op and Metro, where the weighted average for the other banks has been used).

Note: 2011 data is not available for Clydesdale, Danske, Santander and RBSG; 2012 data is not available for Danske. In order to assess the effect of different coverage in 2011 from 2012, we recalculated 2012 revenue per main account for those banks providing 2011 data. The reduction in average net revenue per main account between 2011 and 2012 for these banks was 6% (compared to the 10% for all banks shown in the table).

6. There are a number of potential issues in interpreting the data in Table 1.

(a) The net value of funds is an important source of PCA revenue but different banks have different transfer prices. This point is discussed further below (see paragraphs 10 to 14).

(b) Interest, cashback and other payments to customers are included, but non-pecuniary customer benefits are mostly omitted. Packaged or added-value PCAs include various types of insurance as a benefit, and the omission of any valuation of this benefit is likely to lead to overstatement of the net revenue from these accounts. While it is difficult to estimate the value consumers attribute to these benefits, we obtained information from the five largest banks on the cost incurred in providing benefits: averaged across all accounts, this was about £13 per main account in 2014 (ie if the cost of providing packaged account benefits is deducted, average net revenue in 2014 would reduce from £177 per main account to about £165 per main account).

(c) There may be differences between banks in how they have defined revenue and how or when they recognise revenue.

(d) Limited data is available for 2011 (see note to Table 1).

7. The results in Table 1 reflect a weighted average across PCAs. Trends over time will reflect both general trends affecting all accounts and the composition

of accounts (eg the introduction of Santander's 123 account has affected interest payments and average balances and hence the net value of funds). The following points emerge from Table 1:

- (a) Aggregate net revenue per main account has declined over time. The main factors behind this are:
- a decline in monthly account fees (possibly associated with a tightening of point of sale regulation on packaged accounts);
 - a decline in unarranged overdraft and unpaid item fees (revenue from arranged overdraft fees has also declined slightly);
 - an increase in interest paid on credit balances; and
 - a decline in net value of funds on credit balances (up to 2013, lower interest rates on credit balances more than offset an increase in average balances per main account); this is likely to reflect a reduction in term interest rates and might reverse if and when interest rates increase.
- (b) In 2014, the most important sources of PCA revenue were overdraft and unpaid item fees (accounting for about one-third of net revenue) and the value of funds from net credit balances (accounting for about half of net revenue, or 40% if interest paid to customers is subtracted).
- (c) No bank included revenue from cross-selling other products to PCA customers.
8. The data in Table 1 shows a decline in average net revenue per main account of about 18% over three years. However, not all banks provided 2011 data and, if we adjust for this, the decline in net revenue per main account reduces to 14%.²
9. We considered some possible factors affecting average net revenue per main account.
- (a) One reason for declining net revenue per main account is the decline in the number of packaged accounts. But customers who no longer had a packaged account also lost the benefits from those accounts, and banks saved the cost of providing the benefits. We estimated the reduction in costs per main account for the five largest banks between 2011 and 2014

² The reduction in average net revenue per main account between 2011 and 2012 in Table 1 is about 10%. This reduces to 6% for banks providing data for both 2011 and 2012.

represented about 13% of 2011 monthly account fees, compared to an actual reduction, adjusted for coverage,³ of 18%. Thus the majority of the reduction in monthly account fees appears to have been offset by reductions in the costs of packaged account benefits.

- (b) The number of main accounts (defined on the basis of accounts receiving incoming payments of over £500 per month) increased over the period substantially faster than the adult UK population. We estimate the excess increase in number of main accounts over the population was about 11%. If we assume this was all due to multi-banking, we might expect charges and interest revenue per main account to decline by 10%⁴ (since we would expect multi-banking customers to incur charges on one or other of their accounts but not on all of them). Excluding packaged accounts (considered at (a)), the decline adjusted for 2011 coverage differences was slightly less than this at 6%. Thus the decline in charges and interest revenue appears to be more than fully explained by the increase in the number of main accounts.

If we adjust for both these factors, the underlying decline in net revenue per main account would be about 8% rather than 14%. However, no allowance is made for inflation over the period – the increase in the CPI was about 7%.

Value of PCA funds

10. We asked the banks to provide data on annual average credit balances and the value of funds from these balances, together with data on debit balances and the cost of funding these balances. We used this data to estimate the average transfer price for credit and debit balances, and the net value of PCA funds (ie the value of funds from credit balances less the cost of funding debit balances divided by the aggregate net credit balance).⁵
11. Table 2 summarises this data. It also shows the average net balance per main account that is also a driver of the net value of funds in Table 1.

³ The adjustment for coverage is that referred to in the previous paragraph.

⁴ $(100-100/(100+11))\%$.

⁵ We used the net value of funds since PCAs include accounts with both credit and debit balances. We considered it would be inconsistent to include in revenue the value of funds from credit balances and the interest earned from debit balances without netting off the cost of funds needed for debit balances.

Table 2: Value and cost of funds applied to credit and debit balances of PCAs

	Value of funds (credit) %	Cost of funds (debit) %	Net value of funds %	Average net balance per main account	Number of main accounts§
<i>By bank for 2014</i>					
LBG	[X]	[X]	[X]	[X]	[X]
Barclays	[X]	[X]	[X]	[X]	[X]
RBSG	[X]	[X]	[X]	[X]	[X]
HSBC Group	[X]	[X]	[X]	[X]	[X]
Santander	[X]	[X]	[X]	[X]	[X]
Nationwide	[X]	[X]	[X]	[X]	[X]
TSB	[X]	[X]	[X]	[X]	[X]
Clydesdale				[X]	[X]
Co-op				[X]	[X]
Ulster	[X]	[X]	[X]	[X]	[X]
Danske	[X]	[X]	[X]	[X]	[X]
AIB	[X]	[X]	[X]	[X]	[X]
Bol	[X]	[X]	[X]	[X]	[X]
Metro				[X]	[X]
<i>By year*</i>					
2011†			3.54	2,762	
2012‡			3.15	2,706	45,078,541
2013			2.62	3,073	47,330,265
2014			2.42	3,636	49,171,414

Source: CMA calculations.

*Weighted average for all banks except Clydesdale, Co-op and Metro.

†Excludes Danske, RBSG and Santander.

‡Excludes Danske.

§Average of number at start and end of year.

Note: The net value of funds is the absolute difference between the value and cost of funds as a percentage of net balances. So, the net value of funds is $(vB - cD)/(B - D)$ where v is value of credit funds (%), B is average credit balance over the year, c is cost of debit funds (%) and D is average debit balance over the year.

12. Table 2 shows that there are differences between banks in the valuation of funds, presumably reflecting differences in transfer pricing policies (which are extremely complex for the larger banks). One reason for differences may be that different banks have different loan-to-deposit ratios. Given banks' general preference for retail over wholesale funding of retail loans, a bank with a high loan-to-deposit ratio (or wishing to increase its loans) may put a higher value on funds from its PCAs.
13. Banks tend to place a value on funds higher than the short-term interest rate (0.5% throughout the period 2011 to 2014). Net revenue in Table 1 would be considerably lower if funds were valued at short-term interest rates.
14. The value placed on funds has, however, declined over time. This is likely to reflect a reduction in term interest rates and might reverse if and when interest rates increase.
15. Average net balance per account increased from £2,762 in 2012 to £3,636 in 2014.

Comparison of revenue per main PCA across banking groups

16. In the updated issues statement, we indicated we were considering interpreting differences in net revenue per account as an alternative 'top-down' measure of price differences.
17. Points made by parties included the following:
 - (a) Average net revenue is not a measure of price faced by individual customers and will reflect differences in customer characteristics. Averages per account depend on the mix of customers served, which will vary across banks, reflecting their respective business models and the customers they target and attract. The number of main accounts was not an ideal measure of volume since it would be desirable to reflect other accounts to some extent and there was variation between banks and products in the ratio of main accounts to total accounts.
 - (b) Many providers use increasingly sophisticated eligibility criteria (and often monthly fees for customers not meeting those criteria) to control and influence the customer mix they attract. A provider may therefore have lower average revenue than another provider because its customers make less use of overdrafts, hold lower balances or transact less, rather than because of any difference in prices. Furthermore, any comparison of average prices alone also does not account for: quality (eg mobile app features, ease of use and access, range of products, and service); customer mix (eg eligibility criteria will determine revenue per customer as well as price levels); costs of service (different business models, such as different credit risk appetite or branch availability, have different costs to serve); and customer life stage (providers with newer customers have a higher proportion of customers on introductory offers, particularly for BCAs).
 - (c) It would be difficult to make adjustments for differences in cost to serve: different banks were unlikely to measure the costs of packaged account benefits in the same way, and default information needed to be very detailed.
 - (d) Interchange fee income, which was included in our analysis, would change following the implementation of the European Union's Interchange Fee Regulation.
 - (e) A top-down approach, in which financial data is used to estimate a unit cost paid by customers at different providers, offers the potential to provide a useful sense-check to the results of the bottom-up analysis. However, to provide meaningful results, the CMA would need to

undertake much more detailed analysis that fully controlled for the differences in services provided. Essentially, this would require the CMA to conduct a product profitability assessment.

18. We agree that the above issues are relevant in considering net revenue per account as a measure of price. We nevertheless believe there is some value in making comparisons of net revenue per account.
19. Table 3 shows the comparison for 2014 across all accounts offered by each banking group. In order to make comparisons between banking groups, we have used a standardised percentage net value of funds for each banking group. This is the weighted average across banks, ie the value shown in the lower section of Table 2 (eg 2.42% for 2014). The final column shows the effect, for the five largest banks, of deducting their estimated costs of providing packaged account benefits.⁶
20. We note the comparison may also be affected by customer characteristics if these affect operating costs (for example a bank with a higher proportion of less creditworthy customers would, other things being equal, obtain higher revenue from overdraft charges but would also be likely to have higher impairment costs). We were not able to adjust for this.⁷

⁶ HSBCG said that the adoption of standardised value of funds had serious limitations since it did not reflect the true economic costs of banks –the value of funds would differ by bank depending on the: institution's capital strength; balance sheet strategy; and perspectives on the stability of funding. However, we consider differences may also simply reflect different approaches to fund valuation and, even if they do to some extent reflect underlying economic costs, it is not clear that these should be included in a comparison of net revenue.

⁷ We considered adjusting for expected default losses and obtained data from the five largest banks on their expected default losses. However, different banks appeared to have used different approaches and it was not clear that the data could be used to adjust revenue. Paragraph 5.51 discusses trends in impairment costs.

Table 3: Analysis of net revenue per main PCA using standardised net value of funds (£ per main PCA per year), 2014

<i>Bank</i>	<i>Arranged O/D</i>	<i>Unarranged O/D and unpaid item fees</i>	<i>Foreign ATM and debit card fees</i>	<i>Interchange fees (debit card)</i>	<i>Monthly account fees</i>	<i>Other receipts (net)</i>	<i>Total receipts from charges and interest</i>	<i>Interest payments to customers</i>	<i>Other payments to customers</i>	<i>Standardised net value of funds</i>	<i>Standardised net revenue</i>	<i>Standardised net revenue (adjusted for cost of packaged account benefits*)</i>
LBG	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Barclays	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
RBSG	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
HSBCG	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Santander	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Nationwide	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	
TSB	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	
Clydesdale	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	
Co-op	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	
Ulster	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	
Danske	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	
AIB	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	
Bol	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	
Metro	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	

Source: CMA analysis.

*Cost of packaged accounts is only available for the five largest banks. Santander told us it had no on-sale or off-sale packaged accounts.

Profitability of personal current account customers and products

Overview

1. In this appendix, we consider the profitability of PCAs across different customers and products, and seek to address the following questions:
 - (a) Are PCAs profitable when considered separately from the banks'¹ wider retail banking offerings?
 - (b) Does the profitability of PCAs vary by customer usage (eg propensity to use overdraft facility) or customer type (eg whether the customer is a primary or main banking customer), and if so, how much do different customer groups contribute to the profitability of PCAs?
2. The purpose of this appendix is to understand how and to what extent banks assess the profitability of PCA customers and products, and not to conduct a detailed financial analysis of PCA customer and product profitability. Therefore, our assessment is based on financial data provided by the banks and generally reflects accounting (and not economic) profits.

Are PCAs profitable when considered separately from retail banking?

3. We do not have a comprehensive view of the profitability of PCAs across all of the banks, as they take different approaches in assessing the performance of PCAs, and they do not all assess the profitability of PCAs in the normal course of business:
 - (a) Barclays told us that it used a number of financial metrics to assess the profitability and financial performance of its PCA business, including profit before tax (PBT); cost to income ratio; return on equity (RoE); and return on risk weighted assets (RoRWA), and that these financial metrics were complemented by non-financial metrics, such as net promotor score and engagement score, to give a more rounded view of PCA performance.
 - (b) HSBCG told us that it did not [REDACTED], but it did monitor the performance of all PCA products through a number of financial metrics (eg fee income; average balance; debit card income; stock growth; and net margins) and

¹ We focus our analysis on the PCA banking activities of the five largest banks in the UK (ie Barclays, HSBCG, LBG, RBSG and Santander), as together they had a combined market share (by number of main PCAs) of over [REDACTED]% in 2014. See Section 5, Table 5.1 for further information.

non-financial metrics (eg new business volumes; attrition volumes; average number of products per customer; and dormant accounts).

(c) LBG told us that it used a variety of measures to monitor the financial and operational performance of each of its personal banking products, and these measures included profit before tax (PBT), which was reported to and reviewed by senior management on a monthly basis.

(d) RBSG told us that [REDACTED].

(e) Santander told us that [REDACTED].

4. The banks' assessments of the profitability of their PCA propositions in recent years (and in future years where available) are presented in Annex A. The information provided by the banks in Annex A suggests that, through the economic cycle, for [REDACTED], PCAs are profitable, and for [REDACTED] personal banking – including the provision of PCAs – is profitable.

Does the profitability of PCAs vary by customer usage or customer type, and if so, how much do different customer groups contribute to the profitability of PCAs?

5. We do not have a comprehensive view of the profitability of different PCA customers across all of the banks, as they take different approaches in assessing the performance of customers, and they do not all assess the profitability of PCA customers in the normal course of business:

(a) Barclays told us that it had not consistently tracked customer profitability by segment in the normal course of business over the past five years. It said that, although it had undertaken a number of discrete analyses of customer segment profitability on an ad hoc basis, these analyses varied in their approach to customer segmentation cost allocation. Therefore, it was not possible to provide these discrete analyses over multiple time periods in a consistent format.

(b) HSBCG told us that [REDACTED] and instead, it measured the full customer relationship value through two key elements: (a) [REDACTED]; and (b) [REDACTED].

(c) LBG told us that it did not measure personal banking customer level profitability in the usual course of business. One of the reasons for this was that costs relating to the provision of PCAs were largely common costs (with some fixed costs) and, therefore, it made more sense to look at the income different customers generated rather than customer profitability.

(d) RBSG told us that [REDACTED].²

(e) Santander told us that [REDACTED].

Customer usage

6. There are a number of ways in which the manner in which a customer uses their PCA impacts upon the returns that they generate for their bank:
 - (a) The level of credit balances held in PCAs are an important source of funding for the banks and a driver of net interest income.
 - (b) The volume and type of transactional activity undertaken by the customer relates directly to the income generated by that customer for their bank. The income generated by a customer for their bank is determined by their transactional method (eg electronic payments tend to incur a higher fee than cash and manual payments, although the banks incur higher processing costs) and channel usage (eg the cost to serve those customers who use branches is considerably higher than the cost to serve those customers who use digital or telephone banking).
 - (c) The income generated for the banks from overdraft fees and interest is a driver of the profitability of PCAs. The income generated by the banks from overdraft fees and interest appears to have declined in recent years. It is unclear as to the extent that this has been driven by a decline in overdraft usage and the changes made by a number of the banks to their overdraft propositions to increase the transparency of their charging structures (eg moving from interest charges to daily capped fees and the use of mobile text alerts to inform customers when they had entered into an unarranged overdraft, which would allow the customer to top-up their account before incurring overdraft fees and interest).
7. We present the evidence provided by the banks to demonstrate how these features impact upon PCA profitability in Annex B.

Customer type

8. The following characteristics of PCA customers impact upon the profits that they generate for their bank:
 - (a) The type of PCA held by the customer. The evidence provided by the banks suggests that:

² [REDACTED]

- (i) Packaged accounts tend to be the most profitable type of PCA, as they generally require a monthly fee for their use and are more likely to be held by main banking customers who are active users of their account, and typically hold higher credit balances and other personal banking products.
 - (ii) Standard and reward PCAs are less profitable than packaged accounts, as there may be no monthly fee payable by customers; there is a greater proportion of secondary PCA customers within these groups; and although they will generally be active users, hold credit balances and other personal banking products, this will be to a lesser extent than packaged account customers.
 - (iii) Basic bank accounts (BBAs) and non-adult PCAs (ie youth, graduate and student accounts) tend to be less profitable than standard and reward PCAs, due to typically low credit balances, no (BBAs) or interest-free (non-adult PCAs) access to an overdraft facility. Further, these customers are unlikely to have a great need for other personal banking products.
- (b) Whether a PCA customer is a main/primary or secondary banking customer.³ Primary banking customers tend to hold a greater proportion of their personal banking products with their PCA provider, and tend to be more active users of their PCA.
9. We present the evidence provided by the banks to demonstrate how these characteristics impact upon PCA profitability in Annex C.

³ We understand that a bank deems a customer to be a primary banking customer if they hold their main transactional account (ie the account in which they hold their income and from which the majority of their payments are made) and therefore, their main banking relationship with them, and that all other customers are deemed to be secondary banking customers, as they hold their main banking relationship elsewhere.

Annex A: Personal current account profitability

1. The differences in the information provided by the banks and presented in this annex reflects both the different information provided by each bank ([REDACTED]), and the different revenue and cost allocation methods utilised by each of the banks.

Barclays

2. Table 1 shows [REDACTED]. Barclays told us that it looked at the performance of its businesses through the economic cycle; [REDACTED].

Table 1: [REDACTED]

[REDACTED]

Source: Barclays.

HSBC Group

3. Table 2 shows that [REDACTED].

Table 2: [REDACTED]

[REDACTED]

Source: HSBC.

(a) HSBCG told us that [REDACTED].

Lloyds Banking Group

4. Table 3 shows that [REDACTED] from 2012 to 2014, and is forecast to [REDACTED] in 2015 and 2016.

Table 3: [REDACTED]

[REDACTED]

Source: LBG.

[REDACTED]

5. LBG told us that the key drivers of financial performance were:
 - (a) Net interest income, which was a function of customer deposit and overdraft balances and the banking margin earned on those balances:
 - (i) the growth in total deposit balances reflected the low interest rate environment, as customers chose to hold their funds in PCA rather than in savings accounts;

- (ii) margins on deposits had been compressed by low interest rates;
- (iii) the slowdown in growth of overdraft balances was due to a general reduction in customers' use of credit; and
- (iv) the reduction in margins on overdraft balances reflected reductions in overdraft fees.

(b) Other operating income, which comprised:

- (i) net income from packaged account fees (ie the fees charged to customers less the cost of providing the attached benefits), which had fallen due to a lower volume of sales of packaged accounts;
- (ii) net income from debit card and ATM interchange fees; and
- (iii) returned items fees, which had fallen due to the increased adoption of mobile banking.

(c) Direct costs (eg IT and marketing).

(d) Indirect costs, which were allocated to the PCA business.

RBS Group

6. Figure 1 shows that [REDACTED] in 2013 and is likely to [REDACTED] from 2014 to 2017.

Figure 1: [REDACTED]

[REDACTED]

Source: RBSG.

[REDACTED]

7. RBSG told us that [REDACTED], and that the key drivers of performance were:

- (a) [REDACTED];
- (b) [REDACTED]; and
- (b) [REDACTED].

Santander

8. Table 4 shows that Santander's [REDACTED] from 2012 to 2014, and is forecast to [REDACTED] in 2015 and 2016.

Table 4: [REDACTED]

[REDACTED]

Source: Santander.
[✂]

Annex B: Personal current account profitability by customer usage

Credit balances

1. HSBCG told us that the two largest generators of PCA income were credit interest and overdraft interest and fees, and therefore, customers who regularly used overdrafts and/or held high credit balances would be relatively more profitable than customers who maintained low but stable credit balances (if viewed in isolation from the longer-term benefits of acquiring and retaining the customer relationship).
2. Figure 2 shows that that in 2012, of the [REDACTED] of LBG's highest value PCA customers, [REDACTED] had a monthly credit turnover of [REDACTED], compared with only [REDACTED] of the [REDACTED] of PCA customers.

Figure 2: [REDACTED]

[REDACTED]

Source: LBG.

Transactional activity

3. Figure 3 shows that [REDACTED].

Figure 3: [REDACTED]

[REDACTED]

Source: RBSG.

4. Barclays told us that from a channel usage perspective, active customers who chose to interact purely through the digital channel represented the lowest cost to serve group, and customers who chose to interact via a number of channels, but with a bias towards branches, represented the higher cost to serve group.
5. HSBCG told us that HSBC customers⁴ who primarily used branches would be typically less profitable than customers who primarily used other channels, because the cost to serve customers using branches was considerably higher than the cost to serve customers using digital or telephone banking (eg in 2016, the branch network was forecast to account for around [REDACTED]% of customer interactions and circa [REDACTED]% of total channel costs).

⁴ This data is applicable to the HSBC brand only.

Overdraft usage

6. Figure 4 shows that [REDACTED].

Figure 4: [REDACTED]

[REDACTED]

7. Table 5 shows the profitability of RBSG's primary FIIC PCA and packaged account in 2014 split by deciles and including and excluding income from unauthorised overdraft fees. Table 5 shows that both the FIIC PCA and packaged account were profitable, even when excluding unauthorised overdraft income. RBSG told us that:

- (a) the proportion of FIIC PCAs that broke even when unauthorised overdraft income was excluded reduced by [REDACTED]% from [REDACTED]% to [REDACTED]% (ie around [REDACTED] FIIC PCAs were only profitable when unauthorised overdraft income was included); and
- (b) [REDACTED]% of packaged accounts were profitable without including unauthorised overdraft income.

Table 5: RBSG personal banking products profitability by decile, 2014

£

Decile	Primary FIIC PCA		Primary packaged account	
	Average profitability per account (including unauthorised overdraft income)	Average profitability per account (excluding unauthorised overdraft income)	Average profitability per account (including unauthorised overdraft income)	Average profitability per account (excluding unauthorised overdraft income)
1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
3	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
4	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
5	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
6	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
7	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
8	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
9	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
10	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Product average	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: RBSG.

Notes:

[REDACTED]

8. Barclays told us that the following changes to its overdraft proposition had resulted in a gradual reduction in overdraft fees:

- (a) The introduction of targeted SMS notification in April 2013.
- (b) A shift from Personal Reserve Fees and an interest-based charging structure to a more transparent daily rate model in 2014.

- (c) The removal of income from guaranteed transaction fees.
 - (d) The introduction of a cap on daily paid and unpaid transaction fees from five per day to one per day in January 2014.
9. HSBCG told us that it introduced changes to its personal banking overdraft proposition (for its HSBC and First Direct brands)⁵ in November 2014. For example, the replacement of the £25 charge for unarranged overdraft instance with a daily unarranged overdraft fee of £5, and real time text alerts informing a customer when they were over their limit, which allowed them to top-up their account before incurring overdraft fees and interest. As a result:
- (a) Overdraft fee revenue had fallen from £[REDACTED] in 2010 to £[REDACTED] in 2014, and was forecast to fall to £[REDACTED] in 2015.
 - (b) There had been a rebalancing of the incidence of overdraft charges across a broader set of customers, with customers with the highest use of overdrafts paying substantially less than before (eg it expected circa [REDACTED] customers being better off per month).
10. LBG told us that overdraft income and fees had fallen in recent years due to the use by customers of tools such as text alerts, and greater transparency, which had driven behavioural change.

⁵ M&S Bank charges its PCA customers overdraft interest, but no overdraft fees.

Annex C: Personal current account profitability by customer type

Type of PCA

1. Barclays told us that in 2013:
 - (a) holders of its Cash Card account (Barclays' BBA product) generated a [X] to Barclays of £[X] per customer;
 - (b) those customers holding Child, Youth, Student and Graduate PCAs generated a [X] to Barclays of £[X] per customer; and
 - (c) its PCA customers in total generated a [X] to Barclays of £[X] per customer.
2. Table 6 shows the total annual income per active account for the various types of PCA offered by LBG:
 - (a) Adults FIIC PCAs and interest-bearing PCAs generate significantly greater income than non-adult PCAs and BBAs. LBG told us that BBAs currently generated annual income of £[X] per account, and this would fall £[X] per account following reductions in interchange revenues and Treasury requirements to remove returned item fees.
 - (b) Packaged accounts generate [X] the income of adult FIIC PCAs and interest-bearing PCAs. LBG told us that it incurred additional costs in providing packaged accounts, including the costs of providing insurance products within the package, and higher directly attributable costs due to the higher engagement of packaged account customers.

Table 6: LBG average annual income by PCA type

	Type of PCA				
	<i>Student, Graduate and Youth PCA</i>	<i>BBA</i>	<i>FIIC PCA</i>	<i>Interest-bearing PCA</i>	<i>Packaged account</i>
Total income (£m)	[X]	[X]	[X]	[X]	[X]
Number of active accounts (m)	[X]	[X]	[X]	[X]	[X]
Average annual income per active account (£)	[X]	[X]	[X]	[X]	[X]

Source: LBG.

[X]

3. Table 7 shows that from 2012 to 2014, Halifax's Ultimate Reward Current Account (URCA), a packaged account, generated greater income than its FIIC PCA (the Current Account) and its interest bearing PCA (the Reward Account).

Table 7: Average income per customer by Halifax PCA type, 2012 to 2014

	Current Account			Reward Account			URCA		
	2012	2013	2014	2012	2013	2014	2012	2013	2014
Number of accounts (million)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Monthly average income per account (excluding net credit interest and account fee) (£m)*	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Monthly average income per account (including net credit interest and account fee) (£m)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Proportion of active accounts (%)†	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Proportion of primary PCAs (%)‡	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: LBG.

*The average income for the URCA does not include the direct costs of providing the added package benefits, which is £5 per account.

†Active accounts are those PCAs with at least one customer-initiated transaction in the last three months.

‡Main/primary accounts are those PCAs with average monthly incoming payments of more than £500.

4. LBG told us that:

- (a) The difference between the Current Account and the Reward Account was due to net credit interest, as the Current Account did not pay any credit interest and the internal value of funds to LBG added additional income per customer. LBG told us that although the Reward Account held higher balances, it also paid a £5 reward to customers in those months when the account was credit, and the reward payment was greater than the value of the additional balances compared with the Current Account (in the current interest rate environment).
- (b) The URCA generated a greater contribution per customer on average than the other PCAs, because URCA customers:
 - (i) paid a monthly fee (although the monthly fee did not include the direct costs of providing packaged account benefits and so the difference in contribution would be less);
 - (ii) were more active users of their account (eg in 2014, URCA customers were over twice as likely to use their overdraft as Current and Reward account customers; generated approximately three times more revenue in other income, such as interchange and overseas ATM fees, than Current Account customers; and used their debit card twice as much); and
 - (iii) the difference in the average number of products held between FIIC and packaged account customers was likely to be explained by a higher proportion of Current Account customers being inactive when compared with the other PCAs.

5. Table 8 shows customer value across RBSG's personal banking business in 2014 split by customer value decile, PCA type and relationship status. Table 9 shows that on a fully allocated costs basis:

(a) [REDACTED];

(b) [REDACTED]; and

(c) [REDACTED], but all PCA customers, except non-adult account holders and BBA holders, covered their variable costs and made a contribution to the recovery of fixed costs.

Table 8: RBSG customer value, 2014

£

Decile	Primary PCA customer						Secondary PCA customer					Decile average
	Packaged account	FIIC PCA	Student PCA	BBA	Youth PCA	No PCA	Packaged account	FIIC PCA	Student PCA	BBA	Youth PCA	
1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
3	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
4	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
5	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
6	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
7	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
8	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
9	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
10	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Product average	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: RBSG.

Notes:

[REDACTED]

6. Table 9 shows the estimated lifetime value of the different PCAs offered under RBSG's Royal Bank of Scotland and NatWest brands. The NPV per unit based on variable costs represents the underlying value of providing PCAs separately from the RBSG's wider personal banking offering.

Table 9: RBSG PCA lifetime value, 2014

£

Type of PCA	NPV per unit			
	NatWest		RBSG	
	Variable cost*	Fully loaded cost†	Variable cost*	Fully loaded cost†
BBA	[X]	[X]	[X]	[X]
Student Account	[X]	[X]	[X]	[X]
Select Account‡	[X]	[X]	[X]	[X]
Select Silver Account§	[X]	[X]	[X]	[X]
Select Platinum Account¶	[X]	[X]	[X]	[X]
Black Account#	[X]	[X]	[X]	[X]
Overall	[X]	[X]	[X]	[X]

Source: RBSG.

*Variable costs are assumed to be costs that would flex with activity volume over a one year horizon (eg product-specific marketing, distribution, mailing of product notifications and other product-specific staff costs). Brand marketing and building costs are not included. Most support and central teams and much of the business services infrastructure, including property and technology, are deemed to be fixed costs.

†Fully loaded costs includes a broader allocation of costs and takes into account, for example, brand marketing and overheads.

‡The Select Account is a FIIC PCA.

§The Select Silver Account is a packaged account with a monthly fee of £10, which provides European travel insurance, preferential rates on foreign currency and mobile phone insurance.

¶The Select Platinum Account is a packaged account with a monthly fee of £15, which provides worldwide travel insurance, preferential rates on foreign currency, mobile phone insurance and UK breakdown cover.

#The Black Account is a packaged account with a monthly fee of £24 and is only available to those customers who pay in a sole income of £100,000 sole into the account; or have a NatWest or RBS mortgage of at least £300,000; or hold £100,000 in NatWest or RBS savings and investments. The account provides worldwide travel insurance, worldwide airport lounge access, travel services preferential rates on foreign currency, mobile phone insurance, UK and European breakdown cover and home emergency service.

Notes:

[X]

7. Table 10 shows the five year values of Santander's PCAs. Santander told us that the main differences in the values generated by its PCA products were driven by:

- (a) Net interest income: the difference across each PCA was due to interest payable, which was driven by average customer liability and asset balances (eg the average 123 Current Account had a margin of [X] basis points and a balance of around £[X] compared to the Everyday Current Account, which had a margin of [X] basis points and a balance of around £[X]).
- (b) Non-interest income: the difference across each PCA was mainly due to product features and overdraft fee structure (eg the non-interest income for the 123 Current Account product reflected the monthly fee and cashback paid out on transactions, whereas the Choice Current Account had a higher monthly fee, but this was partially offset by reduced unarranged fees), and also included foreign exchange fees and ATM costs, [X].
- (c) Risk, which was based on the actual credit risk of the average customer and the level of overdraft usage.

- (d) Overheads: some of the costs were based on transaction volume and these tended to differ by product depending on whether a particular product was used as a primary or secondary PCA and the customer type (eg adult, student or youth).

Table 10: Santander PCAs five year values

[REDACTED]

Source: Santander.

[REDACTED]

Primary and secondary banking customers

8. Table 11 shows the difference in the profitability of Barclays' primary and secondary PCA customers. Barclays told us that the difference in profitability generated by each type of customer highlighted the relationship between customer engagement with their PCA and the underlying profitability of the product.

Table 11: Barclays PCA profit by customer relationship, 2013

Customer type	£
	Average profit per customer
Primary	[REDACTED]
Secondary	[REDACTED]
All customers	[REDACTED]

Source: Barclays.

9. HSBCG told us that primary PCA customers provided it with access to detailed PCA transactional data, which enabled it to make better informed lending and marketing decisions and product offerings.
10. RBSG told us that [REDACTED] (see Figure 5); [REDACTED] (see Figure 6); and [REDACTED] (see Figure 7).

Figure 5: RBSG lifetime customer value

[REDACTED]

Source: RBSG.

Figure 6: RBSG customer loyalty

[REDACTED]

Source: RBSG.

[REDACTED]

Figure 7: RBSG cross-sale rates

[REDACTED]

Source: RBSG.

[REDACTED]

11. RBSG told us that primary PCA customers typically accessed and utilised their PCA more regularly than secondary PCA customers, and these higher levels of account activity and behaviour meant that they were more likely to seek other financial products from their bank due to their desire for convenience and keeping their banking and management of finances as simple as possible.
12. Table 12 shows that Santander 123 Current Account customers are more likely to be primary banking customers, who, on average, hold more products, have higher balances, and have more direct debits.

Table 12: Santander PCA customer characteristics, 2012 to 2014

	Non-Santander 123 Current Account*	Santander 123 Current Account
Proportion of Select and Affluent customers (%)†	[REDACTED]	[REDACTED]
Proportion of customers with primary PCA relationship with Santander (%)	[REDACTED]	[REDACTED]
Number of products held with Santander per customer	[REDACTED]	[REDACTED]
Average PCA and savings account balances combined‡	[REDACTED]	[REDACTED]
Proportion of customers with 4 or more direct debits (%)	[REDACTED]	[REDACTED]

Source: Santander.

*The non-123 Current Account category is mainly made up of Everyday, Basic, Choice, Instant Plus and Zero account holders.
†Select is available to new and existing Santander customers who meet the qualifying criteria (ie monthly PCA credit turnover of £5,000 or more; or savings, investments and banking balance of £75,000 or more; or a Santander mortgage where the value of the property is £500,000 or more). Affluent is an internal customer segment, which represents those customers with monthly PCA credit turnover between £4,000 and £4,999; or savings, investments and banking balance between £25,000 and £74,999; or a Santander mortgage where the value of the property is between £350,000 and £499,999.

‡The reference to [REDACTED] represents a comparison between the average combined savings and banking liability balances for 123 Current Account customers and non-123 Current Account customers. The multiplier assumes that the average combined savings and banking liability balances for non-123 Current Account customers is [REDACTED] and the average combined PCA and savings account balance for 123 Current Account customers is [REDACTED] this level.

Note: This analysis only includes adult PCAs.

13. Santander told us that [REDACTED].

Personal current account pricing analysis

Overview

1. This appendix sets out the results of our provisional analysis of PCA pricing using transactions data.
2. It is structured as follows:
 - (a) we set out the background to the analysis;
 - (b) we explain the data used;
 - (c) we set out estimates of the average amount customers could save from switching to a better value PCA; and
 - (d) we set out comparisons of the average price of PCAs, ie the average price across all customers.¹
3. The estimates seek as far as possible to take into account all payments by PCA customers and monetary and non-monetary benefits paid to them. This includes overdraft charges and interest paid, interest received on credit balances, cashback and other benefits and switching incentives. The estimates do not take into account quality of service, which is considered in Appendix 5.5: PCA quality.²
4. We consulted on the methodology for this analysis,³ and discussed the responses in our [pricing working paper](#).⁴ The estimates are set out here for the first time and are provisional. Details of the calculations will be available to interested parties in a data room, and we will consider all responses for our final report.

¹ When we refer to price, we mean the net cost to the customer taking into account all payments by the customer less the value of monetary and non-monetary benefits received.

² They also do not take into account the net value of funds to banks or interchange revenue received by banks.

³ PCA pricing analysis using transactions data.

⁴ See paragraphs 32–34.

Background

5. Our initial pricing analysis (set out in [Appendix C](#) of the [updated issues statement](#) (UIS)) was based on six illustrative profiles of typical PCA users. We accepted that there was a need to supplement this initial analysis with further work; the main reasons being that:
 - (a) the six profiles should be weighted as they do not each reflect an equal number of PCA customers. However, deriving a valid weighting is not straightforward; and
 - (b) the PCA landscape is complex and may not be captured adequately by six customer profiles (even if weighted appropriately).
6. We therefore said in the UIS that:

We intend to extend this analysis using transactions data for a representative, large sample of PCA customers. The advantage of using transactions data is that it enables comparisons based on actual transactional behaviour and facilitates comparisons between providers across all customers.⁵

Use of transactions data

7. We gathered anonymous transactions data from a number of banks operating in the UK. This is information for a sample of anonymous PCAs on account usage including average credit balance, average debit balance, number of days in arranged and unarranged overdraft, inbound payments and transfers into the account (excluding charges).
8. We contracted Runpath Digital Ltd (Runpath) to use the transactions data to estimate for a representative sample of PCAs:
 - (a) The net cost per month of each account, using prices as of August 2015.

⁵ [UIS, Appendix C paragraph 9](#). We obtained the anonymised transactions data from 13 PCA providers (Barclays, HSBCG, LBG, RBSG, Santander, AIB, BoI, Clydesdale, Co-op, Danske, Metro, Nationwide and TSB).

- (b) The net cost per month if the account-holder switched to another PCA. This has been done for other relevant PCAs (we discuss below the relevant PCAs, see paragraphs 19 to 21 and 35 to 36).⁶
9. Runpath has specific experience of comparing PCA prices and has been involved in the Midata project.⁷
 10. We provided Runpath with a subsample of the anonymised transactions data. The transactions data we obtained from the banks is a stratified sample with oversampling of certain accounts, for example switchers, customers of small banks and account-holders resident in certain areas. We removed this oversampling from the subsample we provided to Runpath. Once the oversampling was removed, we randomly selected 10,000 records for GB and 1,000 for NI for account-holders with standard, 'reward' or packaged accounts (see paragraph 18 for definitions).
 11. Runpath estimated the cost each of these account-holders would incur with each PCA product for which they are eligible. Runpath did this using their own database of pricing information, using prices from August 2015. However, it should be noted that in only 8,884 cases was Runpath able to match the PCA name shown in the transactions data with their own PCA data. This is most likely because some PCAs are no longer available to new customers (off-sale PCAs) and therefore not held in Runpath's database.
 12. In order to allow for different expected periods of holding PCAs, these calculations were carried out:
 - (a) For periods of 12 months and 5 years, including switching incentives (such as one-off payments to the customer, first-year discounts and preferential interest rates).
 - (b) Excluding all temporary switching incentives available at that date in the market (such as one-off payments to the customer, first-year discounts and preferential interest rates).

⁶ A PCA is only be included in the comparisons for a particular account if, based on the transactions data for that account, the account-holder met the eligibility criteria for that PCA.

⁷ The Midata project encourages companies to release to consumers details of their usage of services such as PCAs, helping consumers to make accurate comparison of the costs they would incur with different providers. For details see Section 3.

13. Net cost was calculated without taking into account benefits obtained from other banking products that depend on also holding a PCA, for example, some banks provide a preferential rate for regular savings made from a PCA. We note that, in principle, customers may choose to have less beneficial terms on their PCA in order to access a more beneficial rate on another product. On balance, however, we considered it better to exclude such benefits as they appeared principally aimed at encouraging holders of PCAs to take out other products and therefore tended to reflect a reduction in the price of the other product rather than that of the PCA.
14. The transactions dataset did not include all details of account usage and customer characteristics.⁸ In order to estimate costs of each PCA product, it was therefore necessary to make a number of assumptions, for example on the minimum amount by which customers were in overdraft and on the value of the cashback received.⁹ It was also necessary to make assumptions about the value of non-pecuniary benefits provided with some PCAs (for example, travel insurance). The full set of assumptions can be found in Annex A of this appendix.
15. The projections assume prices at the date of comparison (see paragraph 8(a)) and do not attempt to anticipate future price changes.
16. Consequently, these calculations represent estimates, rather than precise calculations of how much would be paid by the customer (or received) for each type of account. Nonetheless, we consider that these estimates are useful as they provide a more detailed understanding of net costs than can be obtained from our previous analysis using the six customer profiles.
17. We excluded the following categories of account from the sample to be analysed:
 - (a) Basic bank accounts (BBAs): following the agreement between nine major banks and the government,¹⁰ the cost of most BBAs will be very similar from December 2015.
 - (b) Student and Young Person's accounts: the future cost of these depends on account-holder characteristics which may not remain the same over time.

⁸ For example, it does not include the amount by which account-holders were in overdraft for each day they were in overdraft; nor unpaid item fees; nor a breakdown of customer spending (which is relevant to calculating cashback under the Santander 123 account).

⁹ This was based on average cashback paid per account in 2014.

¹⁰ [Basic bank accounts](#).

18. We therefore carried out the analysis for:
- (a) Standard PCAs offering standard features only, usually free-if-in-credit to customers.
 - (b) 'Reward' PCAs providing a cash reward (eg monthly payment, interest on credit balances, cashback linked to spending from the account).
 - (c) Packaged accounts providing customer benefits in kind (for example, phone insurance, travel insurance and breakdown cover). The calculations for packaged accounts will require estimates of the value of these customer benefits.

Estimated potential savings from switching

Methodology

19. The estimated potential savings from switching accounts is calculated as the difference between the net cost per month for the existing account held by the customer and the net cost per month for the PCA with the lowest net cost per month to the same customer. For the periods of 12 months and five years, the net cost per month includes temporary switching incentives, see paragraph 12.
20. The transaction records for those who currently hold standard or 'reward' PCAs are compared only with other standard and 'reward' PCAs, not with packaged accounts. This is because it cannot necessarily be assumed that a standard/ 'reward' account-holder would be willing to pay for the benefits provided by packaged accounts. Additionally, there is more uncertainty about the net cost of packaged PCAs due to the need to value benefits in kind.
21. The transaction records for those who currently hold packaged PCAs are compared both with other packaged PCAs and with standard and 'reward' PCAs; as already noted the estimated value of packaged benefits would be taken into account.
22. We have calculated estimated potential savings on two different bases:
- (a) Firstly, comparing only those PCAs offered by the brand or banking group with which the account-holder has their PCA. This shows the potential savings from internal switching.

- (b) Secondly, comparing all relevant PCAs (as defined in paragraphs 20 and 21). This shows the potential savings from internal or external switching.
23. Potential savings across the market are calculated by summing across the sample and grossing up for the proportion of all PCAs represented by the sample. This would be an underestimate of the total switching savings across the market because it excludes any savings from switching by holders of student and young person's accounts.

Results

24. Savings from switching were measured on the three bases described in paragraph 12.
25. Including switching and incentives and assuming the product will be held for 12 months will yield the highest savings. However, customers typically hold PCAs for much longer than one year; hence the importance of switching incentives and temporary discounts is likely to be exaggerated and total savings overstated in the 12 month calculation. Furthermore, if customers switched their PCAs every year, banks would not necessarily offer such large switching incentives (eg because the cost would be much larger). We therefore consider it better to focus on the estimates over 5 years and the estimates that exclude switching incentives and temporary discounts.
26. The results show that customers could save money by switching their PCA. However, the results need to be interpreted carefully for the following reasons:
- (a) It has been necessary to make assumptions about some aspects of customer behaviour, their valuation of benefits (this particularly affects packaged accounts) and the treatment of linked savings on other products.
 - (b) In making comparisons between different PCAs, it is assumed that customers would be able to obtain the same level of approved and unapproved overdraft from other banks as they obtain from their own bank.
 - (c) The estimated savings do not take into account quality or service differences between products. Savings would tend to be overstated if customers preferred their own product to other products. We have seen some evidence of this in that customers tend to have greater trust in their own banks and it may also tend to be the case that customers' own bank has a nearer branch than most providers of alternative products.

- (d) The estimated savings simply reflect that there are price differences between providers and it would be surprising if there were not any price differences. Looking at the average of the five cheapest products¹¹ rather than the cheapest product may be a way of identifying savings from switching without overemphasising the importance of a particularly cheap product.
- (e) In a market with fixed costs, providing the cheapest products to all customers may not be sustainable, because at these lower prices providers might not cover their fixed costs. Hence, at least in the long term, the alternative to providing good value products to active customers and poor value products to inactive customers may be medium value products to all customers.

27. Table 1 summarises savings from switching to the cheapest product.

Table 1: Monthly savings from switching to cheapest product, UK

	<i>£ per month</i>		
	<i>Basis of calculation</i>		
	<i>Excluding switching incentives</i>	<i>12 months (incl switching incentives)</i>	<i>5 years (incl switching incentives)</i>
Matched records – using current Runpath price data for customer's PCA*			
Internal switching only	1.81	–	–
– standard/'reward' PCAs	1.85	–	–
– packaged PCAs	1.11	–	–
All switching	9.50	14.53	9.49
– standard/'reward' PCAs	9.29	14.43	9.26
– packaged PCAs	13.04	16.21	13.42
Matched records – using historic price data for customer's PCA†			
All switching	8.78	15.68	9.14
– standard/'reward' PCAs	8.23	15.07	8.53
– packaged PCAs	18.25	26.30	19.60
All records – using historic price data‡			
All switching	10.00	17.19	10.57

Source: CMA calculations using Runpath data.

Notes:

1. Key results are in bold italics.

2. Average savings is calculated across customers in both Great Britain and Northern Ireland.

*There are 8,884 records (out of 10,995) for which Runpath hold current pricing data on the customer's PCA. Of these, 8,399 were standard/'reward' accounts and 485 were packaged accounts. These results compare Runpath's estimated cost for the customer's PCA with Runpath's estimated cost for all other relevant PCAs.

†These results compare the historical cost from the transactions data from the customer's PCA with Runpath's estimated cost for all other relevant PCAs. They are less reliable than the first set as they are not on a like-for-like basis.

‡There are a further 2,111 records for which Runpath did not hold current pricing data, typically because the PCA concerned is no longer available to new customers (off-sale PCAs).

¹¹ We refer to the product with the lowest net monthly cost (ie cost less value of monetary and non-monetary benefits received) as the cheapest.

28. We noted the following points about the savings from switching to the cheapest product:
- (a) Average savings per customer for switching to the cheapest product are about £9 per month for standard/‘reward’ accounts.
 - (b) The average saving for switching to the cheapest packaged account is around £13 per month though this is subject to uncertainty around customers’ valuation of the benefits from packaged accounts.¹²
 - (c) There is also evidence that on average customers could make savings through switching to another product with the same bank (internal switching). Around 25% of standard/‘reward’ customers could make some savings from internal switching and 20% could make savings of more than £1 per month (excluding switching incentives).¹³ That 20% of customers could make savings averaging around £8.50 per month, giving an overall average saving across all customers of about £1.80 per month.
 - (d) We can make comparison using historical price data both for matched records and all records (ie including records for which Runpath did not have pricing information): this exercise suggests a slight underestimation of the savings from switching, but not sufficient to suggest the exclusions bias the results.
29. This data assumes customers switch to the lowest cost product. Savings reduce considerably if one looks at second, third etc cheapest products, see Table 2.

¹² See Annex A for the values applied to different benefits.

¹³ Calculations of savings including switching incentives are not available but it should be noted that switching incentives are generally not available for internal switching.

Table 2: Monthly savings from switching to five cheapest products, UK

	<i>£ per month</i>		
	<i>Basis of calculation</i>		
	<i>Excluding switching incentives</i>	<i>12 months (incl switching incentives)</i>	<i>5 years (incl switching incentives)</i>
<i>Standard/'reward' PCAs compared to:</i>			
Cheapest product	9.29	14.43	9.26
2 nd cheapest	6.52	12.67	6.70
3 rd cheapest	5.39	11.44	5.80
4 th cheapest	4.35	10.62	4.92
5 th cheapest	3.58	9.58	4.36
Average of above	5.83	11.75	6.21
<i>Packaged PCAs compared to:</i>			
Cheapest product	13.04	16.21	13.42
2 nd cheapest	10.26	10.93	9.49
3 rd cheapest	8.47	10.21	7.64
4 th cheapest	7.00	8.08	6.48
5 th cheapest	6.20	7.27	5.81
Average of above	9.00	10.54	8.57

Source: CMA calculation using Runpath data.

Note: All switching, matched records – using current Runpath price data for customer's PCA.

30. As some variation in price is expected (as mentioned in paragraph 26(d)), we have focused on the average over the five cheapest products. On this basis, the average savings per customer from switching are around £6 per month for standard/'reward' accounts. For packaged accounts, the savings are around £9 per month.
31. The transaction dataset does not include the amount by which customers went into their unarranged overdraft, only the number of days they used an unarranged overdraft and the total overdraft amount (including arranged and unarranged overdrafts). Therefore, Runpath conducted their analysis assuming that customers who went into unarranged overdraft did so by at least £100. To check for the sensitivity of the analysis to this assumption, we have also conducted analysis assuming that customers who used unarranged overdrafts did so by only £10. On this basis, for both standard/'reward' and packaged accounts, average savings per customer from switching are similar but slightly lower than when the overdraft is assumed to be £100.
32. We have subdivided the data to compare estimated savings across different groups of account-holder. For those who used an overdraft, we have done this by the average number of days in overdraft (average days in overdraft per month in 2014). For those who did not use an overdraft, we have done this by their average credit balance (based on the daily average for 2014). The biggest

potential savings from switching are for those in overdraft (though the estimates assume that customers would be able to obtain the same level of approved and unapproved overdraft from all banks, see paragraph 26 (b)). Table 3 also suggests that those with balances of £5,000 or more tend to be on one of the top three PCAs – this is likely to reflect the much better interest rates offered on balances over £3,000 by the Santander 123 account than any other account and its likely use as a savings account.¹⁴ The table below is for savings over five years, including switching incentives.

Table 3: Average monthly savings (over 5 years, with switching incentives) from switching to five cheapest products, UK

	Overdraft users – average days in overdraft			All overdraft users	Non-overdraft users – average account balance				All non-overdraft users	All accounts	£ per month
	1–7	8–14	15+		£0–500	£500–2,000	£2,000–5,000	£5,000 or more			
Standard/'reward' PCAs compared to:											
Cheapest product	6.54	13.06	24.63	14.05	3.24	4.08	5.62	13.50	6.35	9.26	
2nd best	5.12	11.62	22.93	12.53	2.17	2.90	4.76	2.94	3.11	6.70	
3rd best	4.44	10.87	21.59	11.61	1.95	2.53	4.21	0.22	2.20	5.80	
4th best	3.83	9.99	20.28	10.70	1.39	2.10	3.66	–1.98	1.31	4.92	
5th best	3.41	9.29	19.23	10.01	1.34	1.77	3.19	–3.22	0.81	4.36	
Average of above	4.67	10.97	21.73	11.78	2.02	2.68	4.29	2.29	2.76	6.21	
Share of all standard/'reward' account-holders	20%	8%	15%	43%	14%	18%	12%	13%	57%	100%	
Packaged PCAs compared to:											
Cheapest product	7.16	7.36	21.54	14.54	7.92	8.54	9.07	29.12	11.31	13.42	
2nd best	2.58	2.60	19.10	11.03	3.12	3.84	5.98	16.15	5.92	9.49	
3rd best	1.07	1.13	17.71	9.58	0.96	2.42	4.23	7.79	3.33	7.64	
4th best	–0.34	0.20	16.75	8.49	-0.03	0.47	3.05	5.57	1.76	6.48	
5th best	–0.73	–0.33	15.83	7.81	-1.12	0.37	2.37	2.78	0.93	5.81	
Average of above	1.95	2.19	18.18	10.29	2.17	3.13	4.94	12.28	4.65	8.57	
Share of all packaged account-holders	21%	13%	36%	71%	6%	11%	8%	4%	29%	100%	

Source: CMA calculation using Runpath data.

Note: All switching, matched records – using current Runpath price data for customer's PCA.

33. Based on the figures in Table 3, Table 4 below shows estimated aggregate savings from all active PCA customers switching to cheapest product, average of five cheapest products and fifth cheapest product. This gives an indication of the

¹⁴ The Santander 123 account current offers a much higher interest rate on balances between £3,000 and £20,000 than any instant access savings account and it may be recommended as a savings account (eg by MoneySavingExpert.com).

total gains to customers if everyone switched to the cheapest products and maintained their current transaction patterns.

Table 4: Aggregate savings for all active PCAs, UK

	£m		
	<i>Basis of calculation</i>		
	<i>Excluding switching incentives</i>	<i>12 months (incl switching incentives)</i>	<i>5 years (incl switching incentives)</i>
<i>Cheapest product</i>			
Standard/'reward' PCA	5,800	9,000	5,800
Packaged PCAs	1,100	1,300	1,100
<i>Average of five cheapest products</i>			
Standard/'reward' PCA	3,600	7,300	3,900
Packaged PCAs	700	900	700
<i>5th cheapest product</i>			
Standard/'reward' PCA	2,200	6,000	2,700
Packaged PCAs	500	600	500

Source: CMA calculation using Runpath data

Notes:

1. All switching, matched records – using current Runpath price data for customer's PCA

2. Aggregate savings are based on 69.1m active accounts of which 75% are standard/reward and 10% packaged (CMA calculation using data submitted by banks).

Estimated average prices

Methodology

34. We have calculated the average price (ie average net monthly cost) for each account by taking the mean monthly net cost for that account across the sample. We have done this for standard/'reward' PCAs.
35. A complication in calculating average prices is that average prices may be affected by account eligibility criteria. Some 'reward' accounts for example require the account-holder to pay in at least £500 per month and have two or more direct debits. Some other accounts have monthly fees that are waived or incentives which are given if certain account criteria are met.
36. We have therefore carried out this analysis for different segments of the data such that average prices within the segment are comparable. As the majority of eligibility criteria are based on the amount paid into the account each month

and/or the number of direct debits per month, these parameters are used for selecting the segments.

37. The segments are shown in Table 5, along with a breakdown of the sample for each segment. There is no mainstream product with a tighter eligibility requirement than payments into the account over £1,750 and two or more direct debits per month,¹⁵ and this is the largest segment.

Table 5: Breakdown of the sample by segment, UK

<i>Incoming payments per month</i>	<i>Number of direct debits per month</i>	
	<i>Less than 2</i>	<i>2 or more</i>
Less than £500	602	669
£501–750	112	208
£751–1,000	78	208
£1,001–1,500	135	687
£1,501–1,750	57	439
£1,751 or more	165	2269

Source: CMA calculation using Runpath data.

Note: Shows only usable transaction records from the sample (the usable sample is reduced because some records within the dataset could not be compared against all relevant accounts in the market).

38. Therefore, our preferred approach to calculating average prices is:
- (a) Divide the sample into segments so that within each segment products can be compared directly.
 - (b) Calculate the weighted average cost per month for each banking group for that segment –where banking groups have more than one relevant product, these are weighted by the number of customers for that product in that segment. This produces a comparison across banking groups for each segment.
 - (c) We want an overall comparison of prices across banking groups, reflecting relative prices for all segments. We obtain this by weighting results for each segment by the total number of customers in each segment, across all segments.

¹⁵ There are a few products aimed at customers with high income (over £100,000 per year) or wealth. These are excluded.

Results

39. We have calculated results for standard/'reward' accounts on the three bases described in paragraph 12.
40. As an illustration of paragraph 38(b), average prices for the largest segment (payments into the account over £1,750 and two or more direct debits) using the five year data are shown in Table 6. The results excluding switching incentives (not shown) are similar, with slightly higher monthly prices for products which offer switching incentives. The switching incentives have a more noticeable effect on the 12 month basis, with some prices as much as £10 lower per month when the switching incentive is averaged over 12 months rather than five years.

Table 6: Comparison of five-year PCA costs (including switching incentives)*£ per month (negative figure indicates payment to account-holder)*

Group	Brand & product	Average cost per month* for largest segment (£1,751+, DDs 2+) (2,269 account holders)		
		Product	Brand†	Group†
Barclays	Barclays Bank Account	4.08	3.49	3.49
	Barclays Bank Account with Blue Rewards‡	1.17	–	–
Bol/PO	Post Office Standard Account	2.43	2.43	2.43
Clydesdale§¶	Clydesdale Bank Current Account Plus	3.43	3.48	3.50
Co-op	The Co-operative Bank Current Account	5.19	5.19	4.90
HSBCG	HSBC Bank Account	4.71	3.16	2.95
	HSBC Advance Bank Account	2.49	–	–
	First Direct 1 st Account	1.87	1.87	–
	M&S Bank Current Account	–0.22	–0.22	–
LBG	Lloyds Bank Classic Account	8.19	6.96	5.15
	Lloyds Bank Club Lloyds Current Account	4.21	–	–
	Halifax Current Account	4.80	3.03	–
	Halifax Reward Current Account	2.20	–	–
	Bank of Scotland Classic Account	8.19	5.63	–
	Bank of Scotland Classic Account with Vantage	4.73	–	–
Metro	Metro Bank Current Account	1.61	1.61	1.61
Nationwide#	Nationwide BS FlexAccount	–1.54#	–0.89#	–0.89#
	Nationwide BS FlexDirect Account	2.90	–	–
RBSG	Royal Bank of Scotland Select Current Account	5.96	5.96	4.72
	NatWest Select Account	4.47	4.47	–
Santander	Santander Everyday Current Account	6.47	4.19	4.19
	Santander 123 Current Account	2.51	–	–
Tesco	Tesco Bank Current Account	–0.26	–0.26	–0.26
TSB	TSB Classic Current Account	8.20	6.68	6.68
	TSB Classic Plus Account	4.34	–	–

Source: CMA calculation using Runpath data.

*Average cost per month for brand and group are weighted averages where weights are customers in the segment for all banks (from the transaction dataset).

†Brand and group averages may include products not listed in the table.

‡Barclays Blue was introduced in 2014 and therefore had no customers in 2014.

§Yorkshire Bank is not shown separately as it has the same prices as Clydesdale.

¶Clydesdale/Yorkshire Current Account Direct has been omitted as it does not have full branch access.

#Nationwide FlexAccount includes free travel insurance for customers regularly crediting £750 per month – this has been valued at £50 per year. Excluding this benefit would increase monthly cost for product to £2.62 and for brand/group to £2.66 (average monthly cost is increased when the monthly benefit from free travel insurance is no longer offset against the costs of the account for the proportion of Nationwide FlexAccount customers regularly crediting £750 per month).

41. Average prices, weighted across all twelve segments (ie step (c) in paragraph 38) are shown in the table below¹⁶:

¹⁶ Northern Ireland banks are not included, see Annex B.

Table 7: Comparison of five-year PCA costs*£ per month (negative figure indicates payment to account-holder)*

Group	Brand & product	Average cost per month*† across all segments	
		Brand	Group
Barclays	Barclays	3.89	3.89
Bol/PO	Post Office	1.64	1.64
Clydesdale‡§	Clydesdale & Yorkshire	3.19	3.20
Co-op	The Co-operative Bank	5.66	5.50
HSBCG	HSBC	2.86	2.96
	First Direct	3.99	–
	M&S Bank	–0.95	–
LBG	Lloyds Bank	7.74	5.68
	Halifax	3.25	–
	Bank of Scotland	6.51	–
Metro	Metro Bank	1.15	1.15
Nationwide	Nationwide	–1.38¶	–1.38¶
RBSG	Royal Bank of Scotland	5.67	4.44
	NatWest	4.18	–
Santander	Santander	4.09	4.09
Tesco	Tesco Bank	0.88	0.88
TSB	TSB	7.25	7.25

Source: CMA calculation using Runpath data.

*Average cost per month for brand and group are weighted averages where weights are customers in the segment for all banks (from the transaction dataset).

†Group averages may include brands not listed in the table.

‡Yorkshire Bank is not shown separately as it has the same prices as Clydesdale.

§Clydesdale/Yorkshire Current Account Direct has been omitted as it does not allow full branch access.

¶Nationwide FlexAccount includes free multi-trip UK and European travel insurance for UK customers aged 16–75 regularly crediting £750 per month – this has been valued at £50 per year. Excluding this benefit would increase monthly cost for Nationwide to £1.68 (average monthly cost is increased when the monthly benefit from free travel insurance is no longer offset against the costs of the account for the proportion of Nationwide FlexAccount customers regularly crediting £750 per month).

42. To check these results for their sensitivity to the assumption that those who went into unarranged overdraft did so by £100, we also looked at the results assuming that unarranged overdrafts were £10. This had little or no effect on the majority of results in Table 7, however, average prices for Lloyds and BoS were lower with the £10 assumption (by £2.72 and £2.38 respectively).
43. Figure 1 charts weighted average price for each brand against the average length of time account-holders have held their main account with the brand and Figure 2 charts weighted average price for each banking group against GB market share¹⁷. There is some evidence of a positive correlation in both cases,

¹⁷ Average prices are calculated across all available records (some of which are for records with Northern Ireland postcodes); results are similar if limited to records with GB postcodes. In Figure 1, the average length of time account-holders held their main account with the brand was calculated using all records from the transactions data (not just the sample used for the average price analysis).

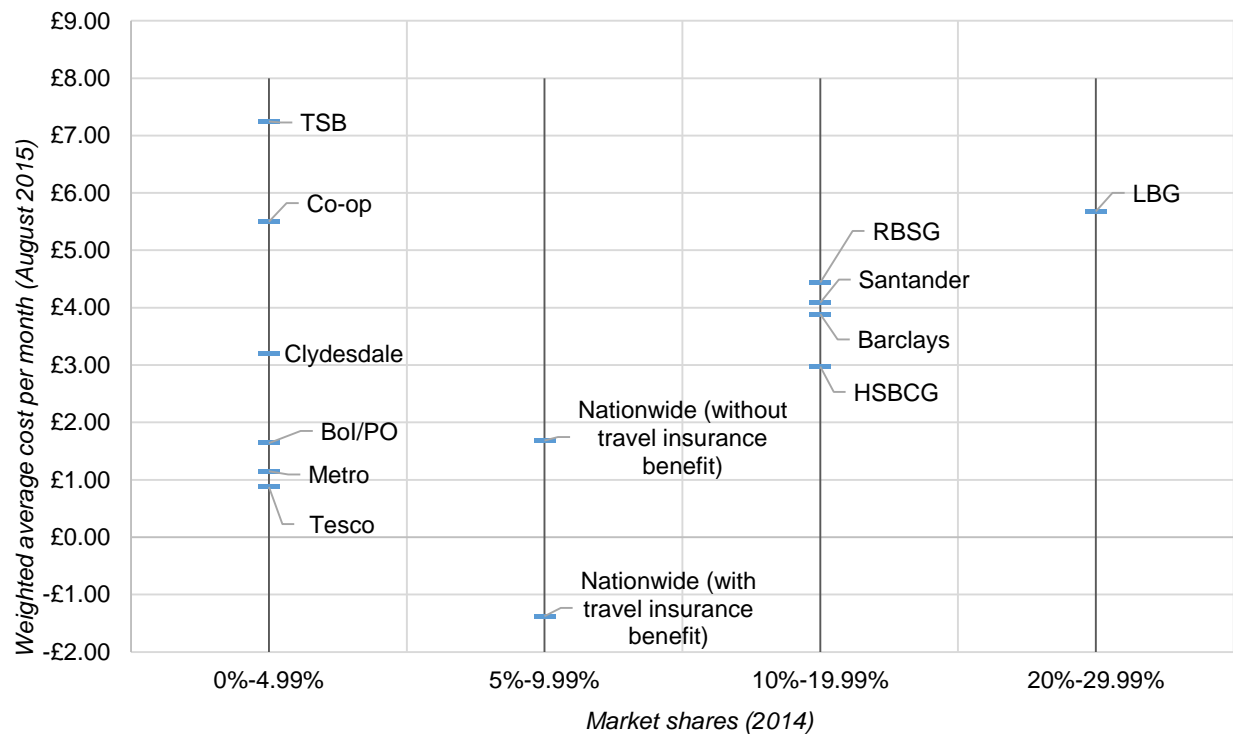
though somewhat more evidence of a link between incumbency and weighted average price since, apart from TSB (recently divested from LBG), the banks with higher prices but low market share are long established (Co-op, Clydesdale).

Figure 1: Five-year prices vs length of time account held – weighted average of all segments



Source: CMA calculation using Runpath data.

Figure 2: Five-year prices vs market share – weighted average of all segments, GB



Source: CMA calculation using Runpath data.

Annex A: Assumptions

1. This annex is the assumptions dictionary which documents all the assumptions Runpath made when running their model.
2. Runpath has worked up all provided figures to represent transactions over 12 months. So if only three months data were provided the results were repeated to achieve 12 months.

General assumptions

- If an incumbent account cannot be matched to a current product then a comparison with alternative products cannot be made. Around 1,100 accounts cannot be matched to a currently available account.
- A calculation of payment fees is not included in the value calculation as there is not enough fidelity to determine what they might be, and only 72 accounts from the 11,000 sample had these charges against them in the dataset provided.
- Location segmentation is based on the following signals provided in the data to identify NI located customers:
 - UKNO
 - Northern Ireland
 - NORTHERN IRELAND
 - N.Ireland
- Any customer tax bands are not taken into account when interest, and cashback incentives are paid. Due to no insight into an individual's tax status.
- Interest, cashback and switching incentives are shown net of 20% tax. It is down to the individual to either claim back the 20% or pay more if they are a higher rate taxpayer.
- Incumbent, best bank and group alternative values are based on the value calculation without switching incentives.

Minimum income

3. From the CMA data Runpath cannot determine the income of the account holders. This is an issue as there are a few accounts that have minimum income requirements of the account holder, but they do not have minimum payments into the account requirements. Therefore there will be a number of accounts that would appear eligible to account-holders, but in reality would not be.

Table 1: Examples of accounts with minimum income requirements

<i>Bank account</i>	<i>Minimum income</i>	<i>Regular payments</i>	<i>Account type</i>
HSBC Premier Bank Account	£100,000 per annum	None required	Reward
NatWest Black Account	£100,000 per annum	None required	Packaged

Source: Runpath.

4. To counter this, Runpath is using the 'payments in' data provided by the CMA as income. There are 569 accounts that pay in at least £100,000 every year.

Existing customer only

5. Existing customer only accounts are included in the list of accounts that can be switched to, as there is little barrier to opening these accounts. There are six accounts that this applies to.

Table 2: Accounts available to existing customers only

<i>Account provider</i>	<i>Account name</i>	<i>Account details provided to customers</i>
TSB	Platinum	Customers need to already be a Classic or Silver Accountholder to upgrade to Platinum. Customers are able to do this through internet banking once they've held their account with the bank for a few months.
TSB	Silver	Customers need to be a Classic Account-holder to upgrade to a Silver Account. Customers are able to do this through internet banking once their Classic Account is up and running.
Post Office	Packaged	Exclusive upgrade for Standard Account customers only. Customers can apply to upgrade from a Standard Account.
HSBC	Premier	HSBC Premier is available to customers, as long as they pay their annual income into their HSBC Premier Bank Account and either: 1) have savings or investments of at least £50,000 with HSBC in the UK; or 2) have an individual annual income of at least £100,000 and one of the following products with HSBC in the UK: a mortgage; an investment, life insurance or protection product.
BoS	Silver	Customers with a Classic Account can upgrade to one of BoS's Added Value Accounts through internet banking.
BoS	Platinum	Customers with a Classic Account can upgrade to one of BoS's Added Value Accounts through internet banking.

Source: Runpath.

Value calculation

6. Value calculation = Payments in – Payments out.
7. There are three time variants of the value calculation
 - Year 1 annual value
 - Monthly – excluding switching incentive – one month average taken from year 2
 - Years 1–5 sum of each year's annual value
8. Payments in are:
 - Credit interest
 - Switching incentive (for the year 1 and year 5 variants only)
 - Cashback
 - Benefit value
9. Payments out are:
 - Overdraft fees – authorised
 - Overdraft interest – authorised
 - Overdraft fees – unauthorised
 - Overdraft interest – unauthorised
 - Foreign ATM fees
 - Foreign debit transaction fees
 - Annual fee

Account type

Table 3: Classification of accounts

<i>Standard</i>	<i>Reward</i>	<i>Packaged</i>
All of these must be true:	One of these must be true:	If there is an account fee and any benefit from this list:
0.01% or no credit interest No cashback No benefits Not basic accounts	0.01%+ credit interest received Cashback	Mobile & gadget offers Breakdown cover Travel insurance Home emergencies Motoring offers Life insurance Shopping protection

Source: Runpath.

Foreign transactions

10. Runpath has not been provided with a transaction value, and in order to calculate the cost to the consumer Runpath needs to make the following assumptions to ensure consistency:
 - each debit card transaction is worth £100; and
 - each ATM withdrawal is worth £50.
11. Runpath only has values for Q4. Runpath will multiply these up to represent 12 months.
12. As Runpath does not know if the spend was worldwide or Europe and there can be different fees depending on region, Runpath has assumed all transactions to have occurred in Europe.

Runpath has not rebalanced any foreign transaction charges against the average balance

Credit interest

- The average balance is treated as being that balance for every day in that month that the user was in credit.
- A year is 365 days.
- Runpath has not rebalanced any credit interest against the average balance.

- For Ulster Bank there were no averages supplied, rather end of month balance. These have been treated as averages to ensure consistency.

Overdrafts

- There is only one figure provided for overdraft balance, so if there are unauthorised overdraft days Runpath does not know how far over they went. So each day they are in unauthorised overdraft Runpath will assume this is £100 over their approved overdraft limit. This is not excessive and will ensure that all buffers are treated equally, as typically they are less than £100.¹⁸
- Authorised buffers, where the average is over the buffer amount – Runpath assumes that all days were over the buffer amount.
- Date added, Runpath include the fee and interest charge in the month it occurred, rather than add it at the start of the following month.
- Averaging, note that the averages are based number of days in that state not the number of days in a month.
- Runpath has not rebalanced any overdraft charges against the average balance

Benefits

13. The proposed values for additional products which are provided with packaged accounts are based on:
 - Market average pricing for specific items – eg mobile and gadget insurance, breakdown cover.
 - Customer behaviour – if a customer has to take another product to benefit Runpath has assigned no value, eg discount on mortgage, access to a saving rate. This is because the CMA views this as a reduction in the price of the other product rather than increasing the value of the PCA.

¹⁸ To check the sensitivity of this assumption, Runpath also provided a version of the dataset which assumed those in unauthorised overdraft were £10 over their approved overdraft limit.

Table 4: Valuation of benefits

Category	Value	Examples
Mobile & gadget offers	£60 pa	<ul style="list-style-type: none"> Provides worldwide cover for devices including phones, cameras, MP3 players, laptops, tablets and more. Mobile phone insurance – covers unauthorised calls up to £2,500 (inc VAT) for monthly contracts and up to £100 (inc VAT). For pay-as-you-go customers 2 phones are covered if you have a joint account. The replacement value per phone is unlimited (excluding cosmetic embellishments with precious metals, stones or crystals). There is a £75 excess. Free worldwide cover on mobile against theft, loss, damage, breakdown and unauthorised calls on one handset. Max 2 successful claims per 12 months. Cover includes, mobile phone repair or replacement up to the max individual retail cost or value of £2K inc VAT.
Breakdown cover	£75 pa	<ul style="list-style-type: none"> AA Breakdown Cover, inc Home Start – breakdown assistance when you need it most. You're covered as a driver or a passenger in any eligible vehicle if you breakdown at home or on the roadside. Free UK AA Roadside Assistance. Free UK Green Flag Rescue Plus Breakdown Cover for account-holder, covers any car account holder is travelling in. 24 hour Motor Breakdown Assistance (including at home) with AGA International SA.
Travel insurance	£50 pa	<ul style="list-style-type: none"> Annual Worldwide Family Travel Insurance. Worldwide* travel insurance underwritten by AIG Europe Limited. Multi-trip cover for you and your family, including winter sports, golf and wedding cover. *Cover is not provided for travel to or through Afghanistan, Cuba, Liberia and Sudan or areas where the Foreign and Commonwealth Office have advised against all but essential travel. Free European Multi-Trip Family Travel Insurance which covers you and your family. Max cover age 70 years old. Available on trips up to 31 days and includes baggage, delay and cancellation cover, personal injury and personal liability. 5* Defaqto rated UK and worldwide travel insurance. Extra-long cover for trips of up to 90 days and 31 days for winter sports. Family protection – includes you and your partner, plus any dependent children under age 18 at the start of the journey, or under 23 if they're in full-time education. No upper age limit. Conditions apply.
Cashback	No value or included in the calculation	<ul style="list-style-type: none"> Each scheme is specific and dependent on spend at participating retailers. Any specific value based on account behaviour is factored into the calculation.
Switching incentive	No value	<ul style="list-style-type: none"> The specific value is included in the calculation already for Year 1 and Year 5 comparison.
Switching incentive voucher	No value	<ul style="list-style-type: none"> The specific value is included in the calculation already for Year 1 and Year 5 comparison.
Existing customer offers	No value	<ul style="list-style-type: none"> Apply for a HSBC Premier Credit Card with reward points, no annual fee and a low rate. Discounted rates on loans of £7,500 to £14,999 for up to 5 years. Access to 3 year flexible or 4 year fixed mortgage rates. Eligible for Private Reserve Savings Account.

Category	Value	Examples
Exclusive offers and rewards	No value	<ul style="list-style-type: none"> • Sign up for Save the Change® and every time you make a purchase with your Bank of Scotland Visa debit card, the difference will be rounded up to the nearest pound and transferred into your nominated savings account the next working day. • Personalised debit card – use your favourite photo to personalise your card. • Access to 123 World offers, including preferential rates and special deals on other Santander products. • Simply Rewards scheme provides discounts and deals when using Nationwide Visa debit card. • Free entry into 'It's on Us', for the chance to have any transaction up to £500 refunded, drawn per month.
Help and advice	No value	<ul style="list-style-type: none"> • Free specialist advice service. • ID Defender – Access your credit reports, check if your personal details are being used online, and get support and advice when you need it. • Pay Monthly Money Calendar – Access to a quick, interactive tool that can help you manage your money. It lets you take an objective look at your spending, identify your financial goals and gives you hints and tips on how to achieve them. • Free text message services to help you keep better track of your money wherever you are. • Free Sentinel Card Protection for any bank or store cards, offering access to emergency cash advances up to £1,000, up to £3,000 for hotel expenses and up to £3,000 for lost tickets and travel documents. Also available, up to £200 to cover lost or stolen handbags, wallets and purses containing a card, plus you can claim up to £200 to replace your missing cash.
Home emergencies	£120 pa	<ul style="list-style-type: none"> • Free key protection through Sentinel Gold® if lost or stolen. Assistance to access property 24 hours a day. Up to £600 replacement lock and key cover for home, home-office, car, caravans, motorbikes and motor homes per claim, including costs for locksmith, car hire (if needed) and replacing locks and keys. Excess of £25 of each and every vehicle claim or more than 3 claims within any 12 month concurrent period. • Home emergency cover – cover from burst pipes to broken windows, get the help and repairs you need. • 24/7 home emergency cover up to £750 including VAT. Cover for two homes. Approved repairers. Conditions apply.
Lifestyle offers	No value	<ul style="list-style-type: none"> • Tastecard – available from 21st July 2014. Enjoy 2-for-1 meals or 50% off your food bill at thousands of restaurants across the UK. Restrictions apply. • Ticket Booking Service – Receive 25% cashback on tickets for theatre, dance, opera, concert performances and more throughout the UK and Ireland. • Discover some of Britain's treasures with two family day passes each year at a selected range of National Trust sites. • Free Lifestyle Benefit, choose one per year of either 12 month Gourmet Society Membership; 6 free Vue cinema tickets per year; or free magazine subscription for 12 months with a choice of 14 printed or digital titles deliver to the door or downloaded to an Apple device.
Enhanced customer service	No value	<ul style="list-style-type: none"> • If your debit card is lost or stolen, our Emergency Cash service makes sure you can access your money from our ATMs (limits apply). • Overseas Transaction Alerts telling you when your Visa debit card has been used abroad. • Easy switching – move direct debits and standing orders from your existing accounts to your Lloyds Bank current account. • Free Mobile Banking app. • Control helps you take charge of your money by restricting your account from going into an unplanned overdraft.

Category	Value	Examples
Motoring offers	£70 pa	<ul style="list-style-type: none"> The chance to save up to £75.99 with the AA (if you're 17 or over). Save £36 on AA driving lessons and get a free Pass Your Test CD-ROM worth £19.99. After passing your test, you can get £20 off Pass Plus – the qualification for advanced practical skills. For those aged 16 and over. Save £36 on AA driving lessons, receive a free 'Pass Your Test' CD-ROM worth £19.99 and after passing your test save a further £20 off Pass Plus – the DSA recognised qualification for advanced practical skills which could secure a discount of up to 35% on car insurance.
Life insurance	No value	<ul style="list-style-type: none"> Not currently offered
Shopping offers	£30 pa	<ul style="list-style-type: none"> £10 Amazon.co.uk gift certificate when you open your account Discounts at top retailers with Discount Card 25% off at Vue cinema for 1 Year for 2 people. £127 worth of hot drinks vouchers for the M&S Café. £45 worth of treats and delights vouchers. Birthday gift eg afternoon tea for two, worth £10. £40 a year in M&S vouchers, to spend in store on clothing and homeware
Shopping protection	£80 pa	<ul style="list-style-type: none"> Extended warranty on appliances for 12 months.
Travel advice and offers	No value. ATM and purchase costs are covered in calculation	<ul style="list-style-type: none"> Foreign currency with no commission charge. Commission-free travel money and American Express® traveller's cheques. Black Travel Service: Up to 10% discount from a number of major tour operators. 10% discount on airport parking, airport hotels, car hire, transfers and tickets for attractions abroad. Complimentary 20kg baggage allowance with Thomas Cook Airlines. You will not incur additional charges – such as credit card or booking fees. Free debit card usage abroad – using your N&P debit card abroad will be just like using it in the UK.

Source: Runpath.

Transaction cashback value

14. Transaction cashback value cannot be calculated on an individual basis, as it is not included in the transaction information. The CMA provided estimates of the value of cashback per account to Runpath based on the following:

- The data below (Table 5) shows average 2014 non-interest payments to customers divided by number of accounts with at least one customer-generated payment or transfer (including standing order and direct debit, but excluding charges and interest on the account) coming into, or leaving, the account in the 12 months.
- Data relates to the 12 months of calendar year 2014.
- The number of accounts is computed as the average of start and end-2014 totals (for accounts which had at least one customer-generated payment or transfer).

- Generally the data does not distinguish between accounts with and without control.

Table 5: Valuation of transaction cashback

Bank of Scotland	Classic Account	[X]	[X]
Bank of Scotland	Classic Account with Control	[X]	[X]
Bank of Scotland	Classic Account with Vantage	[X]	
Bank of Scotland	Platinum Account	[X]	
Bank of Scotland	Platinum Account with Vantage	[X]	
Bank of Scotland	Silver Account	[X]	
Bank of Scotland	Silver Account with Vantage	[X]	
Barclays	Bank Account		[X]
Barclays	Bank Account with Blue Rewards		[X]
Halifax	Current Account	[X]	
Halifax	Current Account - with Control	[X]	[X]
Halifax	Reward Current Account	[X]	[X]
Halifax	Ultimate Reward Current Account	[X]	
Halifax	Ultimate Reward Current Account - Funded with Overdraft	[X]	[X]
Halifax	Ultimate Reward Current Account - Non-funded	[X]	[X]
Lloyds Bank	Classic Account	[X]	
Lloyds Bank	Classic - with Control	[X]	[X]
Lloyds Bank	Club Lloyds Current Account	[X]	
Lloyds Bank	Club Lloyds - with Control	[X]	[X]
Lloyds Bank	Platinum - with Club Lloyds	[X]	
Lloyds Bank	Silver - with Club Lloyds	[X]	
M&S Bank	Premium Current Account		[X]
NatWest	Black Account		
NatWest	Select Account	[X]	
NatWest	Select Account - with Control	[X]	[X]
NatWest	Select Platinum Account	[X]	[X]
NatWest	Select Silver Account	[X]	[X]
Royal Bank of Scotland	Black Account		[X]
Royal Bank of Scotland	Select Current Account	[X]	
Royal Bank of Scotland	Select Account - with Control	[X]	[X]
Royal Bank of Scotland	Select Platinum Account	[X]	[X]
Royal Bank of Scotland	Select Silver Account	[X]	[X]
Santander	1 2 3 Current Account	[X]	

Source: CMA calculations.

[X]

Annex B: Northern Ireland average prices

1. We had originally intended to carry out separate analyses for GB and NI and for this purpose included 1,000 records with NI postcodes in the sample.
2. However, we acknowledged in our [pricing working paper](#) that there were limitations in the data for some NI banks, which may affect the robustness of comparisons. In the event, we concluded that comparisons based only on NI customers would not be robust as there was missing information for too many NI customers. We did however extend the comparisons based on all UK records to include the NI banks. Table 1 below shows these figures together with the figures from Table 8 for other brands with a material number of customers in NI.
3. Shown below is a revised version of Figure 1 including the Northern Ireland banks. Figure 2 below shows average prices from Table 1 below plotted against NI market shares. We do not observe much evidence of a positive correlation between market share in NI and average price.

Table 1: Comparison of five-year PCA costs, Northern Ireland banks

		£ per month (negative figure indicates payment to account-holder)	
Group	Brand	Average cost per month* across all segments	
		Brand	Group
AIBG	First Trust Bank	4.07	4.07
Barclays	Barclays	3.89	3.89
Danske	Danske Bank	4.43	4.43
HSBCG	HSBC	2.86	2.97
	First Direct	3.99	–
LBG	Halifax	3.25	3.25
Nationwide	Nationwide	–1.38†	–1.38†
RBSG	Ulster Bank	2.78	2.78
Santander	Santander	4.09	4.09

Source: CMA calculation using Runpath data. No data available for BoI (other than the PO account shown in Table 8).

*Average cost per month for brand and group are weighted averages where weights are customers in the segment for all banks (from the transaction dataset).

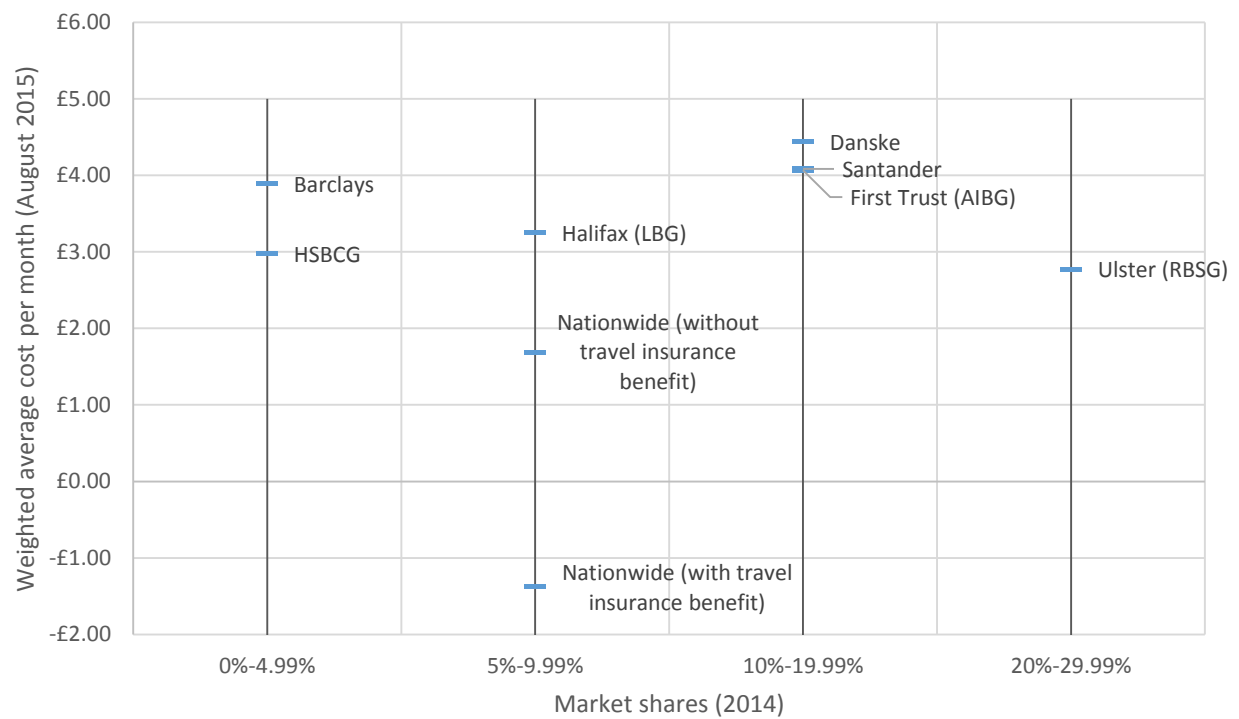
†Nationwide FlexAccount includes free travel insurance for customers regularly crediting £750 per month – this has been valued at £50 per year. Excluding this benefit would increase monthly cost for brand/group to £1.68 (average monthly cost is increased when the monthly benefit from free travel insurance is no longer offset against the costs of the account for the proportion of Nationwide FlexAccount customers regularly crediting £750 per month).

Figure 1: Five-year prices vs length of time account held – weighted average of all segments, UK

[✂]

Source: CMA calculation using Runpath data.

Figure 2: Five-year prices vs market share – weighted average of all segments, NI



Source: CMA calculation using Runpath data.

Personal current account quality

Overview

1. This appendix sets out our provisional analysis of the evidence on PCA quality outcomes.
2. Our approach to assessing the overall quality of service delivered by PCA providers is to use customer satisfaction and willingness to recommend measures. We have also sought to analyse in detail the quality of service provided in relation to those features of a PCA service which customers consider most important.
3. In particular, the results of the GfK PCA consumer survey found that the three most important features of a bank account were (in order of importance):¹
 - quality of staff and customer service;
 - quality and speed of handling problems; and
 - convenience of location and opening times of branches.
4. To assess and compare performance along each of these dimensions, a set of proxy performance indicators has been defined, encompassing evidence from a range of sources (both subjective and objective in nature) including survey data, complaints volumes, and other parameters of the service offering.
5. In undertaking these comparisons we have sought to identify i) whether there is a relationship between market structure and quality outcomes and ii) how and to what extent customers have responded to variations in quality outcomes.
6. Despite the range of sources used in this analysis, we recognise that each represents only an imperfect proxy for the particular dimension of quality we are seeking to capture. We are also unable to capture all aspects of banks' service offering. Additionally, there are specific limitations to the proxy measures used which are discussed as they appear in the paper.
7. The remainder of this paper presents the analysis of the relevant quality indicators. The results should be interpreted alongside that of the pricing and

¹ [GfK PCA consumer survey](#).

revenue work streams, particularly where observed differences in prices reflect differences in the quality, and vice versa.

8. A summary of the comparisons by banking group for each indicator is provided in Table 1 of Annex A.

Analysis of overall quality of service

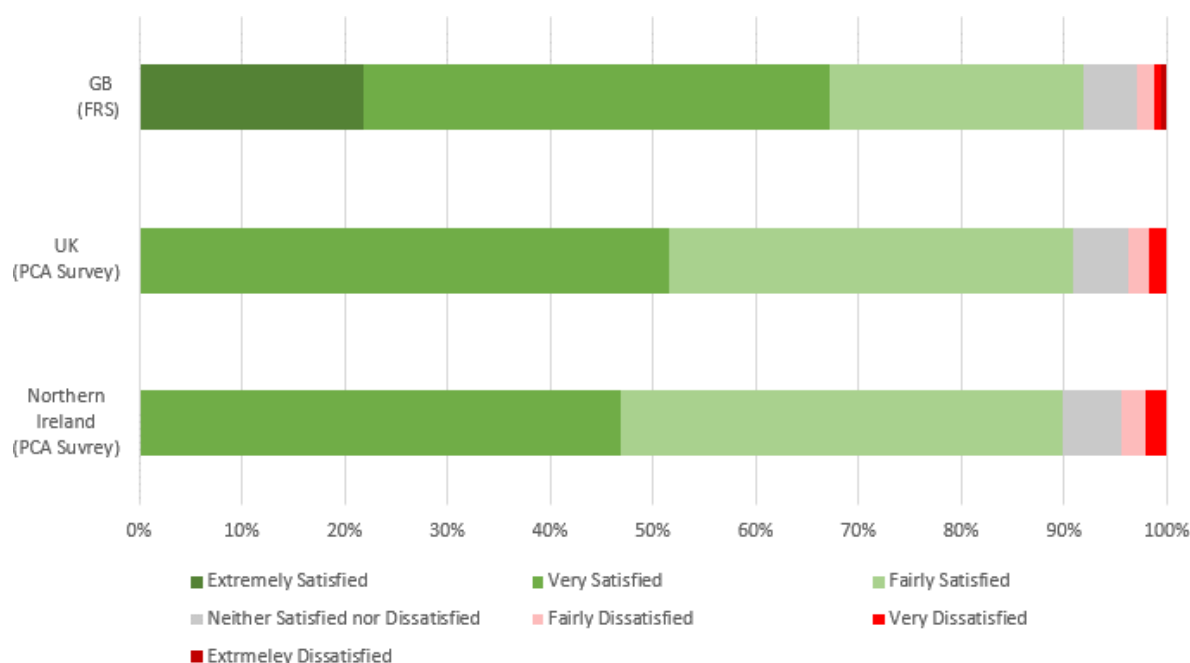
9. Customer experience metrics such as customer satisfaction and advocacy ratings, can be useful indicators of the overall quality of service received by customers.
10. We recognise that there are limitations to the use of these measures as a proxy for quality outcomes, and for this reason the results of such analysis should be interpreted carefully, especially when considering at absolute levels of satisfaction. In particular, ratings are likely to reflect customers' expectations of quality, which may be bounded by the range of service offered by current market participants. It is also possible that perceived quality does not coincide with the actual quality of the service delivered, for example if the service is not well understood by the customer or due to brand taint effects.²
11. However customer experience metrics have the benefit over alternatives indicators (such as operational performance measures) of measuring service outcomes as perceived by customer, as opposed to single inputs or components of the overall quality outcome. In this way they will reflect the implicit weighting attached by customers to the various attributes of service.
12. Customer-reported indicators of service quality are also the most appropriate measures to use in assessing the strength of competitive dynamics in the market, and in particular, how customers responded to perceived variations in service quality between providers.
13. We therefore consider customer satisfaction and advocacy measures to be a primary indicator of service quality outcomes, particularly when making comparisons between providers or across geographic markets.

² In particular, a customers' reported NPS and satisfaction ratings may be impacted by positive or negative publicity surrounding a bank over issues that are not relevant to the provision of the PCA product. For example, in its submission on measuring consumer outcomes in retail banking, RBSG noted the divergence in NPS scores received by its NatWest and RBS brands (despite the similarity of their service offerings). RBSG considered this might be a result of the RBS brand being more readily associated by customers with the negative media coverage received by the RBSG group during and after the financial crisis.

Customer satisfaction

14. Customer satisfaction is a customer experience metric that is widely used as a measure of overall service quality, by both private companies and regulators.³
15. Customer satisfaction data is available from the GfK PCA consumer survey which measured satisfaction on a five point scale (from 'very satisfied' to 'very dissatisfied'). Satisfaction data is also available (for GB only) from the GfK Financial Research Survey (FRS) on a seven point scale (from 'extremely satisfied' to 'extremely dissatisfied'). Aggregate scores from both measures are plotted in Figure 1 below for the UK, and for GB and Northern Ireland separately.
16. The distribution of scores between the 'very' and 'fairly' satisfied categories differs between sources (and this is likely to be explained in part by the existence of the 'extremely satisfied' category in the GfK FRS). However, the total proportion of customers reporting as satisfied is around 90% for both the UK as a whole and for GB and Northern Ireland separately.

Figure 1: Overall satisfaction with main current account supplier in 2014

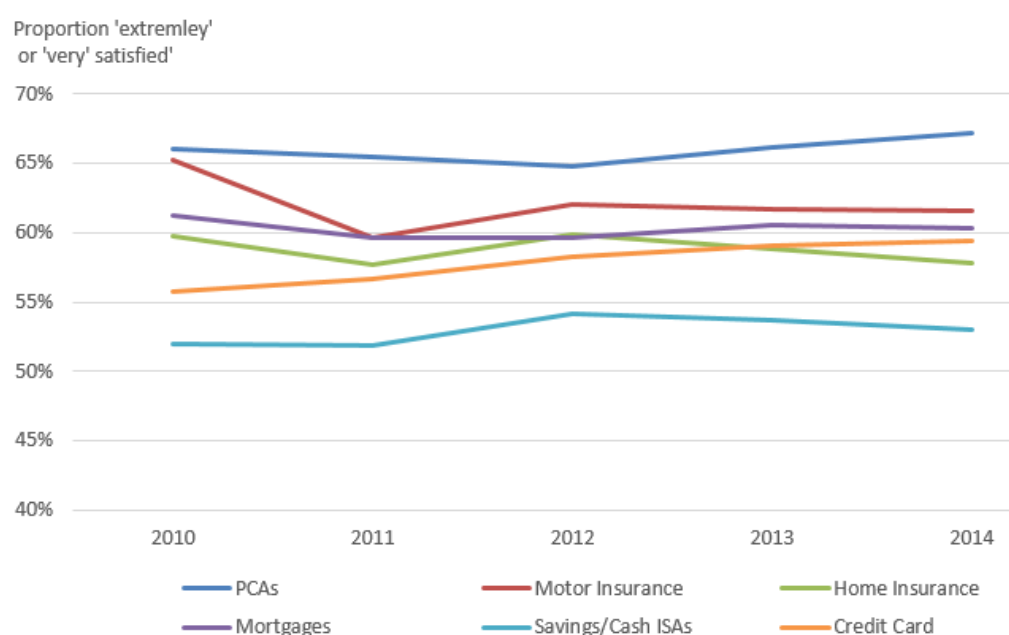


Source: CMA calculations using GfK FRS and GfK PCA consumer survey.
 Note: FRS data does not include Northern Ireland.

³ For example since 2010/11 Ofwat has used customer satisfaction as one of its key metrics to compare and incentivise improvements in the service quality delivered by regulated water companies. Since 2009 Ofcom has used customer satisfaction surveys to quantify and monitor the customer service experience delivered by the main communications providers in the UK. Similarly, customer satisfaction forms part of the Broad Measure of Customer Service (BMCS) used by Ofgem in its DPCR5 and RIIO-ED1 price controls to incentivise improvements in the customer service delivered by electricity distribution network operators.

17. Figure 2 provides a comparison of satisfaction over time between PCA providers and suppliers of other financial products. The following points emerge from this comparison:
- (a) throughout the period shown, satisfaction with PCAs is higher than that of the other products;
 - (b) the proportion of customers 'extremely' or 'very' satisfied has remained broadly flat since 2010, ranging from between 65 to 67%; and
 - (c) despite the considerable overlap in providers, the greatest difference in satisfaction is with savings and cash ISA products, for which satisfaction in 2014 was 14 percentage points lower than that of PCAs.

Figure 2: Comparison of satisfaction across sectors



Source: CMA calculations using GfK FRS.
Note: Data does not include Northern Ireland.

Net Promoter Score

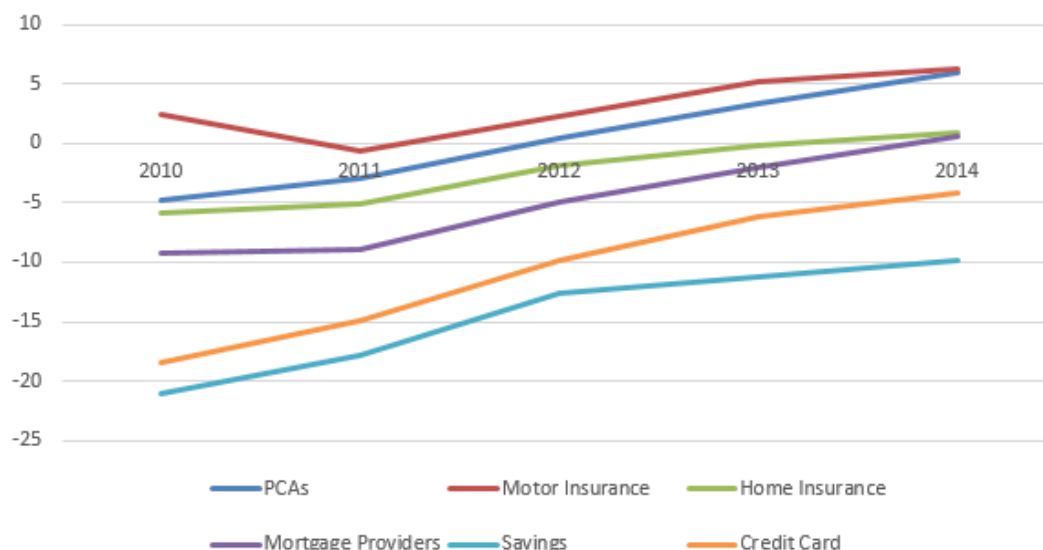
18. Net Promoter Score (NPS) is a customer loyalty metric widely used by banks as part of their quality monitoring processes.⁴ Whilst not a direct measure of customer experience, NPS may be useful for comparing across firms and products. In contrast to satisfaction, NPS scores lack a direct interpretation. However, we have noted that banks prefer it to satisfaction as a way of measuring their performance relative to competitors and it may therefore be

⁴ In their response to the PCA market questionnaire, 8 of the 13 banking groups cited NPS as a metric used to monitor and/or benchmark the quality of PCA service provided.

preferable to satisfaction for making comparisons across providers and products.

19. The NPS metric is derived from survey evidence in which customers are asked on a scale of 0 to 10, how likely they are to recommend their provider to friends and family. Net promoter score is then calculated as the percentage of customers reporting a score of 9 or 10 (the 'promoters') less the percentage of customers reporting a score of 6 or less (the 'detractors'). The score is therefore bounded from below by -100 (in the case where all customers are detractors) and from above by +100 (all customers are promoters).
20. Figure 3 plots the NPS over time for PCAs and other financial products. PCA providers attained the second highest NPS over the period. By 2014 performance had all but converged to that of the highest scoring product (motor insurance) with an increase in score of 11 points since 2010.

Figure 3: Comparison of NPS across products



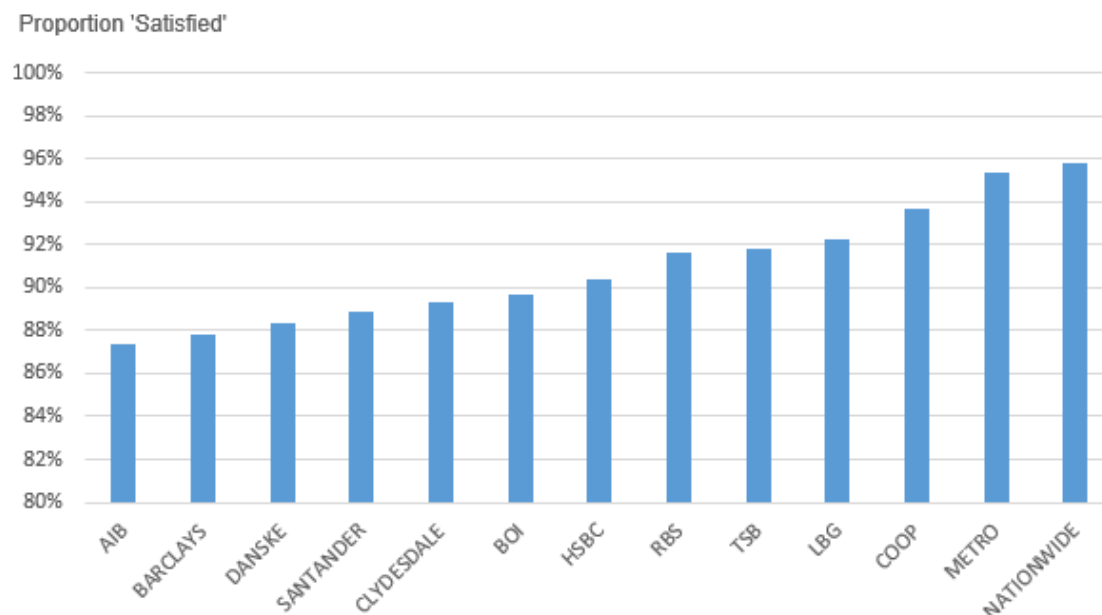
Source: CMA calculations using GfK FRS.
 Note: Data does not include Northern Ireland.

Comparison across banking groups

21. We have undertaken comparisons across banking groups of various quality indicators to examine the strength of customer response to quality variations, and to determine whether there is evidence of a relationship between quality outcomes and concentration.

22. Figure 4 plots a comparison of customer satisfaction scores across banking groups.⁵ The proportion of customers reporting to be 'satisfied' with their main current account supplier in 2015 varies across banking groups, ranging from around 87 to 96%. Nationwide, Metro and Co-op received the highest percentage of satisfied customers whereas Danske, Barclays and AIB received the lowest proportion.

Figure 4: Comparison of satisfaction in 2014 using GfK PCA consumer survey

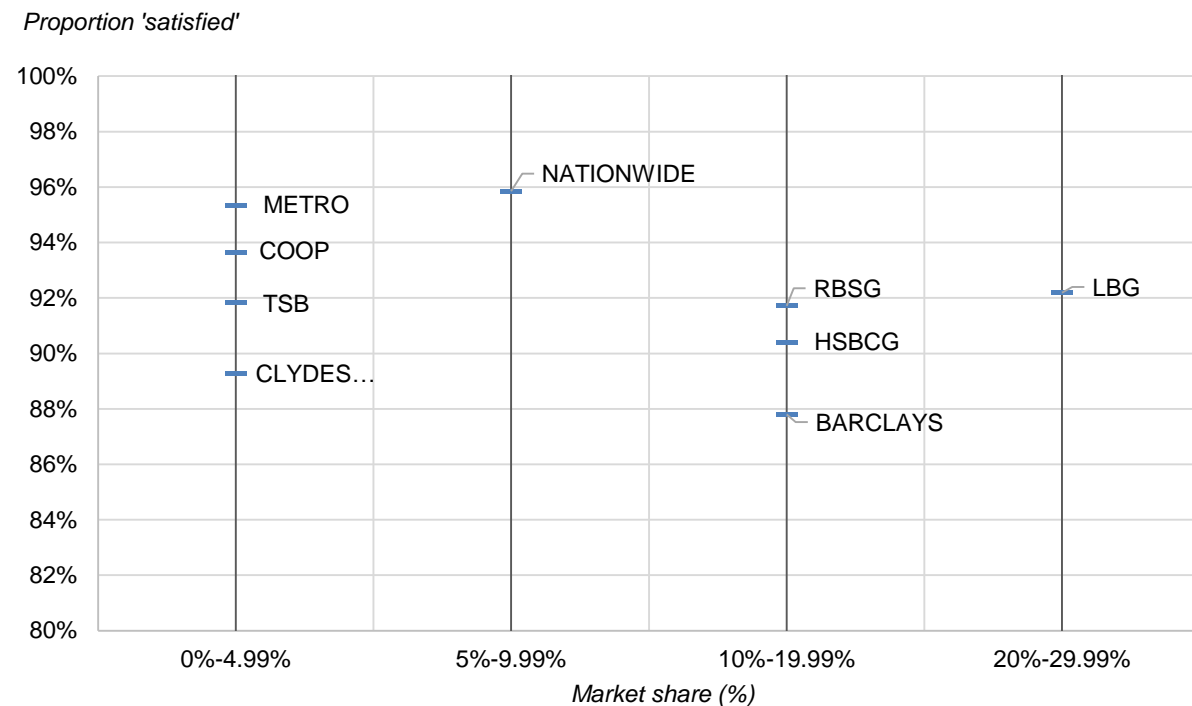


Source: GfK PCA consumer survey.

23. This latter result might appear to suggest a relationship between market share and customer satisfaction. To explore this relationship further, Figure 5 plots the corresponding satisfaction scores by market share for GB.

⁵ The customer satisfaction score for each banking group reflects a weighted average of scores for its brands, where the weights are the number of accounts. For example, the score of HSBCG (90%) is a weighted average of the scores for HSBC (89%) and First Direct (98%).

Figure 5: Comparison of GB satisfaction scores by market share in 2014



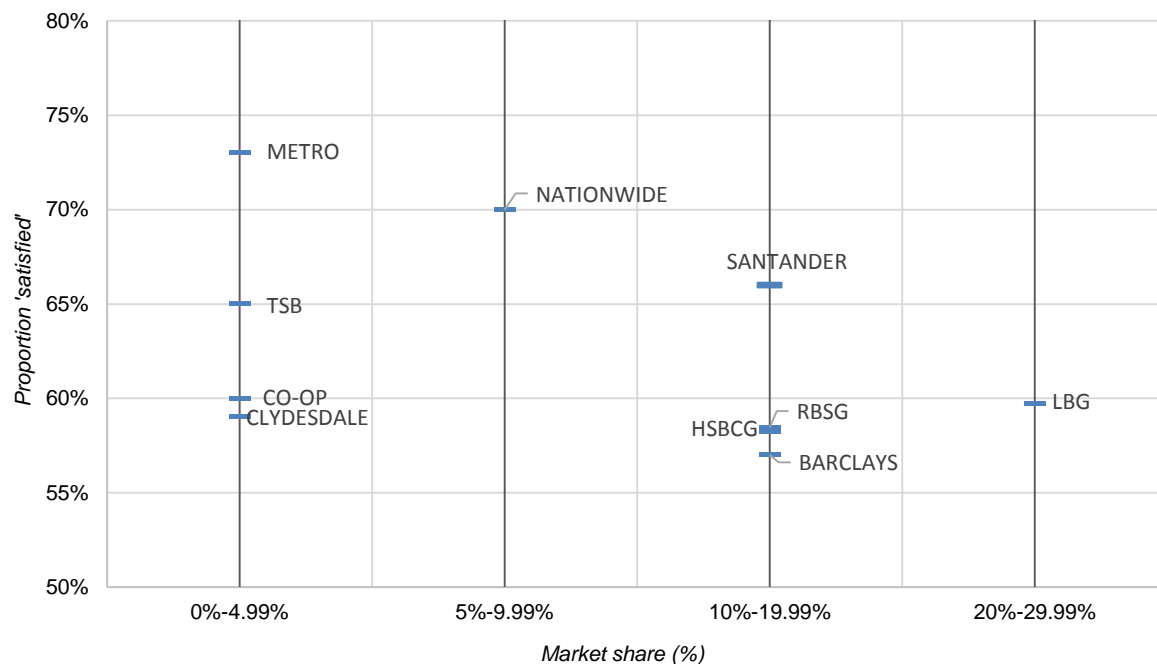
Source: GfK PCA consumer survey and CMA calculations using data submitted by banks.
 Note: Market shares relate to share of GB main accounts.

24. Figures 6 and 7 plot the respective scores from the Which? and GfK FRS surveys of satisfaction with current account providers. There are time period and definitional differences between the two series,⁶ and therefore the scale is not directly comparable across sources. Nevertheless, there is a reasonably strong correlation between the two sets of scores (around 78%) and the following observations may be drawn:

- [X] and [X] receive high satisfaction scores [X]; however
- the relative performance of Santander varies substantially, [X] under the GfK FRS measure while enjoying the third best Which? satisfaction score.

⁶ The Which? satisfaction score is a hybrid measure calculated using combination of respondents' overall satisfaction rating and how likely they are to recommend their bank to a friend.

Figure 6: Comparison of satisfaction in 2015 using Which? satisfaction index



Source: Which? (June 2015) and CMA calculations using data submitted by banks.

Notes:

1. Market shares relate to the share of GB main accounts.

25. The Which? satisfaction scores tend to point to a stronger relationship between size and satisfaction than depicted in the GfK FRS. However, it should be borne in mind that the Which? results are derived using a much smaller sample compared to the GfK FRS. It has also not been possible for us to verify the representativeness of the sample and robustness of the survey methodology.

Figure 7: Comparison of satisfaction in 2014 using GfK FRS

[REDACTED]

Source: GfK FRS (GB only) and CMA calculations using data submitted by banks.

26. As a further comparative measure of overall service quality, Figure 8 plots the relationship between market share and NPS for GB current account holders in 2014. [REDACTED] have the highest scores.

Figure 8: Comparison of Net Promoter Score in 2014

[REDACTED]

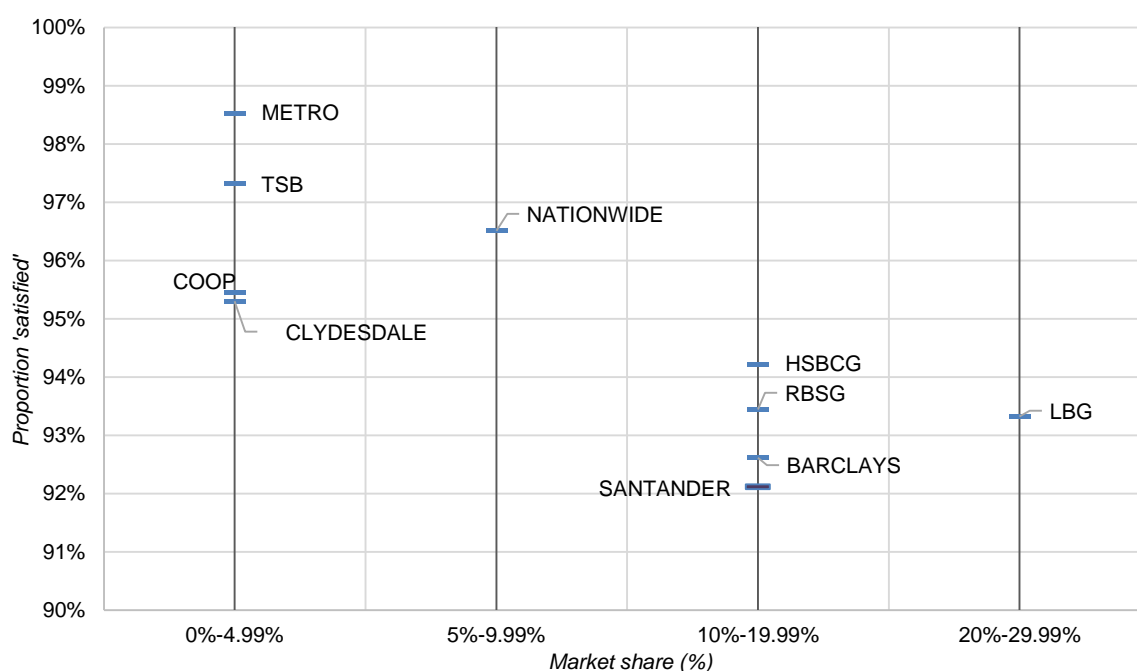
Source: GfK FRS (GB only) and CMA calculations using data submitted by banks.

27. On the basis of the analyses presented above, we find that there are some small banks, such as [REDACTED] and [REDACTED], which receive comparatively high customer satisfaction and advocacy scores. However, in other cases, such as [REDACTED] and [REDACTED], a relationship between customer satisfaction and advocacy scores is less apparent.

Quality of staff and customer service

28. According to the GfK PCA consumer survey, 'quality of staff and customer service' was ranked as the most important feature of a bank account, with 83% of customers rating it as either 'essential' or 'very important'. We have sought to use customers' self-reported satisfaction with the quality of staff and customer service as a proxy for this quality dimension.
29. Figure 9 plots a comparison of this satisfaction measure between banking groups for GB customers. The banks with the highest reported levels of satisfaction are also the banks with the lowest market shares (Metro, TSB, Nationwide and Co-op).

Figure 9: GB Satisfaction with the quality of staff and customer service in 2014



Source: GfK PCA consumer survey and CMA calculations using data submitted by banks.
Note: Market shares refer to share of GB main accounts at year end.

30. An equivalent analysis of Northern Ireland customers can be found in Figure 2 of Annex A. On the basis of the analysis, there does not appear to be an association between satisfaction of quality of staff and customer service in Northern Ireland, however the small sample size limits the strength of inference that can be drawn from this data.

Quality and speed of handling problems

31. According to the GfK PCA consumer survey the 'quality and speed of handling problems' is the second most important feature of a bank for customers, with 83% rating it as 'essential' or 'very important'.

32. Customer complaints can provide an indication of not only how frequently banks make errors but also how effective they are at resolving them. There are two primary sources of complaints data available:
- (a) Banks are required to report all complaints that are not resolved within one working day to the Financial Conduct Authority (FCA). These are known as FCA-reportable complaints.
 - (b) Customers who are not satisfied with the response from their bank can escalate their complaint to the Financial Ombudsman Service (FOS).
33. We have collected data on both types of complaints from the banks and FOS, respectively. While each dataset contains complaints about the provision of current accounts only, complaints included within them are not limited to PCAs may also include complaints related to BCAs.⁷
34. There are also limitations to the interpretation of these complaints datasets as neither provides a measure of the total complaints received by each bank. For example, a bank with comparatively good performance on the FCA-reportable complaints measure may receive the same (or more) total number of complaints as another bank, but instead be more effective at dealing with them (ie within one working day).
35. Nevertheless, the speed at which complaints are handled is itself a dimension of service quality and as such we consider that the complaints indicators act as a useful proxy.
36. Figure 10 plots each of the complaints series by banking group for 2014, normalised by the number of main accounts.
37. Performance between FCA-reportable and FOS complaints varies within banks. For example, while [X] has third largest volume of FCA-reportable complaints, it also has the fewest complaints referred by customers to the FOS. This disparity in relative performance between the measures may indicate that while the service offered by some banks may generate a higher volume of reportable complaints, some of these banks are relatively successful at resolving these complaints to the satisfaction of their customers. On the other hand, we observe a reverse pattern for [X] and to a lesser extent [X].

⁷ However only complaints made by private individuals or micro-enterprises (defined as business with a an annual turnover of up to two million euros and fewer than ten employees) can be referred to the FOS.

Figure 10: Normalised Customer Complaints in 2014



Source: FOS, and CMA calculations using data submitted by banks.

Notes:

1. FOS complaints relate to April 2014–23 March 2015 reference period, complaints relating to overdrafts are not included.
2. FCA-reportable complaints relate to 2014 H2 reference period.

38. We have also examined the extent to which variations in complaints performance are reflected in market dynamics (see Figure 11). Some banks with higher comparative performance (such as TSB and Nationwide) have experienced an increase in market share, but in general the relationship between complaints performance and change in market share is relatively weak.

Figure 11: FoS complaints and changes in market share in 2014



Source: CMA calculations using data submitted by banks.

Notes:

1. Complaints relate to April 2014–March 2015 reference period, complaints relating to overdrafts are not included.
2. Change in market shares refer to change in 2013 in share main accounts at year end.

39. We also note that there have been a number of high-profile service failures affecting PCA customers over recent years. These are summarised in
40. Table 1 below.

Table 1: Summary of recent PCA service failures

<i>Date</i>	<i>Banking group</i>	<i>Description of service failure</i>
June 2012	RBSG	An IT failure lasting several days left approximately 6.5m RBSG customers unable to use online banking facilities or obtain accurate account balance information from ATMs. During the period, incorrect credit and debit interest was applied to customers' accounts and inaccurate bank statements were produced. The IT failure lasted longer for Ulster Bank customers (three and a half weeks) than for other RBSG customers. RBSG was later fined £42m and £14m, as part of enforcement action by the FCA and PRA, respectively. RBS provided £70.3 million in redress to UK customers affected.
March 2013	RBSG	A system failure left some Natwest PCA customers unable to withdraw cash, use online banking or make debit card payments.
December 2013	RBSG	Systems problems resulted in a proportion of RBSG customers being unable to make debit card payments or access their accounts using internet or mobile banking.
January 2014	LBG/TSB	A server failure left approximately [X] of LBG and [X] TSB customers unable to make point of sale debit card transactions for a four hour period. ATM cash withdrawal transactions were also declined for some customers.
February 2014	Nationwide	Some Nationwide customers were unable to make debit card payments for a number of hours due to an IT problem.
June 2015	RBSG	Around 600k RBSG customer payments were delayed for a number of days after an IT problem resulted in them going 'missing' overnight on the day they were scheduled to be paid.
August 2015	HSBCG	An IT problem resulted in approximately 275k BACs payments originating from HSBC accounts being delayed by up to a day.

Sources: [FCA](#), [Guardian \(1\)](#), [Financial Times](#), [LBG](#), [Guardian \(2\)](#), [Telegraph](#), [Guardian \(3\)](#).

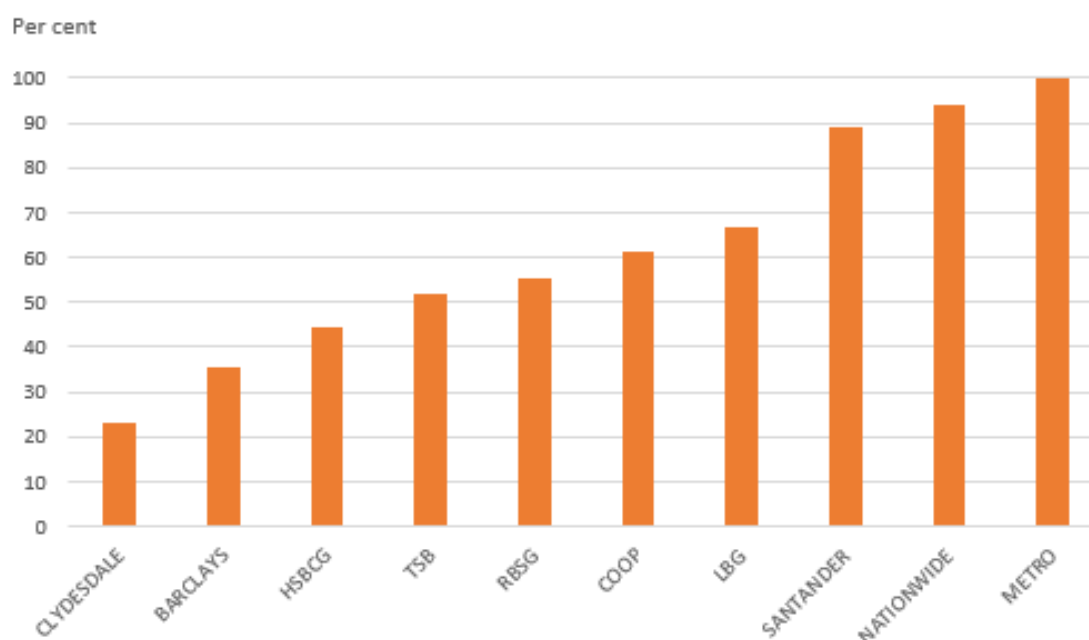
41. One of the most significant of these was RBSG's IT failure in June 2012 which resulted in Ulster's IT systems being unavailable for three and a half weeks. RBSG told us that Ulster suffered, both in terms of satisfaction as well as reputational damage; for example its Net Promoter Scores went from around [X], down to [X], and it has taken Ulster nearly [X] years to increase its scores back to the same levels prior to the failure. We noted, however, that there seemed to have been a relatively small impact on Ulster's total number of main accounts. Ulster's number of main accounts opened reduced from about [X] in 2011 to just under [X] in 2012 and 2013 then to [X] in 2014, while the number closed increased from [X] in 2011 to [X] in 2012 and [X] in 2013 and [X] in 2014. These numbers suggest a loss of [X]%⁸ of Ulster's total number of main accounts (and [X]% if 2014 numbers are included). RBSG said that even though customers were inconvenienced, it was able to help them through that period, albeit with manual processes; hence, in its view, its relationships with its existing customers became even stronger even though there was a lot of overall dis-satisfaction in the market and negative publicity.

⁸ This is based on adding a [X] reduction in main accounts opened and a [X] increase in main accounts closed over the period 2011 to 2013 and dividing by Ulster's total number of main accounts.

Convenient access to branches

42. The results of the GfK survey show convenience of access to branches to be amongst the most important features of a PCA.⁹ We have therefore undertaken comparisons between banks using data on branch opening hours and weekend access in January 2015 as an indicator of this dimension of service quality. The comparison does not take into account customers' travel time to their nearest branch, which might be regarded as an important measure of convenience.
43. Figure 12 and Figure 13 plot for each banking group the proportion of GB branches with weekend opening and average weekly opening hours, respectively.

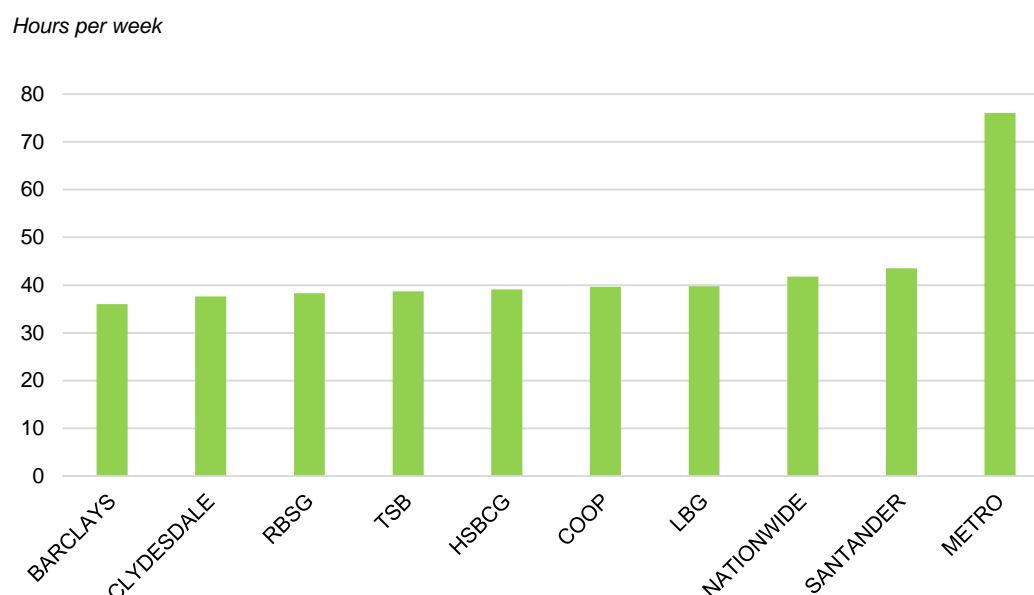
Figure 12: Proportion of GB branches with weekend opening in January 2015



Source: CMA calculations using data submitted by banks.

⁹ When asked about the most important features of a main current account, 60% of customers cited 'the convenience of location and opening times of branches' as 'essential' or 'very important'.

Figure 13: Average GB branch opening hours in January 2015

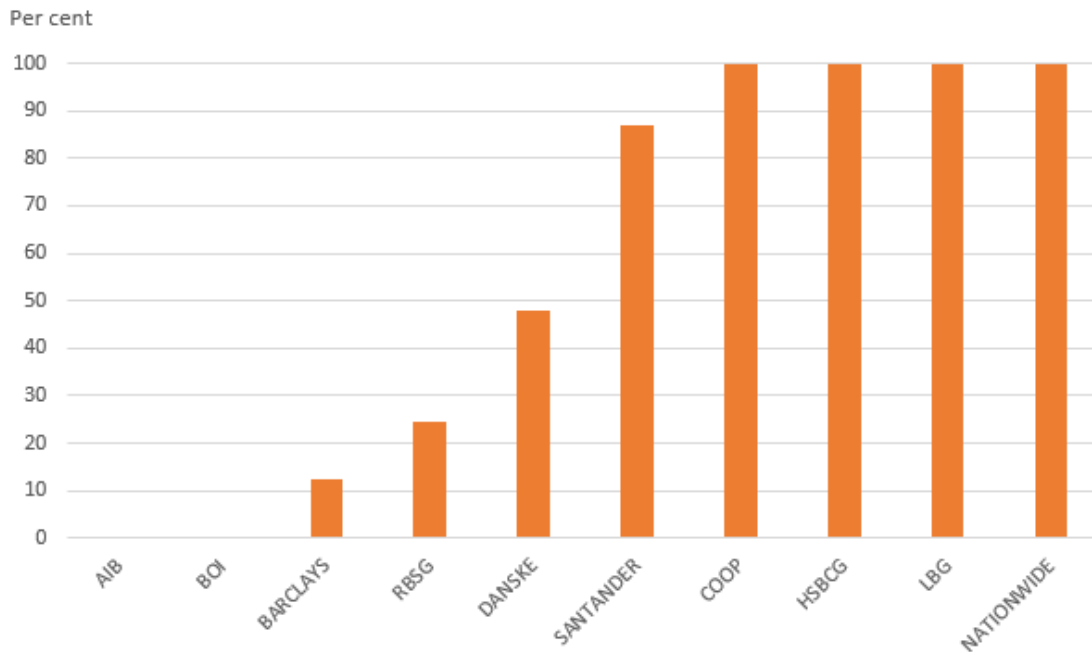


Source: CMA calculations using data submitted by banks.

44. Evidence on whether banking groups with a smaller market share perform comparatively better under these metrics is mixed. For example, on the one hand, Metro and Nationwide had the highest proportion of GB branches with weekend opening (see Figure 12). However, Santander the fifth largest banking group, had the third highest proportion of branches with weekend opening and Clydesdale which, despite having a relatively small GB market share (1.2%) had the lowest proportion.¹⁰
45. We observe less variation in performance on average weekly opening hours in GB, with the exception of Metro which has the longest opening hours (see Figure 13).
46. Figure 14 and Figure 15, respectively, plot the equivalent metrics for branches in Northern Ireland.

¹⁰ We note that Clydesdale is a long-established bank with a large geographic concentration of customers in Scotland (where it is the fourth largest banking group).

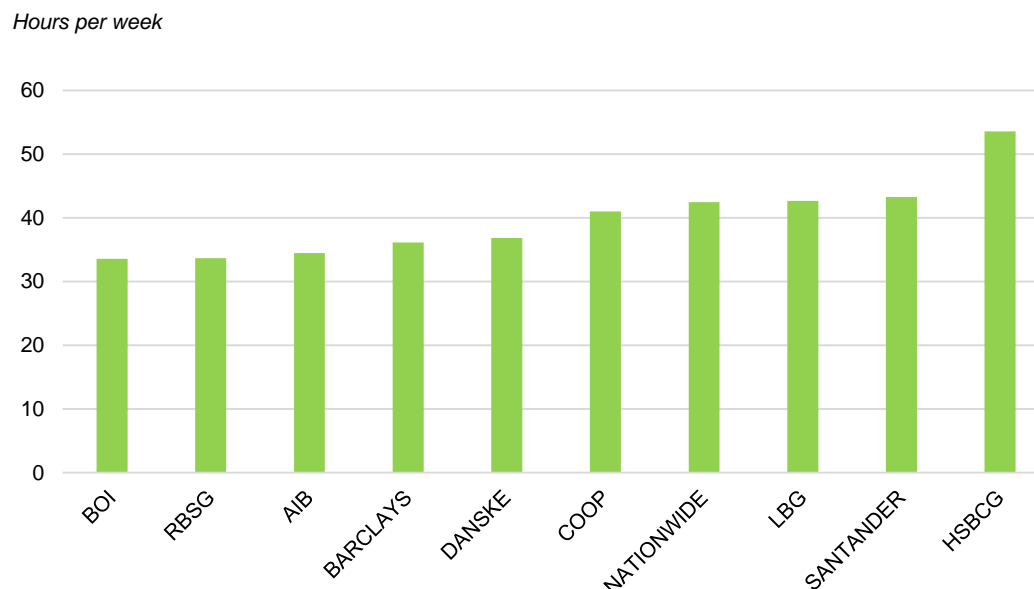
Figure 14: Proportion of Northern Ireland branches with weekend opening in January 2015



Source: CMA calculations using data submitted by banks.

47. A clear association between convenience of branch access and market size is not evident for PCA providers in Northern Ireland. On the one hand HSBC and Nationwide had the highest proportion of branches with weekend opening. However, Santander and LBG (the third and fifth largest PCA providers, respectively) also performed comparatively well, whereas smaller providers such as AIB, Barclays and BOI had amongst the lowest proportion of branches open.

Figure 15: Average Northern Ireland branch opening hours in January 2015



Source: CMA calculations using data submitted by banks.

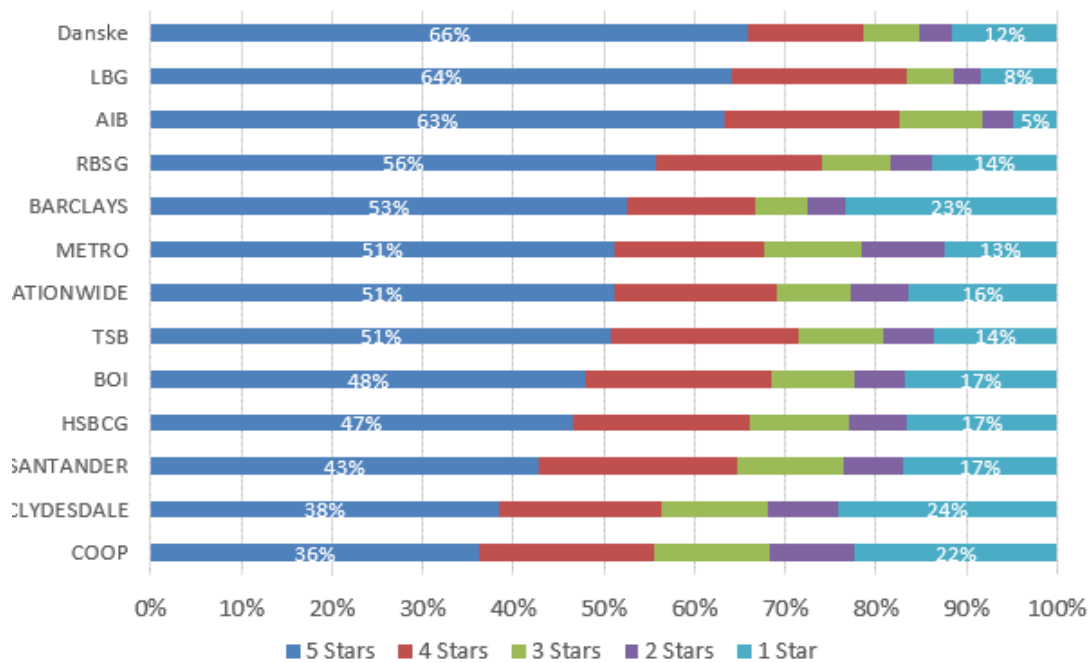
48. In interpreting these results, it is relevant to note that banks may face a trade-off between having a smaller number of heavily-used branches open for long hours and a larger number of more lightly-used branches open for shorter hours. While each of these may have convenience benefits and drawbacks for customers (the former longer opening hours and the latter lower travel time to branch), the former group would tend to come out better from a comparison limited to opening hours only. However, we have not been able to extend the comparisons to take into account other aspects of convenience, such as travel time to branch.

Mobile banking

49. Whilst not ranked in the GfK PCA consumer survey as one of the most important features of a BCA,¹¹ mobile banking has become an increasingly important channel for accessing PCA services. According to the GfK PCA consumer survey, over a third of customers currently use a mobile banking app on their tablet or smart phone and amongst those that use do, 74% use it to access their PCA at least once a week.
50. Figure 16 and Figure 17, respectively, plot the user ratings for the Android and Apple versions of the banking groups' mobile apps. It is important to note that these ratings do not necessarily constitute the responses of a representative sample of mobile banking users and merely represent the views of those that chose to give a rating.

¹¹ Around a fifth of customers rated an app on a smartphone or tablet as an 'essential' or 'very important' feature of a bank account.

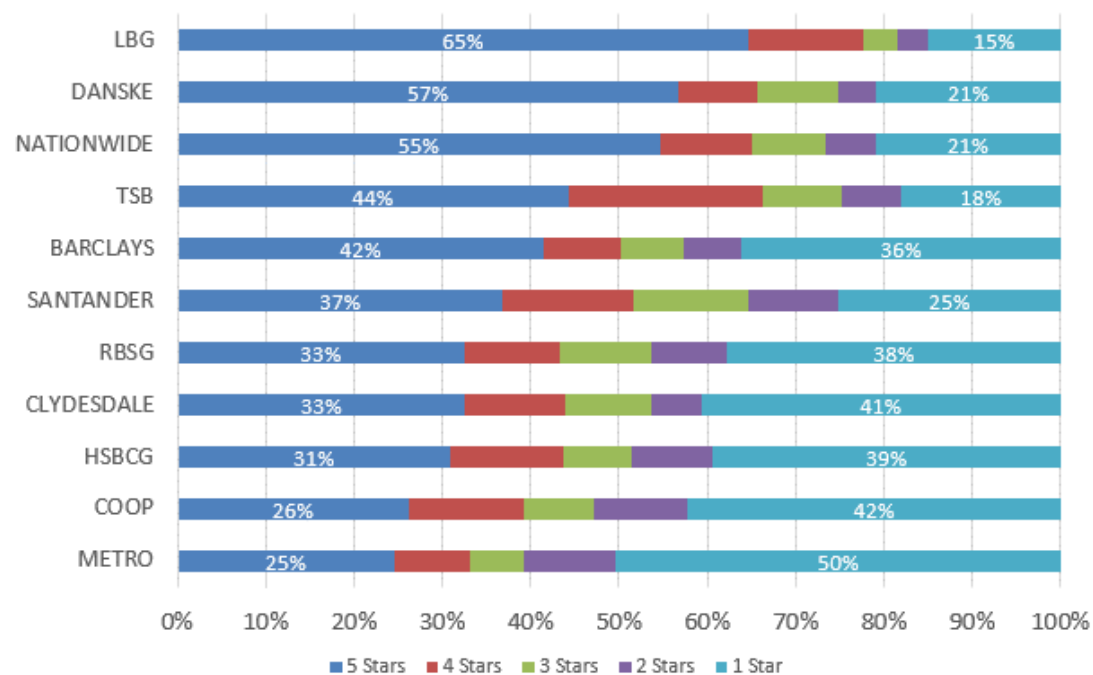
Figure 16: Android mobile banking app ratings at June 2015



Source: Google Play Store.

Note: Ratings collected over 24 hour period on 14 June 2015.

Figure 17: Apple mobile banking app ratings at June 2015



Source: iTunes App Store.

Notes:

1. Ratings collected over 24 hour period on 14 June 2015.

2. Data not included for apps which received less than 100 ratings (AIB and BOI).

51. Although the ratings vary between platform, the following common points emerge:
- LBG and Danske have the top two rated apps for both platforms;¹²
 - Co-op's apps were amongst the worst two performers for both platforms; and
 - on average, the ratings for large banks' apps were higher than those received by small banks.¹³
52. Whilst it is not possible to extend inference from this sample to the general population of mobile banking users, the results provide an indication that amongst those users that chose to leave a rating, the apps of larger banks were viewed as higher quality than those of smaller banks.

Strength of customer responses

53. To examine the strength of customers' responses to variations in bank quality we have compared customer satisfaction ratings and NPS for each brand against the respective change in market share (see Figure 18 and Figure 19).

Figure 18: Comparison of NPS and change in market share in 2014



Source: GfK Financial Research Survey (GB only) and CMA calculations using data submitted by banks.
Note: Change in market shares refer to change on 2013 in share of GB main accounts at year end.

Figure 19: Comparison of Satisfaction Scores and change in market share in 2014



Source: GfK PCA Consumer Survey and CMA calculations using data submitted by banks.
Note: Change in market shares refer to change on 2013 in share of GB main accounts at year end.

54. We find, in general, that brands which deliver higher levels of customer satisfaction are gaining market share relative to brands which deliver below average satisfaction. Nevertheless, the pace of these gains/losses is slow, potentially indicative of a weak customer response.
55. We also observe some PCA brands with high relative levels of satisfaction/NPS, such as First Direct¹⁴ and Co-op, which are failing to

¹² In terms of both the average rating and proportion of five star ratings.

¹³ For the Android platform, the average rating for large banks' apps was 3.99 stars, compared 3.75 stars for the small banks (where a small bank is defined as one which was not amongst the top four providers [in terms of market share] in the UK or primary devolved nation in which it operates). For Apple devices, large banks' apps received an average rating of 3.42 stars, compared to 3.40 for the apps of smaller banks.

¹⁴ Part of HSBCG.

increase their market share. Similarly, some banks with relatively low levels of satisfaction or willingness to recommend, such as LBG and Santander, have experienced an increase in market share.

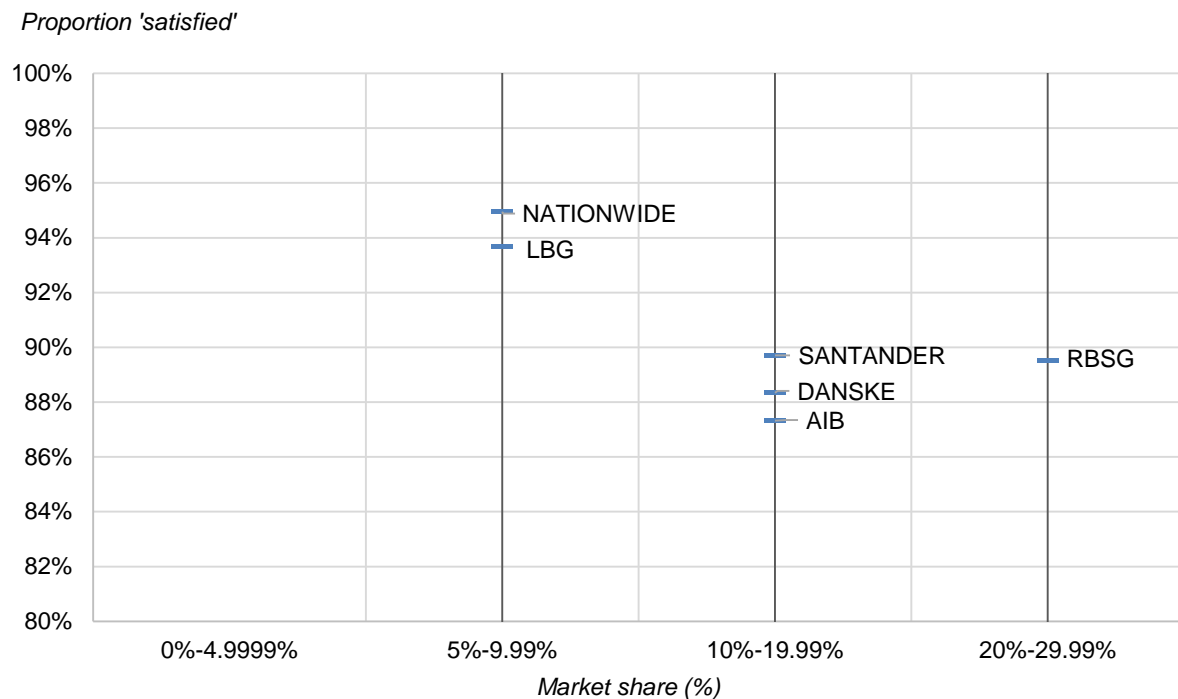
Annex A: Additional analysis

Table 1: Comparison of quality indicators by bank

Service attribute	Overall quality				Quality of staff and customer service	Quality and speed of handling problems		Convenience of location and opening times of branches		Mobile banking	
Quality indicator	CSAT – PCA Survey (% satisfied)	NPS	CSAT – FRS (% satisfied)	CSAT – Which? (% satisfied)	CSAT (% satisfied with quality of staff and customer service)	FCA-reportable complaints (000s main accounts)	FOS-escalated complaints (00,000s main accounts)	Weekend opening (% branches)	Opening hours (average per week)	Android app (average rating on scale 1-5)	Apple app (average rating on scale 1-5)
Metro	95	[✖]	[✖]	73%	99%	[✖]	[✖]	100	76	3.85	2.47
Nationwide	96	[✖]	[✖]	70%	97%	[✖]	[✖]	94	42	3.81	3.72
TSB	92	[✖]	[✖]	65%	97%	[✖]	[✖]	52	39	3.90	3.68
Co-op	94	[✖]	[✖]	60%	95%	[✖]	[✖]	61	40	3.38	2.70
BOI	n/a	[✖]	[✖]	62%	n/a	[✖]	[✖]	0	34	3.77	n/a
HSBCG	90	[✖]	[✖]	58%	94%	[✖]	[✖]	44	39	3.73	2.87
LBG	92	[✖]	[✖]	60%	93%	[✖]	[✖]	67	40	4.28	4.09
Clydesdale	89	[✖]	[✖]	59%	95%	[✖]	[✖]	23	38	3.39	2.90
Santander	89	[✖]	[✖]	66%	92%	[✖]	[✖]	89	44	3.67	3.28
RBSG	92	[✖]	[✖]	58%	93%	[✖]	[✖]	55	38	3.98	2.92
Danske	88	[✖]	[✖]	61%	90%	[✖]	[✖]	48	37	4.18	3.76
Barclays	88	[✖]	[✖]	57%	93%	[✖]	[✖]	36	36	3.68	3.13
AIB	87	[✖]	[✖]	n/a	90%	[✖]	[✖]	0	35	4.33	n/a

Source: CMA calculations using (1) GfK NOP FRS, (2) GfK PCA consumer survey, (3) Which? (June 2015), (4) Financial Ombudsman Service, (5) Google Play Store (see Figure 16), (6) iTunes App Store (see Figure 17) and (7) data submitted by banks.

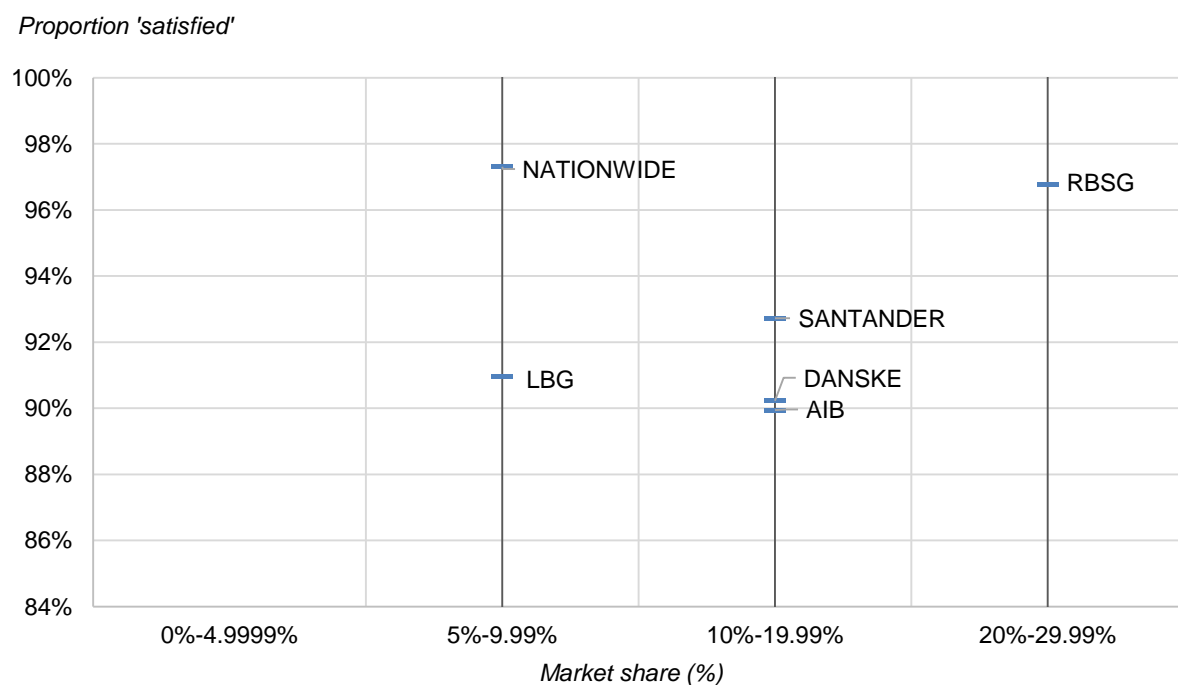
Figure 1: Satisfaction by market share in Northern Ireland in 2014



Source: GfK PCA consumer survey and CMA calculations using data submitted by banks.

Note: Insufficient number of observations available to calculate satisfaction scores for Barclays, BOI, Co-op, HSBCG and TSB.

Figure 2: Satisfaction with quality of staff and customer service by market share in Northern Ireland in 2014



Source: GfK PCA consumer survey and CMA calculations using data submitted by banks.

Note: Insufficient number of observations available to calculate satisfaction scores for Barclays, BOI, Co-op, HSBCG and TSB.

Innovation in personal current accounts

Overview

1. In this appendix, we consider the following types of innovation in the PCA market:
 - (a) product innovation;
 - (b) service innovation (including the use of new or enhanced distribution models, such as mobile banking); and
 - (c) new business models.¹
2. In addition to considering innovation in retail banking in the UK, we also consider, where relevant, the implications for the UK market of international innovations in retail banking,² with reference to the [Deloitte innovation report on the impact of innovation in the UK retail banking market](#) (the Deloitte innovation report)³ and our case study on the Dutch retail banking market (the Dutch case study)⁴.

Product innovation

3. In recent years, product innovation in the PCA market has primarily taken the form of PCAs offering some form of reward, such as credit interest or cashback (see Appendix 7.1 PCA overdraft customer characteristics, Table 5). For example:
 - (a) Santander's 123 Current Account, launched in 2012, offers an interest rate of up to 3% on credit balances up to £20,000 and up to 3% cashback

¹ We do not consider directly the extent of any innovation in operational processes, but note that the use of new or enhanced distribution models, particularly where this is based on the increasing digitalisation of banking, is likely to lead to cost efficiencies.

² In considering retail banking in international markets, we do so in the context of our market investigation into PCA and SME banking specifically.

³ We commissioned Deloitte to undertake research into ongoing and future innovations in the UK retail banking market and the possible implications for competition, by reference to international comparisons. Deloitte assessed the impact of five innovations on retail banking (mobile banking; digital wallets; aggregators; big data; and bank in a box (BiaB)).

⁴ Our case study on the Dutch retail banking market focused on recent regulatory studies in the Netherlands looking at the retail banking market, in order to identify any relevant insights that may be useful for our investigation into the UK retail banking market. Both pieces of work were conducted with the view that international comparisons can offer useful insights, but are limited by the extent to which there exist differences in market features and customer preferences in different countries or regions. (see Appendix 7.8)

on household bills paid by direct debit.⁵ Customers also receive preferential rates on other Santander products.

- (b) TSB's Classic Plus account, launched in April 2014, offers credit interest of 5% on balances up to £5,000.⁶
- (c) The Club Lloyds account, launched in April 2014, offers up to 4% credit interest on balances up to £5,000; preferential rates on other Lloyds products; and other benefits (eg cinema tickets and magazine subscriptions).⁷
- (d) HSBC's new Advance account, launched in November 2014, provides access to preferential terms, prices and rates (eg access to the Regular Saver account that offers at 6% credit interest; reduced mortgage booking fees; and 10% interest cashback on personal loans); and enhanced terms (eg worldwide ATM withdrawals free from HSBC non-sterling cash fees and £500 ATM withdrawal limits).⁸

Service innovation

- 4. While product innovation in the PCA market has largely reflected the significance of price to customers, service considerations are also important. For example, the GfK PCA consumer survey found that quality of staff and customer service was rated as the most important element of a PCA.⁹
- 5. A number of service innovations have arisen as a result of the increasing digitalisation of banking and the resulting transition from traditional branch-based banking to the multi-channel distribution banking model that is now commonplace among the established banks in the UK, notably internet and mobile banking.

Internet banking

- 6. Although internet banking functionality has been offered by the established banks in the UK for some time, increasing customer access to broadband and high-speed connections, coupled with an increased uptake in the general use of the internet, has resulted in the development of internet banking into a

⁵ Santander 123 customers are required to pay a monthly fee of £2; pay in at least £500 per month; and set up at least two direct debits.

⁶ TSB Classic Plus account customers are required to pay in at least £500 per month and register for internet banking.

⁷ Club Lloyds is free for those Lloyds customers that pay in at least £1,500 a month. Otherwise, customers are required to pay a monthly fee of £5.

⁸ HSBC customers must have a minimum monthly credit turnover of £1,750 to be eligible for the Advance account.

⁹ See [GfK PCA consumer survey](#), p2.

significant distribution channel. For example, the British Bankers' Association estimated that every day in March 2015 there were 9.6 million logins to internet banking services.¹⁰

7. Many of the banks have made and continue to make significant investment in this area, as part of their wider digital banking offer. For example:
 - (a) In June 2014, RBSG announced that it would be investing more than £1 billion into its digital services for personal (and small business) banking in the next three years.
 - (b) LBG told us that it had invested over £750 million in digital technologies over the past three years and it would invest £1 billion over the next three years.
 - (c) HSBCG told us that its Retail Banking and Wealth Management business was investing [X] to improve its UK multi-channel offering and digital services.
8. We consider below the impact of the development of internet banking and the wider digitalisation of banking in the context of the increasing adoption of mobile banking.

Mobile banking

9. Although internet banking has been common place for some time, mobile banking – the provision of banking services through smartphone and tablet channels – is also increasing at a rapid pace. For example:
 - (a) The British Bankers' Association estimates that customers now log into their mobile banking applications 10.5 million times a day and use them to transfer £2.9 billion each week.¹¹
 - (b) LBG told us that it had [X] active mobile banking customers, and of these customers, [X] to [X] accessed mobile banking with an application and [X] to [X] with a mobile browser.
 - (c) RBSG told us that it had over [X] million active digital customers, which equated to approximately [X] of its existing PCA customer base, and in [X] million customers activated online or mobile banking for their

¹⁰ See Deloitte (2015), *The Impact of Innovation in the UK Retail Banking Market*, p4.

¹¹ See [Deloitte innovation report](#), p4.

accounts and [X] million customers logged into their online banking account approximately [X] million times.

10. Mobile banking is provided by all of the largest banks in the UK (ie Barclays, HSBCG, LBG, RBSG and Santander). The core services provided by mobile banking applications typically include account checking services; money transfer and payment services; ATM location services; personalised alerts; and loan and service requests. Table 1 compares the functionality of the PCA mobile banking applications of a selection of UK banks, and suggests that, while providing similar basic services, there is some differentiation in the applications of the main banks. Recent developments in the UK include a feature that allows customers to withdraw cash from ATMs with their smartphone, and a biometric fingerprint feature that allows customers to login using only their finger print. Features that are available in other markets that have not yet been introduced in the UK include proximity payments and advanced personal financial management tools.

Table 1: Functionality of PCA mobile banking applications, as at June 2015

<i>Bank</i>	<i>Check balance</i>	<i>Make payment to new recipient</i>	<i>Send money to a mobile number (PAYM)</i>	<i>Branch/ATM locator</i>	<i>Touch ID support</i>
Lloyds, Halifax and Bank of Scotland	Yes	Yes	Yes	Yes	No
NatWest/RBS	Yes	No	Yes	Yes	Yes
Barclays	Yes	No	Yes (via Pingit)	Yes	No
Nationwide	Yes	No	No	No	No
HSBC	Yes	No	Yes	Yes	No
Santander	Yes	No	Yes	Yes	No
Metro Bank	Yes	No	No	Yes	No
TSB	Yes	Yes	Yes	Yes	No

Source: Deloitte innovation report, p8.

11. The Deloitte innovation report compares the levels of mobile banking adoption in 2015 for a selection of countries around the world. This suggests that the USA is the leading market, but the UK – where around one third of customers use mobile banking applications – has one of the highest levels of mobile banking adoption in the sample. Although, when mobile banking adoption is taken as a proportion of smartphone users, the UK performs slightly below average among the markets considered.¹²
12. To date, the use of mobile banking in the UK remains limited (eg 27% of UK adults were using mobile banking in 2014),¹³ and it has not replaced the more traditional channels, such as branches and ATMs, for some customer segments.

¹² See [Deloitte innovation report](#), pp9 & 10.

¹³ See [Deloitte innovation report](#), p9.

13. Further, recent entry into the PCA market suggests that traditional branch-based banking is unlikely to be replaced by mobile banking in the near future, and that a multi-distribution banking model, utilising both digital and traditional channels is now commonplace:¹⁴
- (a) TSB's customer research suggests that branch location was an important consideration for customers who were planning to switch bank accounts. For example, the main reason that customers switched to TSB was 'convenient branches'.¹⁵
 - (b) Metro Bank launched in July 2010, and at the end of 2014, it had 31 branches in and around Greater London, and it aims to have 200 branches by 2020. Metro Bank's branches represent its main sales channel, although telephone, mobile and internet banking are also available to its customers. Metro Bank believes that having physical branches is important, because it enables it to provide traditional banking services, and build relationship with customers.¹⁶
 - (c) Atom launched in 2015 as the UK's first full-service digital-only bank. On its decision to be a fully digital bank, Atom has noted that the costs associated with acquiring and running branches are prohibitively high. Atom will serve both personal and SME business customers, and its offering will be optimised for smartphones and tablets, with telephony services as support rather than as an alternative channel. However, its customers will be able to access counter services in [✂] branches.¹⁷
14. The rise of digital banking, whilst not replacing traditional branch-based banking, has resulted in the changing use of branches, reflected in the rationalisation of branch networks undertaken by the largest UK banks, and the increasing optimisation of branches to reflect the increased digitalisation of banking (eg migration to self-service technology, reduced counter services, remote or virtual advice, and alternative branch formats).¹⁸ Much of a typical customer's transactional activity is undertaken via digital channels banking (and where a customer chooses to perform these activities in branch, they are

¹⁴ The rise of the multi-distribution banking model does not suggest that the ownership of a branch network is essential to entry into the retail banking market, as there are numerous methods of providing counter services to customers without having branches (eg agency banking relationships; Inter-Bank Agency Agreements (IBAAs); use of the Post Office network; and cash collection and delivery services agreements). On a similar note, the Netherlands Authority for Consumers & Markets (ACM), the primary competition authority in the Netherlands, providing consumer protection and market oversight, found that a national branch network is not a barrier to entry in the Dutch retail banking market due to the increasing digitalisation of banking and digital operating model of some new entrants (see Appendix 7.8).

¹⁵ See Appendix 10.2.

¹⁶ See Appendix 10.2.

¹⁷ See section 10.

¹⁸ See section 10 for further information.

increasingly directed towards electronic terminals), but branches continue to play an important role in the acquisition and retention of customers, and in promoting brand recognition and loyalty. See Section 11 for further information.

15. The increasing use of digital banking to conduct transactional activity is likely to increase customers' engagement with their PCA, as the ease with which a customer can access their account via internet or mobile banking appears to be driving greater customer interaction with their PCA. For example:
 - (a) Barclays told us that the average Barclays mobile banking user logged in [🔗] during the month of August 2015, whereas the average branch user visited their branch [🔗] a month.
 - (b) Recent evidence from the USA suggests that 94% of customers use their mobile banking application to check their balance,¹⁹ and approximately half of mobile banking users in the USA receive low balance alerts and 83% of those that receive them take some action as a result.²⁰
 - (c) The FCA found that signing up to text alerts or mobile banking applications reduced the amount of unarranged overdraft charges incurred by customers by 5% to 8%, and signing up to both services had an additional effect, resulting in a total reduction of 24%.²¹
16. Looking forward, as mobile banking adoption is largely driven by smartphone adoption, which is greater amongst the younger population,²² this suggests that both smartphone and mobile banking adoption is likely to increase over time. Increased mobile banking adoption is likely to be further enhanced by the greater functionality and broader integration of banking services within the mobile application, including account opening functionality, in-store payments and advanced money management features.²³ According to the British Bankers' Association, by 2020, customers will use their mobile phone to

¹⁹ See [Deloitte innovation report](#), p13.

²⁰ See [Deloitte innovation report](#), p14.

²¹ See FCA (2015), [Impact of annual summaries, text alerts, and mobile banking apps on consumer banking behaviour](#).

²² For example, Turkey has a higher rate of mobile banking adoption (when mobile banking adoption is taken as a proportion of smartphone users) than the UK, and approximately two thirds of its population is under 40 years old (see [Deloitte innovation report](#), p10).

²³ For example, in Turkey, Garanti Bank's mobile banking application (iGaranti) combines 23 features, including money management tools, mobile chat, an ATM withdrawal function (without the need for a card), and a voice control feature. Central to the design of the app is social media integration. There are over 30 million Facebook users in Turkey and iGaranti allows customers to transfer money to their Facebook friends without setting up their bank account details (see [Deloitte innovation report](#), p11).

manage their current account 2.3 billion times, which will be more than internet, branch and telephone banking combined.²⁴

Other digital service innovations

17. The increasing digitalisation of banking, and particularly the rising adoption of mobile banking, has led to other service innovations in the PCA market:
- (a) Contactless payment technology – the use of radio-frequency identification (RFID) or near field communication (NFC) for making low-value secure payments – is offered by all of the largest banks in the UK (ie Barclays, HSBCG, LBG, RBSG and Santander). There are over 40 million contactless cards in use in the UK and spending via contactless technology amounted to approximately £300 million in 2014.²⁵
 - (b) Barclays launched Pingit in 2012 – a mobile payment system that allows money to be sent using a mobile phone number rather than an account number and sort code. By September 2015, Pingit had been downloaded [✂] times and had processed payments worth £[✂]. A number of the other banks have subsequently adopted PAYM technology (see Table 1).²⁶
 - (c) Most banks offer SMS alerts, notifying customers, for example, when they are near to their account limit (at a level set by the customer) or when they have entered their overdraft. LBG introduced a new service called Balance Extra on 2 September 2015, where customers are notified of their balance at the end of the month after regular payments. The service is new to the PCA market in the UK and aims to remove the unexpected element of overdraft charges by letting customers view their ‘true’ month end balance. Around 550,000 Halifax customers are currently eligible for the service.
 - (d) Both cloud banking – where customers can store their important documents securely online – and video banking – which enables customers to talk to their bank from a smartphone, tablet or desktop computer – is available to select customers of some banks.
 - (e) A number of the banks are trialling mobile cheque depositing (or cheque imaging), whereby cheques can be scanned and emailed using mobile

²⁴ See [Deloitte innovation report](#), p15.

²⁵ See [Deloitte innovation report](#), p32.

²⁶ PAYM is a mobile payment service that enables customers to send and receive payments directly to a current account held with a participating bank or building society using a mobile number.

devices, in response to the increasing volume of electronic payments and corresponding decline in cheque volumes.

- (f) A number of the banks are increasing the ability of their customers to open their accounts online through the use of remote ID verification. For example, RBSG told us that it launched an online photo ID checker in November 2013. This provided customers with an additional option to open their account online without requiring documentation to be sent to RBSG via mail and/or having to visit a branch.²⁷ RBSG told us that as a result of the Photo ID checker, it had seen its online account opening application rate improve from [X] in [X] to [X] by the end of [X].

Aggregators

- 18. Aggregators are services that collect and collate information from a number of sources. There are two main types of aggregators:
 - (a) Comparison aggregators collect and display the same information for a similar product or service for comparison purposes (eg a price comparison website (PCW)).
 - (b) Account aggregators are intended to help customers manage their personal finances and monitor their spending and saving patterns. These aggregators may collate information from across multiple accounts, in order to provide customers with a consolidated overview of their finances. Some aggregators go further and also allow users to manage their accounts directly through the service.
- 19. In this section, we focus on account aggregation services as, relative to comparison aggregators, account aggregators have generally had a more limited presence in the UK (despite such services having been available in the UK in some form since 2001), especially when compared to their greater presence in the USA.²⁸ In particular, the US market is more advanced in the use of aggregation services provided by third parties, with these services being more than twice as popular in the US market than in Europe.²⁹ The current players in the USA are Mint, Moven and Simple, which provide a range of services. They allow customers to track their spending and saving patterns and manage bills and payments, and they make use of the detailed

²⁷ The tool prompts customers to take an image or use their passport and/or driving licence to complete their PCA application. These images are then electronically verified and if acceptable, the account is then opened.

²⁸ In both the USA and Europe, about 22% of internet users use online or mobile money management services. However, US customers are about 50% more likely than European customers to use services that aggregate information from multiple financial providers (see [Deloitte innovation report](#), p40).

²⁹ See [Deloitte innovation report](#), p41.

financial data that they hold on their customers to recommend new products and services to them.

20. Although emerging services are being provided by both banks³⁰ and third party organisations³¹ in the UK, there are a number of potential barriers to the development of account aggregation services for current accounts. These include: the difficulty of comparing across many banks the different services offered by a PCA; concerns about data security and transparency; the inability of account aggregators to adequately reflect service quality; and the need to gain access to the data held by banks. Ongoing regulatory initiatives – such as the Payment Accounts Directive (PAD), the government's Midata initiative, and the European Commission's Second Payment Services Directive (PSD2) – are likely to play an important role in the development of these services. See Appendix 3.1 for further information on these regulatory initiatives.

Big data

21. 'Big data' is a term broadly used to describe data that is especially large in volume, highly complex or frequently updated to the extent that traditional desktop computers and software (such as spreadsheets) are no longer capable of processing it. Data can include customer spending patterns and social media activities from third party sources. The growth of the digitalisation of activities and processes means there are vast increases in the amount of data being generated, while developments in data storage, management and analytics have the potential to promote greater use of this information.
22. There are a number of potential uses for big data within the banking sector, including:
- (a) using detailed customer data to better differentiate (and potentially discriminate) between customers. This can be used for both customer acquisition and customer retention strategies;
 - (b) making use of data from a wider variety of sources, in order to assess potential borrowers and the risks of default associated with loans;
 - (c) analysing patterns in large datasets, in order to rapidly identify security breaches and predict future violations;

³⁰ HSBCG, Barclays and LBG offer their customers money management tools that enable them to aggregate information from across multiple accounts held with the bank.

³¹ At present, the UK's most popular personal finance application is OnTrees. Other applications include the free iPhone app and Money Dashboard.

- (d) making use of centralised information, in order to ensure that regulatory reporting requirements are fulfilled while protecting customer privacy; and
 - (e) simulating future events and understanding the state of their business, in order to become more capable of managing risk.
23. Many of the established banks still use legacy IT systems and a lot of data remains isolated across different departments, making it difficult to build a complete picture of customer behaviour. However, they are also investing in big data tools that will help them to collect, store, analyse and visualise their data to develop a more comprehensive understanding of their customers. For example, HSBCG spent 18 months in 2013 and 2014 testing out big data systems and migrating its legacy data into a new format, and LBG and Santander have both offered personalised discounts to customers based on individual spending patterns identified through big data analysis.³² There are also examples of big data used by international banks:
- (a) banks in Canada, such as the Bank of Nova Scotia, have begun using real time-data to improve their risk management processes;³³
 - (b) major Australian banks, such as National Australia Bank, Westpac and ANZ, have begun to use big data to tailor their products for different customer segments; and³⁴
 - (c) Alior Bank in Poland has put together a substantial database on customers and their payments in the country. The bank has stated that it wants to combine online browsing data with information from social media sites and T-Mobile Poland, in order to sell and price products.³⁵

New business models

Recent and impending entry

24. The rise of digital banks underlines the importance of technological innovation in facilitating entry into the market, but the entry of banks with more traditional distribution models, such as Metro Bank (see paragraph (b)), suggests that branch-based banking has not yet been totally replaced by digital banking, and is unlikely to be in the short- to medium-term. None of the new entrants

³² See [Deloitte innovation report](#), p51.

³³ See [Deloitte innovation report](#), p52.

³⁴ *ibid.*

³⁵ *ibid.*

referred to in this section have yet replicated the full service model of the larger, established banks.

Entry by firms with ancillary financial services products

25. In recent years, a common channel of entry into the PCA market has been the expansion of a firm with an established presence in an area of retail banking into PCA banking. For example, Tesco Bank, Marks and Spencer (M&S) Bank,³⁶ and the Post Office³⁷ have expanded their product offerings to include PCAs. See Section 11 for further information.

Online entry

26. As noted previously, Atom launched in 2015 as the UK's first full-service digital-only bank. Atom told us that it believes it can enter the UK market with 'brand new systems and without the constraints of legacy technology and damaged loan books ... to ultimately provide better value for customers'. Atom intends to reduce its running costs by adopting the latest technology, and this, it says, will be reflected in a 'competitive and fair charging structure' for its customers. Atom will serve both personal and SME business customers, and its offering will be optimised for smartphones and tablets (via an app), with telephony services as support rather than as an alternative channel.³⁸
27. Starling is planning to enter with a niche PCA offering before subsequently building a platform that will offer third-party financial services. Starling's business model is, like Atom's, purely digital, although basic branch services will be available to its customers. Although Starling told us that it is targeting young 'urbanites', it believes its niche offering will prove attractive to a wider audience.³⁹

Bank in a Box (BiaB)

28. Historically, BiaB technology referred to licensed application software providing deposit taking and lending functionality (often including current accounts) through non-digital channels, covering front and back office functions. A banking institution would have to implement such software itself. In the context of the UK banking sector, BiaB customers historically included branches of international banks in the UK and branches of UK banks

³⁶ M&S Bank is a wholly owned subsidiary of HSBC Bank plc.

³⁷ The Post Office offers retail banking services under Bank of Ireland's banking licence.

³⁸ See Appendix 10.2.

³⁹ See Appendix 10.2.

overseas, whereas most larger UK banking institutions had built their own banking platforms. However, today BiaB is typically understood more broadly as a 'one-stop-shop' service, whereby a new entrant or existing institution can obtain the complete IT system it needs to operate a banking business.⁴⁰

29. BiaB services may differ from provider to provider, but broadly they include:
- (a) a core banking system providing a range of banking products;
 - (b) support for face-to-face and different digital delivery channels;
 - (c) debit and credit card processing;
 - (d) Know your Customer (KYC) and anti-money laundering (AML) services;
 - (e) credit processing;
 - (f) fraud and risk analytics; and
 - (g) financial, management and regulatory reporting.⁴¹
30. BiaB technology provides a number of advantages to users:
- (a) it reduces costs of entry, as it allows users to avoid many of the costs involved with setting up a bank;
 - (b) it reduces time to market, as it allows users to adopt preconfigured systems instead of developing their own; and
 - (c) it reduces uncertainty, as it provides a stable platform with ongoing upgrades, and, as the service is known to regulators, bank authorisation requests are likely to be more straightforward than requests based on unknown or unproven platforms.⁴²
31. Table 2 suggests that the BiaB market in the UK is less mature than other markets in Europe and North America.

⁴⁰ See [Deloitte innovation report](#), p63.

⁴¹ *ibid.*

⁴² *Ibid.*

Table 2: International examples of BiaB provision

Market	<i>Check balance</i>	<i>Make payment to new recipient</i>	<i>Send money to a mobile number (PAYM)</i>	<i>Branch/ATM locator</i>	<i>Touch ID support</i>
North America	Yes	Yes	Yes	Yes	No
Nordics	Yes	No	Yes	Yes	No
Germany and Austria	Yes	No	Yes (via Pingit)	Yes	Yes
Australia	Yes	No	No	No	No
UK	Yes	No	Yes	Yes	No

Source: Deloitte innovation report, p64.

32. However, there are a number of instances of banks entering and planning to enter the market on BiaB platforms, targeting specific market segments:

- (a) Sainsbury's Bank started trading in 1997 as a joint venture with the Bank of Scotland (later LBG). In 2013, Sainsbury's Bank announced that it would acquire LBG's share of the bank and set out a 42-month transition plan to move onto a BiaB platform provided by FIS. The platform is intended to be a better digital offer to customers and enable new product launches, and the bank intends to provide only contact centre services in-house.⁴³
- (b) Metro Bank chose to work with Temenos, which provided it with an IT platform with a single customer view that underpins its banking services. It selected Temenos because it offered an integrated IT system, which 'lowered the entry barriers by offering a flexible and massively scalable delivery model which reduced capital outlay and operating costs to a bare minimum'. The implementation period for Metro Bank's IT system was also relatively short at nine months.⁴⁴
- (c) Lintel Bank plans to use a pre-configured core banking system from a third party provider to target overseas students and new migrants to the UK. Although Lintel is still awaiting authorisation from the PRA and FCA, it is planning on offering services that range from PCAs to loans for SMEs.⁴⁵
- (d) German digital bank, Fidor, is also planning a UK launch. Fidor targets digitally-sophisticated customers (both private and business) through a range of services, with a focus on social media users and online only businesses. The bank will include a community site, where users and representatives are able to discuss the financial services offered by the

⁴³ See [Deloitte innovation report](#), p68.

⁴⁴ See Appendix 10.2.

⁴⁵ See [Deloitte innovation report](#), p67.

bank, and in Germany it already has a reputation for approving loans in minutes.⁴⁶

33. There may be limits on the extent to which BiaB users can grow market share, partly because of the constraints that BiaB technology places on the capacity to differentiate and to offer more complex services. For example, in TSB's experience, no one IT provider is able to provide a comprehensive IT system with all of the functionality that would be required by a full service multi-channel bank. Moreover, TSB believes that, although it may be possible for a new entrant to obtain IT systems that, whilst not performing as well as 'big bank' IT, are adequate for a small scale operation, those systems cease to be adequate as the new entrant expands beyond a particular scale.⁴⁷ We consider further in Section 10 whether access to IT is a barrier to entry and/or expansion.

Digital wallets

34. A digital wallet is a service that facilitates the storage of payment (and possibly other) credentials and enables users to make payments, either online or via a mobile device. It can take a number of forms, encompassing different technologies, channels and providers. Digital wallets are generally split into two broad categories:
- (a) Online digital wallets allow customers to store the payment details of one or more cards online for use in repeat purchases. The main advantage for users of online digital wallets is that they do not have to input their bank details each time they make a transaction on the internet, increasing both convenience and security. They first appeared in the late 1990s, with PayPal and eBay, and are now common on websites, such as Amazon. PayPal now provides a variety of services including online payment services, mobile payment services, account services, deferred payment systems, money (including cheques) transfer services into PayPal accounts and in-store payment systems.
 - (b) Mobile digital wallets allow customers to make in-store payments with their mobile device. There are different models of payment with a mobile device, including cloud-based technology, QR code scanning and the use of NFC⁴⁸ technology to transmit credentials to point of sale devices. The

⁴⁶ See [Deloitte innovation report](#), p67.

⁴⁷ See Appendix 10.2.

⁴⁸ Near Field Communication (NFC) technology enables two-way interaction through radio communication between electronic devices, allowing for contactless payment with a single touch, or at distances of less than four centimetres. The technology can also be used for accessing digital content and connecting electronic devices,

majority of mobile digital wallets currently available worldwide are provided by technology companies. In contrast, card providers, such as Visa and MasterCard, are yet to offer mobile-based wallets that can be used in stores, and the services offered by banks are more limited in their scope with money transfers between individuals being the core service of these applications. In July 2015, Apple introduced Apple Pay to the UK market. Apple Pay allows iPhone 6 and iPhone 6 Plus owners to use their smartphone (or an Apple Watch) to make payments at NFC-equipped terminals. As of June 2015, 19 high street stores and all of the major UK banks had signed up to Apple Pay.⁴⁹

35. Although online digital wallets are relatively established, adoption remains relatively low and credit and debit cards still account for significantly larger proportions of online payments. Mobile digital wallets are less established, but the UK's low level of adoption is in line with several other European and North American countries. The region with the highest rate of adoption is Asia Pacific, where digital wallets account for 23% of online transactions; this is led by China, where 44% of online transactions are made using digital wallets, with Alipay the market leader. Rates of adoption are somewhat lower in the USA and Canada (18%), and Europe (13%).⁵⁰
36. It appears that concerns about security and their ability to provide a more convenient payment experience than, for example, credit or debit cards has driven the limited adoption of digital wallets to date.

though for making contactless payments it can be built into mobile phones, debit or credit cards, or stickers amongst other things. See [Near Field Communication Forum](#).

⁴⁹ See [Deloitte innovation report](#), p23.

⁵⁰ See [Deloitte innovation report](#), pp27 & 28.