

UK Banks: Plastic Fantastic

Opportunities And Challenges In The Credit Card Market

- **A Large And Profitable Market** — The UK has one of the highest card penetrations in the EU, with over 10 billion annual transactions and growing. Cards now account for 57% of overall UK cashless transactions, and total credit card debt has reached \$92bn, equivalent to 3.5% of GDP or \$1,800 per person. It is also a highly profitable market for the card issuers, the banks. In 2013 BarclayCard reported a RoE of 18%. In the US it is not uncommon for the large card issuers to report RoEs of 25%+.
- **Sizing Up The UK Banks** — Among UK banks Barclays has the largest credit card business (\$52bn debt outstanding), operating in the UK, US, South Africa and parts of Europe. BarclayCard accounts for 17% of Group revenues and 24% of underlying Group PBT. HSBC is the second largest (\$30bn), mainly operating in UK and Asia. Lloyds (\$15bn) is UK focused, while RBS (\$11bn) operates in both the UK and US.
- **Lloyds: The UK Opportunity** — Barclays is the dominant player in UK credit cards with a market share of 27%, +8ppt in the past three years. In contrast Lloyds only has a market share of 16%, well below its mortgage market share (25%), but has recently announced plans to refocus on this segment via better cross-sell and additional distribution channels. Cards tend to be far more contestable than other banking products, helped by high churn rates, so Lloyds may have some success. If Lloyds can take 9ppt market share it could lift underlying Group PBT by c5%.
- **Barclays: The US Opportunity** — Barclays only has a 2.5% market share in US credit cards, but debt outstanding continues to grow rapidly, and is already almost the same size as its UK portfolio. If Barclays can double its market share in the US, to 5%, then we estimate this could lift underlying Group PBT by c4%.
- **Evolving Regulation** — The most pressing regulatory issue, in our view, is the outlook for interchange fees. MIFs act as a minimum price floor and determine to a large extent (c50%+) the price charged by PSPs to merchants for card acceptance via the Merchant Service Charge (MSC). The latest proposals from the European Commission are pushing for a 0.2% cap on debit card MIFs and a 0.3% cap on credit card MIFs. However the experience in the US, post Durbin, is that consumers have ended up paying more for banking services, and merchants have often failed to pass along the savings from a lower MSC to the end-consumer. In any case only c5% of overall BarclayCard income is derived from European interchange fees.
- **New Innovation** — Internet and mobile banking platforms, offering access to financial services, are already well developed, but e-payments and m-payments are still in their infancy relative to cards. Over a multi-year transition period physical card transactions may shrink and disappear altogether, to be replaced with mobile and online payments, combined with digital wallets. The risk of disintermediation is often asked about card networks, merchant acquirers and point-of-sale providers, but there seems to be little direct disintermediation worry for card issuers.
- **Recommendation** — We have Buy ratings on Barclays and Standard Chartered. We have Neutral ratings on HSBC and Lloyds and a Sell/High Risk rating on RBS.

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See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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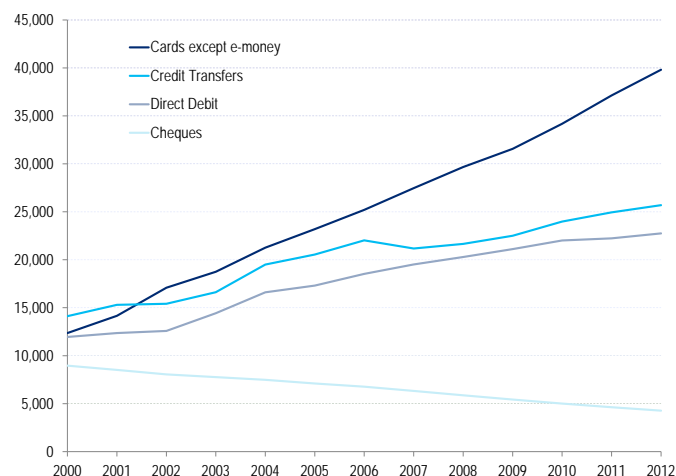
UK Banks: Plastic Fantastic

Overview Of The UK Cards Market

Credit and debit cards account for 43% of all EU cashless transactions and 57% of UK cashless transactions

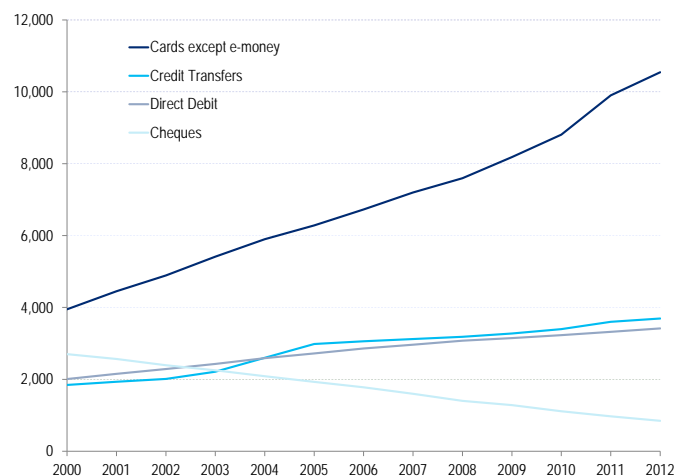
The EU retail payments market is one of the largest in the world, with 93 billion of non-cash transactions annually. However, the structure of this market has changed substantially over the past decade, as cheque payments have demonstrated a steady decline, while cards – including both debit and credit – have grown in popularity. In 2012 cards were the most popular non-cash payment instruments, accounting for 43% of all cashless transactions, followed by credit transfers and direct debits (Figure 1). These charts exclude internet payments (e-payments) and mobile payments (m-payments) which are still in their infancy.

Figure 1. EU – Number of Transactions by Type of Payment (million)



Source: ECB Payment Statistics. Note: Based on debit and credit cards.

Figure 2. UK – Number of Transactions by Type of Payment (million)

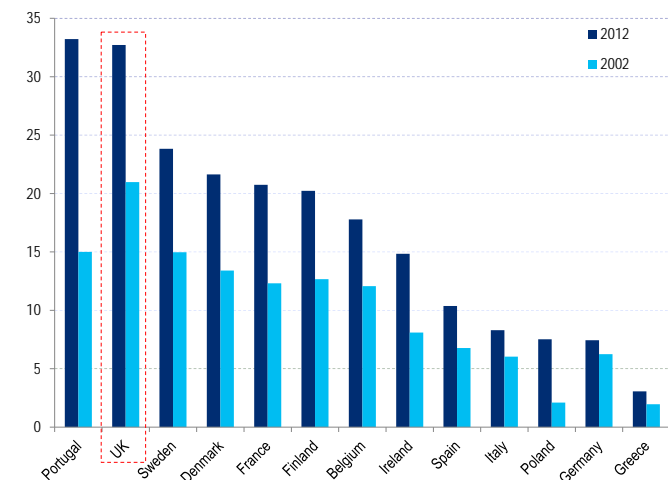


Source: ECB Payment Statistics. Note: Based on debit and credit cards.

The UK has one of the highest card penetrations within the EU

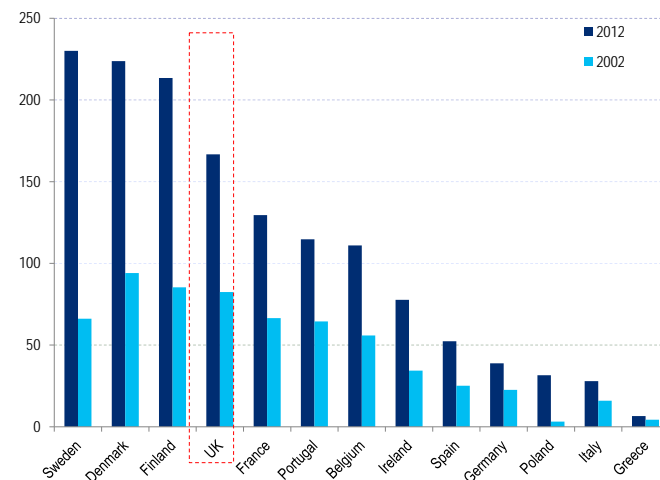
This trend is even more pronounced in the UK, an early adopter of cards, where total card payments accounted for 57% of cashless transactions in 2012 (Figure 2). Only Portugal has a greater cards penetration within the EU, as a proportion of GDP, and only the Nordic countries as a proportion of population. Despite this, the size (and penetration) of the UK cards market is still small relative to the US.

Figure 3. EU – Annual Card Transaction Value as a % of GDP (%)



Source: ECB Payment Statistics. Note: Based on debit and credit cards.

Figure 4. EU – Annual Card Transaction Value Per Person (€)

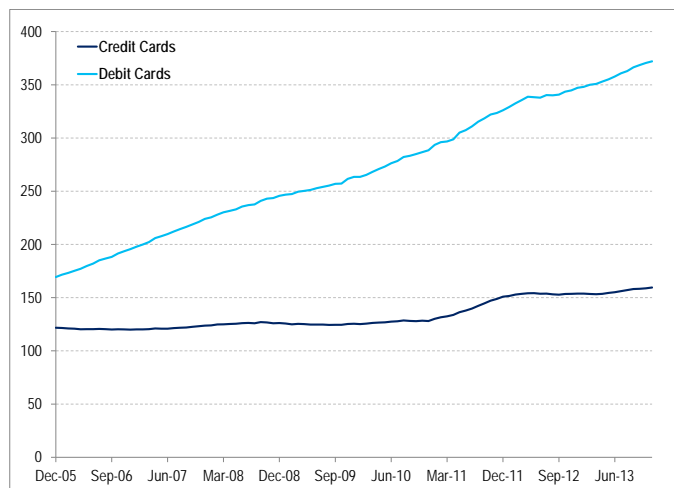


Source: ECB Payment Statistics. Note: Based on debit and credit cards.

Growth in credit card expenditure has started to recover

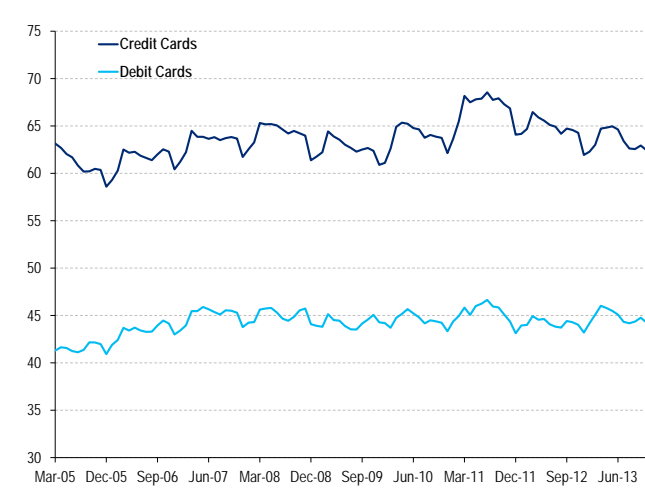
Much of the growth in UK card spending in the past decade has been attributable to debit cards, rather than credit cards, and for every single credit card transaction there are still three debit card transactions. However, growth in credit card expenditure has started to recover in recent months, consistent with an increase in discretionary spending (entertainment, home improvement, overseas travel, etc). The average transaction value for UK credit cards also continues to be slightly larger than for debit cards, at c£65 versus c£45.

Figure 5. UK Avg Monthly Expenditure by Value (12-month rolling), £bn



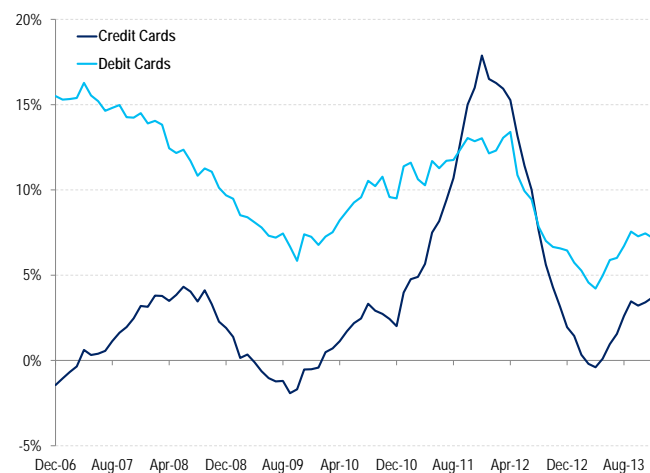
Source: UK Cards Association; Updated to end-2013

Figure 6. UK Average Payment Transaction Values (3-month avg), £



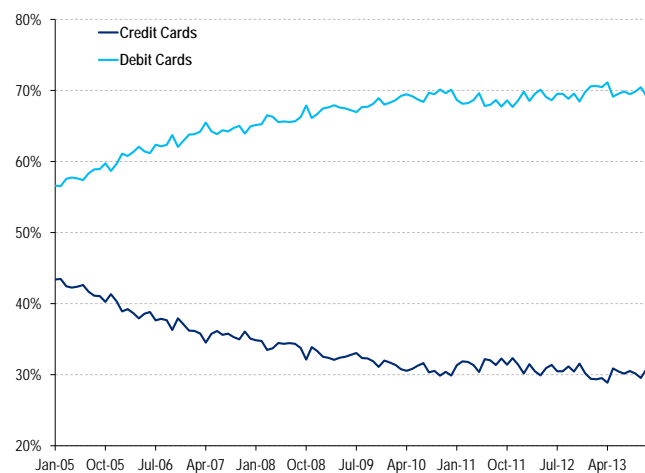
Source: UK Cards Association; Updated to end-2013

Figure 7. UK Spending on Cards (12-month rolling), Value Growth YoY



Source: UK Cards Association and Citi Research; Updated to end-2013

Figure 8. UK Split of Card Payment Transactions by Value

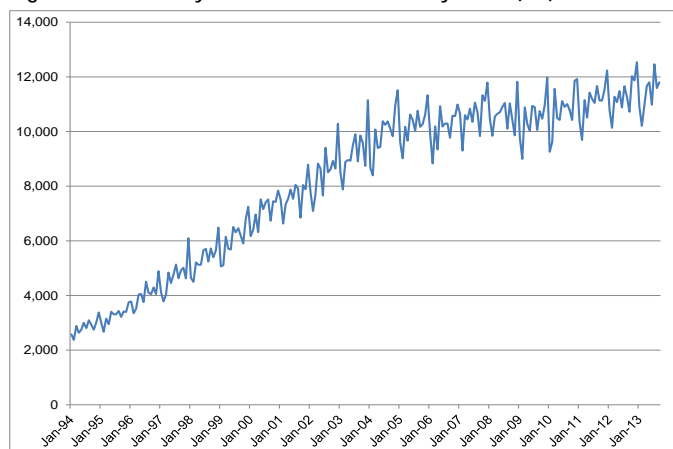


Source: UK Cards Association; Updated to end-2013

March 2013 marked the trough for UK credit card outstanding, which has since rebounded, mirroring the improvement in consumer confidence and expenditure

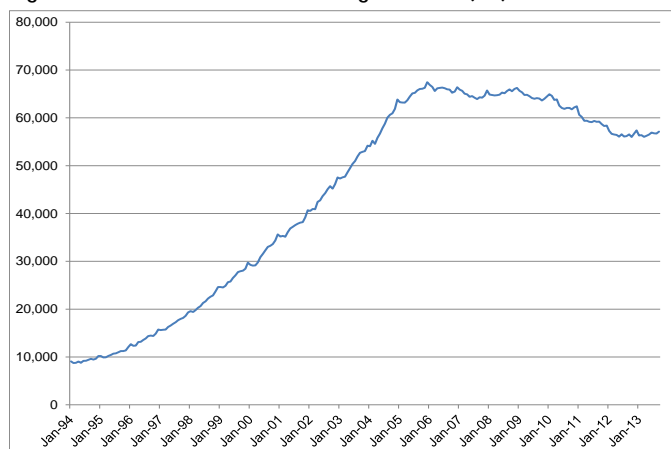
In 2012 there was still a steady decline in 'revolvers' (making the minimal monthly payment) and a steady increase in 'transactors' (full payment) as customers continued to pay down outstanding debt burdens. However, March 2013 marked the trough for UK credit card outstanding, which has since rebounded, mirroring the wider improvement in consumer confidence and expenditure. We illustrate credit card purchases and credit outstanding balances in Figure 9 and Figure 10.

Figure 9. UK Monthly Credit Card Purchases by Value (£m)



Source: BBA based on Mastercard and Visa data.

Figure 10. UK Credit Card Outstanding Balances (£m)



Source: BBA based on Mastercard and Visa data.

The Operating System

The most common card scheme in operation is the 'four-party' scheme supported by MasterCard and Visa

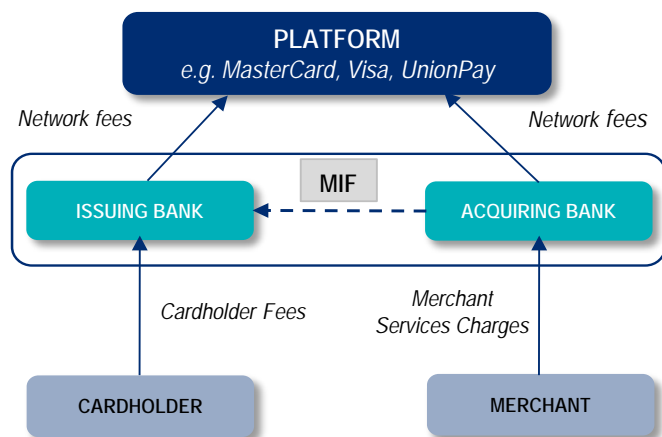
The most common card scheme in operation is the 'four-party' scheme (see Figure 11). This is the platform supported by MasterCard and Visa. Under this scheme when a consumer uses their card to make a transaction, the cardholders bank – the issuing payment service provider (PSP) – will pay the bank of the merchant – the acquiring PSP – the amount of the transaction, after the deduction of a Multilateral Interchange Fee (MIF), which covers the cost to the issuing bank.

A second type of scheme is the 'three-party' scheme, used by firms such as American Express and Diners Club

The MIF, as well as the network fees paid to the platform provider, are typically passed on by the acquiring bank to the merchant via a Merchant Service Charge (MSC). The Merchants are typically willing to accept this charge, as the use of cards gives them access to a much broader range of customer and can reduce the possibility of fraud. Furthermore the MIF is rarely retained by the issuing bank, with the majority often passed onto the cardholder in the form of bonuses (e.g. air miles, etc.) in order to incentivise greater use of the card amongst cardholders.

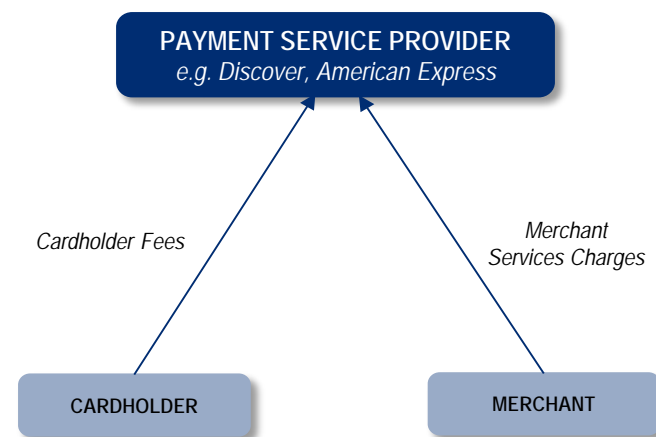
A second type of scheme is the 'three-party' scheme, used by firms such as American Express and Diners Club, as illustrated in Figure 12. In this scheme only one bank is involved, acting as both the issuer and acquirer. This scheme therefore enables one single party to retain all of the economics.

Figure 11. Basic Operation of a Four-Party Scheme



Source: European Commission and Citi Research

Figure 12. Basic Operation of a Three-Party Scheme



Source: European Commission and Citi Research

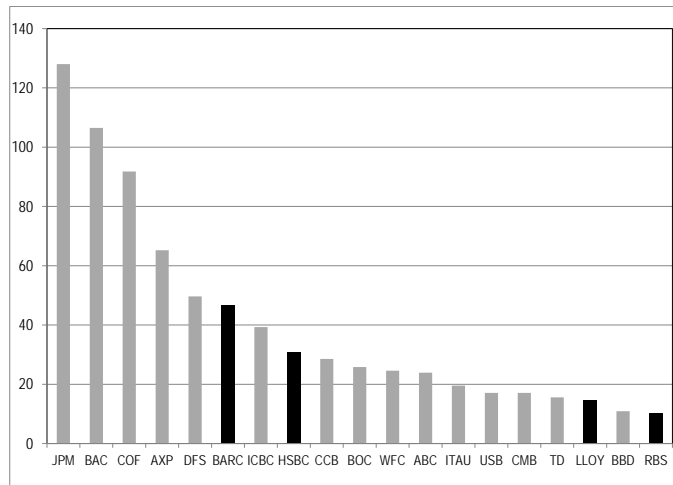
Sizing Up The UK Banks

Barclays has the largest global credit card business among the UK banks, followed by HSBC

Barclays also has a dominant market share position in UK credit cards

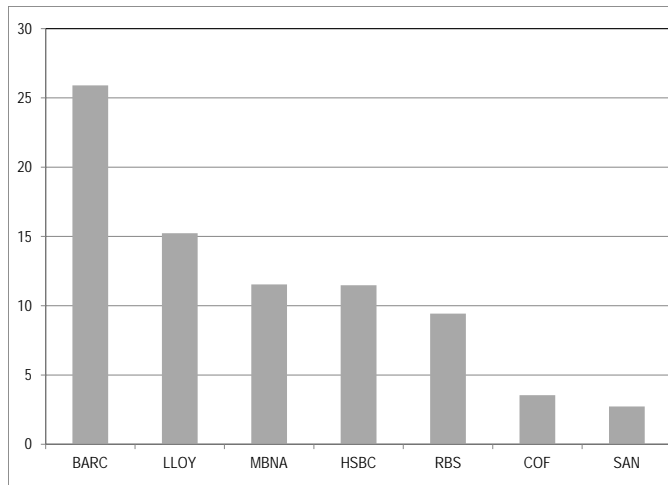
Barclays has the largest credit card business among the UK banks, operating in the UK, US, South Africa and parts of Europe. HSBC is second largest and mainly operates in UK and Asia. Lloyds is UK-centric, while RBS predominantly operates in both the UK and US. Standard Chartered also has a sizeable credit card business, but disclosure is lacking (credit cards are combined with unsecured personal loans). Below we outline the outstanding credit card loan balances for each of the UK domestic banks, relative to global peers, both overall and in the UK market alone. The UK banks remain small compared to their US counterparts, while the Chinese banks are seeing the fastest growth in outstanding credit card balances.

Figure 13. Global Credit Card Balances by Card Issuer (\$bn)



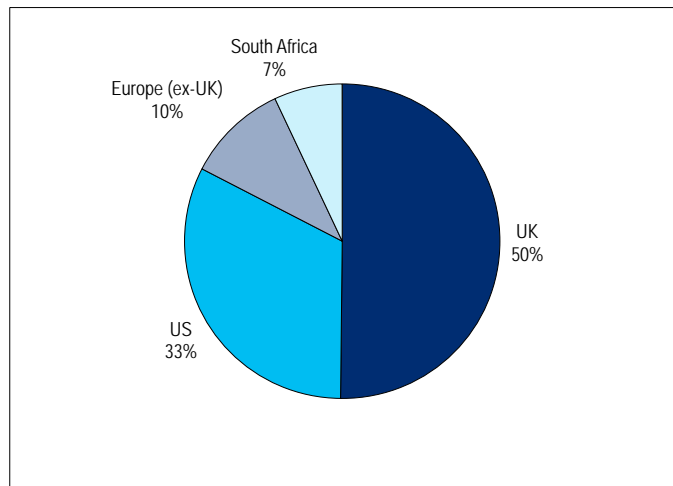
Source: Company Reports, end-2013

Figure 14. UK Credit Card Balances by Card Issuer (\$bn)



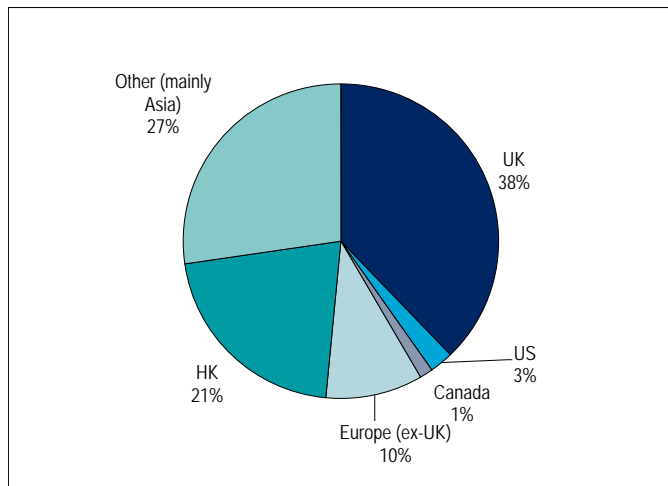
Source: Company Reports, end-2013

Figure 15. Barclays – Credit Card Balances By Region



Source: Company Reports, end-2013

Figure 16. HSBC – Credit Card Balances By Region



Source: Company Reports, end-2013

A Highly Profitable Business

**Credit cards are highly profitable:
On aggregate the US card issuers
generate a RoE of c25%; in 2013
BarclayCard generated a RoE of 18%**

The majority of UK retail banks' tend to use the 'four-party' scheme, with RBS, HSBC, Lloyds and Santander UK only acting as the issuing PSP, on behalf of the cardholder. In contrast Barclays has also started to use the 'three-party' scheme, acting as an integrated payment provider, servicing both the cardholder and the merchant. This 'payment acceptance' business is one of the fastest growing areas at BarclayCard and offers a c30% RoE. While the traditional consumer business is less profitable, Barclays combined UK and international credit card lending business still generates mid-teens RoEs, resulting in an overall BarclayCard RoE of 18% in 2013. This is higher than the vast majority of Barclays' other divisions and yet still lower than a number of the US card issuers, which average c25% on aggregate.

**BarclayCard is 17% of Group revenues
and 24% of underlying Group PBT**

While almost all of the UK banks disclose outstanding card balances, P&L data is much harder to come by. RBS reports total UK credit and debit card income (£0.9bn in 2012, or c6% of total UK income), but disclosure is sadly lacking at both HSBC and Lloyds. By contrast Barclays provides a wealth of information. Overall BarclayCard revenues amounted to £4.8bn and underlying PBT to £1.6bn in 2013, equivalent to 17% and 24% of Group revenues and underlying PBT respectively.

**BarclayCard income is split evenly
between UK and International cards...**

BarclayCard's income is split evenly between UK consumer cards and International consumer cards (c43% each) with the remainder from Global Business Solutions (c14%). The latter encompasses payment acceptance, commercial payments and partner sales finance. Overall UK-derived card revenues, from UK consumer and GBS, totalled £2.7bn in 2013, or 57% of total BarclayCard revenues. This is down from 66% in 2008, as the International business continues to grow at a faster pace.

Figure 17. BarclayCard – Key Financials, 2007-2013

	2007	2008	2009	2010	2011	2012	2013	% YoY
Net Interest Income	1,374	1,786	2,723	2,814	3,047	3,009	3,318	10%
Non-Interest Income	1,196	1,446	1,338	1,218	1,259	1,336	1,468	10%
Insurance Net Claims & Benefits	-13	-11	-20	-8	-1	-1	0	-
Total Income	2,557	3,221	4,041	4,024	4,305	4,344	4,786	10%
- o/w UK Income	-	2,114	2,493	2,453	2,638	2,616	2,747	5%
Operating Costs	-1,093	-1,447	-1,527	-1,570	-1,812	-1,842	-1,999	9%
Gross Operating Profit	1,464	1,774	2,514	2,454	2,493	2,502	2,787	11%
Loan Loss Provisions	-827	-1,097	-1,798	-1,688	-1,312	-1,049	-1,264	20%
Other Net Income	-7	-3	8	25	31	30	33	10%
Pre-Tax Profit	630	674	724	791	1,212	1,483	1,556	5%
Balance Sheet								
Loans (Ebn)	19.7	27.4	26.5	26.6	30.1	32.9	35.6	8%
- o/w UK credit cards (Ebn)	8.4	10.2	10.8	12.3	14.7	15.4	15.9	3%
Deposits (Ebn)	-	-	-	0.6	0.6	2.8	5.2	86%
RWAs (Ebn)	20.2	27.3	30.6	31.9	34.2	36.5	41.1	13%
Key Ratios								
NIM	7.24%	7.58%	9.69%	9.77%	9.44%	8.46%	8.29%	
Cost-Income	42.7%	44.9%	37.8%	39.0%	42.1%	42.4%	41.8%	
LLR	4.38%	4.25%	6.04%	5.70%	3.94%	2.94%	3.37%	
UK as % Total Card Income	-	66%	62%	61%	61%	60%	57%	
Underlying RoE	20%	23%	14%	13%	16%	20%	18%	
Underlying RoRWA	-	-	1.8%	1.9%	2.5%	3.1%	2.8%	

Source: Company Reports and Citi Research

Note: BarclayCard divisional disclosure restated from 2012 to include all European Retail & Business Banking credit card operations and exclude ABSA's debit card operations

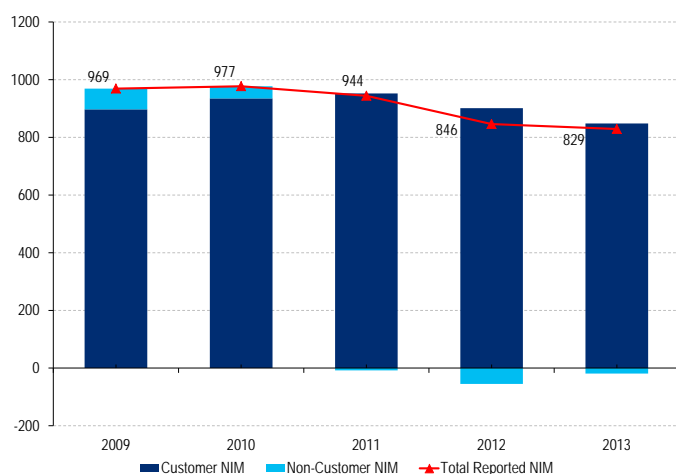
... but International cards are growing at a much faster rate

In 2013 Barclays reported strong volume growth, +8% yoy, boosted by International expansion, especially in the US and Germany. However, interest margins continue to be squeezed, driven by the roll-off of interest rate hedges (non-customer income) as well as deposit funding initiatives underway in US and Germany (Figure 18). In contrast overall UK industry credit card spreads continued to improve, driven by higher APRs (Figure 20, Figure 21). Loan losses have also stabilised at benign levels, with further declines in UK and US offset by a pick-up in South Africa.

The ability to retain and capture market share via service, innovation and pricing will be a key differentiator

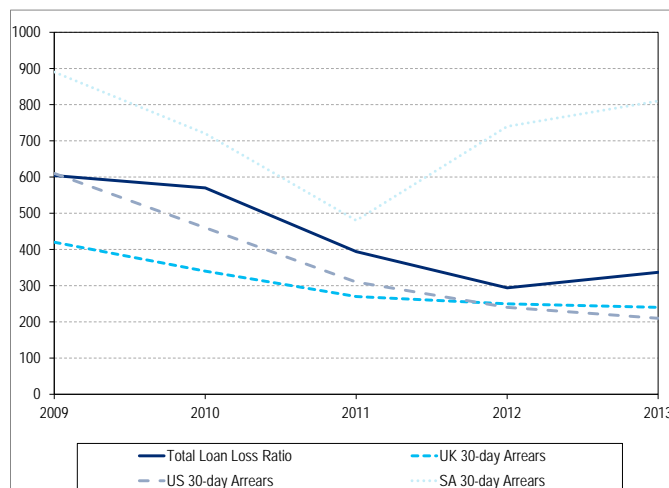
In the long-term rising base rates are likely to put some pressure on both interest margins (as wholesale funding becomes more expensive) and loan losses (reduced affordability), but we expect volumes to remain strong, as the economic recovery in the UK and US continues to gain traction. The ability to retain and capture market share via service, innovation and pricing will therefore be a key differentiator.

Figure 18. BarclayCard – Net Interest Margin Progression (bps)



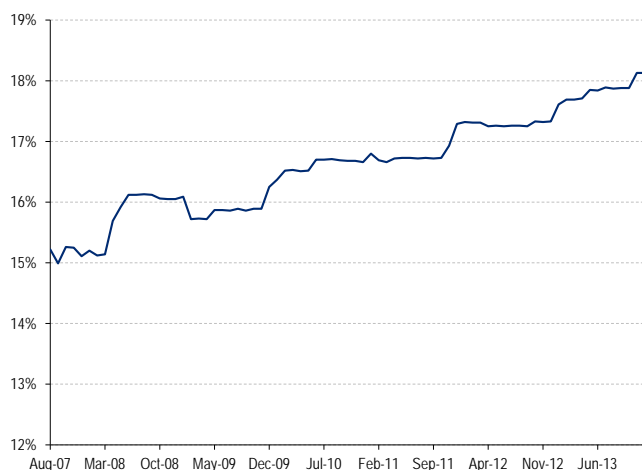
Source: Company Reports

Figure 19. BarclayCard – Loan Loss Progression (bps)



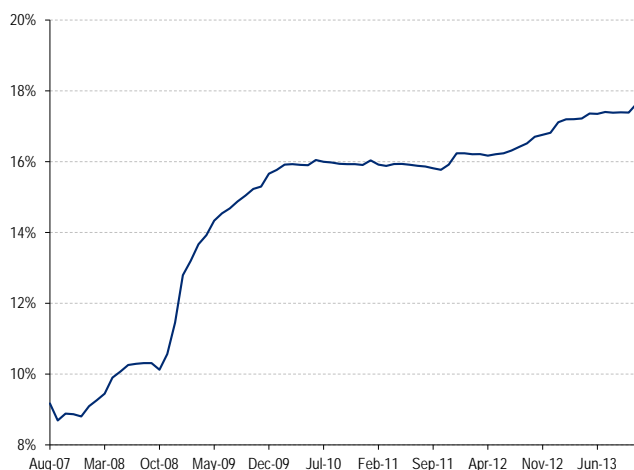
Source: Company Reports

Figure 20. UK – Aggregate Credit Card Rates % (Aug 07 – Dec 13)



Source: BoE

Figure 21. UK – Aggregate Credit Card Spreads % (Aug 07 – Dec 13)



Source: BoE, Citi Research; Note: Spreads calculated vs 3M LIBOR

Lloyds and the UK Growth Opportunity

Barclays has captured the most market share in UK cards the past three years, +8ppt to a 27% market share

In the UK Barclays has captured the most market share in the past three years, with balances up 30%, driven by a combination of acquisitions (Egg in 2011) and organic growth. In contrast HSBC (-2%), RBS (-4%) and Lloyds (-8%) have all seen outstanding balances shrink in line with the wider industry.

Figure 22. UK Credit Card Balances by Card Issuer (£bn)

	2010	2011	2012	2013	% Chg 2010-13
BARC	12.3	14.7	15.4	15.9	30%
LLOY	10.2	10.2	9.5	9.4	-8%
MBNA	9.0	9.3	7.5	7.1	-21%
HSBC	7.2	7.3	7.3	7.1	-2%
RBS	6.0	5.7	5.6	5.8	-4%
COF	2.5	2.5	2.4	2.2	-14%
SAN	2.9	2.7	2.6	1.7	-42%
Other	12.3	6.0	7.0	9.2	-25%
Total	62.4	58.4	57.4	58.4	-7%

Source: Company Reports, BBA

Note: Total is derived from BBA which is based on Mastercard and Visa data.

Figure 23. UK Credit Card Market Shares by Outstanding Balance (%)

	2010	2011	2012	2013	Chg 2010-13
BARC	20%	25%	27%	27%	7.6%
LLOY	16%	17%	16%	16%	-0.3%
MBNA	14%	16%	13%	12%	-2.2%
HSBC	12%	12%	13%	12%	0.6%
RBS	10%	10%	10%	10%	0.3%
COF	4%	4%	4%	4%	-0.3%
SAN	5%	5%	5%	3%	-1.8%
Other	20%	10%	12%	16%	-3.8%
Total	100%	100%	100%	100%	0.0%

Source: Company Reports, BBA

Note: Total is derived from BBA which is based on Mastercard and Visa data.

Lloyds' market share, at c16%, is much lower than its market share in mortgages and deposits, at c25%

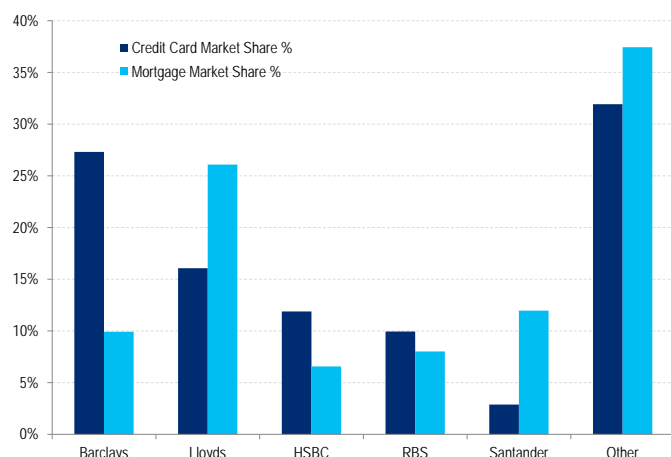
Lloyds outstanding market share, at c16%, is substantially lower than the bank's market share in mortgages and deposits, at c25%, potentially presenting an opportunity (Figure 24). In 2014 Lloyds plan to provide a new divisional breakdown to include "Consumer Finance". This will include Lloyds' unsecured lending businesses, such as Lex Autolease and Black Horse, as well as Lloyds' credit card business, demonstrating the new focus here.

We expect Lloyds will look to rectify this via better cross-sell and additional distribution channels

Credit cards are commonly sold via relationship channels and as stand-alone products. For example at Barclays 15% of the distribution is from internal bank referrals, 30% via open market – including direct to consumer mailing – and 55% via business partnerships (Figure 25). The last category is large as Barclays has no retail branch presence in the US, so the majority of US cards are distributed in this way. Barclays' partnerships include Apple and American Airlines, among others.

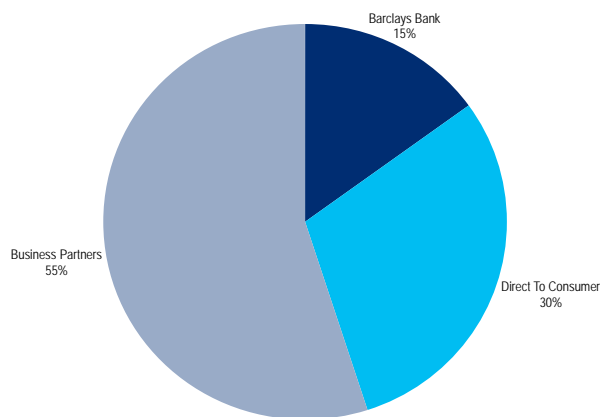
At Lloyds the sole distribution channel has been through internal referrals and even here success has been limited – only c30% of new Lloyds customers currently take out a credit card with Lloyds when they open a current account. This 'cross-sell' could be improved, in our view. Lloyds also plans to target co-brandings, white labels, and other different distribution channels, opening up more possibilities.

Figure 24. UK - Credit Card Market Share vs Mortgage Share, 2013 %



Source: Company Reports and Citi Research

Figure 25. Barclays – Credit Card Distribution Channels

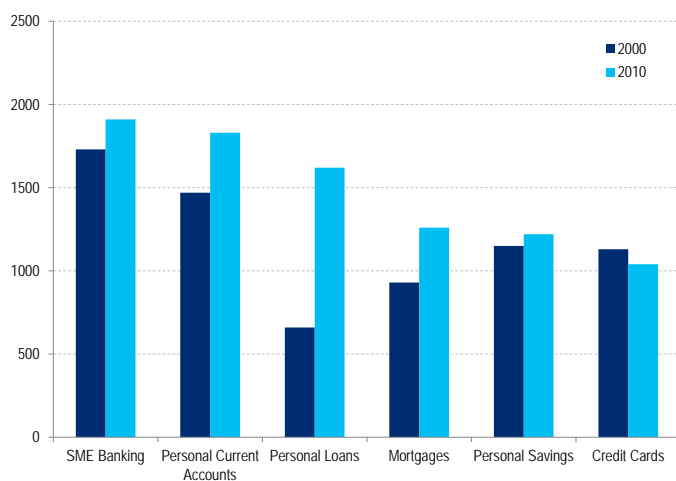


Source: Company Reports, 1H13

Credit cards tend to be more contestable in the UK than other banking products...

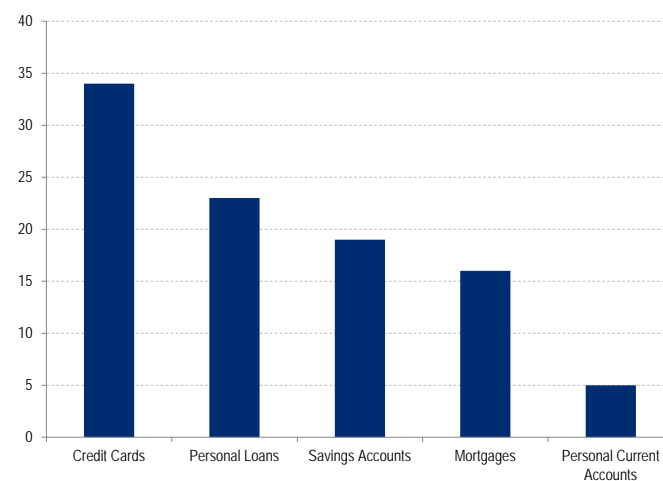
The UK credit card sector is relatively fragmented in terms of market share. The Herfindahl-Hirschman Index (HHI) for the UK credit cards sector stood at 1,040 in 2010, the lowest among major banking products (Figure 26). Importantly, while HHI for most products increased in the decade between 2000 and 2010, the HHI for UK credit cards business fell slightly, demonstrating the competitive nature of this market. This trend is also corroborated looking at the number of new entrants in the credit cards business between 2001 and 2010 (Figure 27).

Figure 26. HHI Index for UK Banking Products, 2000 vs 2010



Source: ICB Final Recommendations

Figure 27. Number of New Entrants into Banking Products, 2001-10



Source: ICB Final Recommendations

New entrants in the UK banking sector typically face significant challenges. Barriers to entry are high due to a combination of capital, technology and regulatory constraints. However the greatest barrier to entry comes from the difficulty in attracting retail and SME customers, due to customers' preference for banks with an extensive branch network, a strong brand loyalty and low historical switching rates.

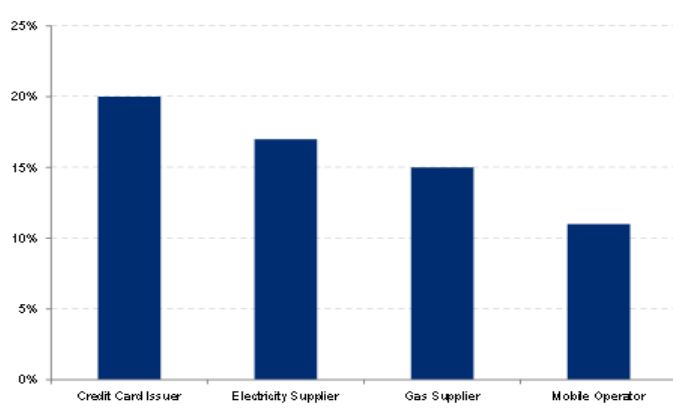
... as there is less reliance upon a branch network, less brand loyalty and customers are more price-sensitive...

In contrast acquiring new credit card customers is a considerably easier task. Distribution relies less upon an established branch network, relative to mortgages and personal current accounts, for example, while the churn rate for customers in this segment (i.e. the percentage of customers who switch credit card provider in a period) is high. It is relatively easy for customers to switch brand/product loyalties if a more attractive offer comes along – be it a card with a lower interest rate, lower annual fees or a better spend reward programme. According to the UK Cards Association, 20% of consumers switched their credit card issuer in 2013. This compares to 17% who have switched their electricity supplier, 15% who have switched gas suppliers and 11% who have switched mobile operator (Figure 28).

... so new entrants have had more success than in other banking products

Based on the data above, credit cards appear to be the most contestable of all the UK banking products. This is also evidenced by the success of the new entrants in this market over the past decade. From 2000 to 2010 new entrants captured 18% market share of the UK credit cards market, more than treble the amount that new entrants captured in the personal loans market and greater than eight times more than new entrants managed in the mortgages and personal current accounts market (Figure 29).

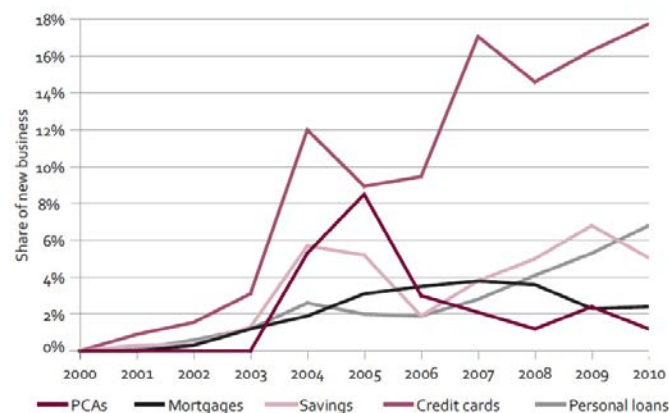
Figure 28. UK Churn Rate, 2013



Source: UK Cards Association

Note: Based on ICB data the annual switching rate for most banking products is c3-6%

Figure 29. UK Share of New Business Each Year For New Entrants



Source: ICB Final Recommendations. Data provided by GfK FRS.

This bodes well for Lloyds' new strategy

If Lloyds could move its market share in UK credit cards in-line with mortgages, then it could add c5% to Group PBT

This higher churn rate for credit cards should mean that it is relatively easier for Lloyds to capture market share here, provided it improves its distribution and is willing to compete on price and on service. Brand loyalty and a large branch presence are an added advantage that Lloyds could tap into. Our scenario analysis below shows that if Lloyds is able to increase its market share from the current 16%, to c25%, broadly in line with its mortgages market share, then it would add an incremental 5% to our underlying Group PBT (Figure 30) and c41bps to our Group RoTE forecast. Our analysis assumes key performance metrics (revenue margin, cost-income ratio, loan loss ratio, etc) for Lloyds are similar to BarclayCard.

Figure 30. Lloyds – UK Credit Card Market Potential (£m)

BarclayCard KPIs (2013):

UK Revenue / Loans	17.2%
Total Cost-Income Ratio	41.8%
UK Loan Loss Ratio	3.7%

Lloyds UK Cards:

2013 Market Share	16%
2013 Credit Card Loans Outstanding	9,373
UK Credit Card Market Size	58,355

Assumed Market Share	25%
Additional Credit Card Outstanding	5,194
Incremental Revenues	893.2
Incremental Costs	(373.1)
Incremental Operating Profit	520.1
Incremental Loan Losses	(190.1)
Incremental PBT Generated	330.0

% of 2016 UK Retail Banking PBT	8%
% of 2016 Group Underlying PBT	5%

Incremental RWAs	5,921
Boost To 2016 Group RoTE	0.41%

Source: Company Reports, Citi Research

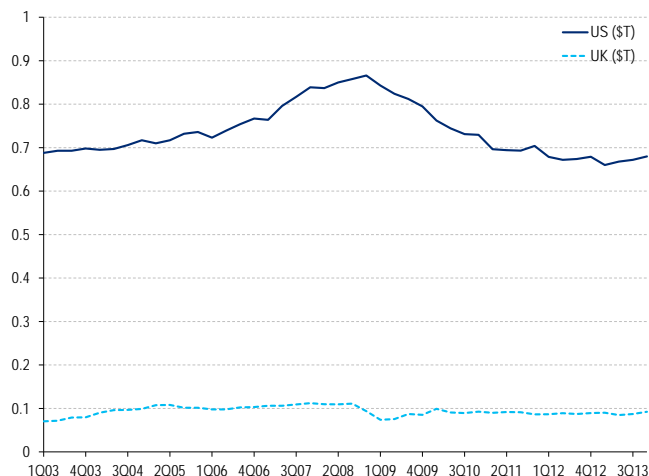
Note: Barclays cost-income ratio is for BarclayCard and not the UK cards business stand-alone, which is not disclosed. We prudently assume the total industry market size for UK credit cards remains constant. Boost to Group RoTE based on maintaining a Group CET1 ratio of 11%+.

Barclays and the US Growth Opportunity

The US credit card market continues to dwarf the UK's: a 1% market share of US cards is equivalent to a c7% share in UK

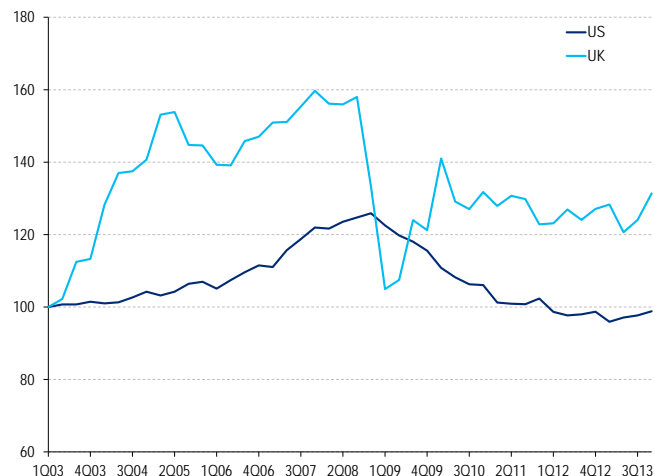
The US credit card market continues to dwarf the UK. Total credit card debt in the US amounts to \$680bn, versus only \$92bn in the UK, equal to 4.0% of GDP, or \$3,200 per person versus 3.5% of GDP and \$1,800 per person in the UK. So a 1% market share of US cards is equivalent to a c7% market share of UK cards, which gives an idea of the sizeable opportunity available from US expansion.

Figure 31. Credit Card Debt Outstanding – US vs UK (US\$tr)



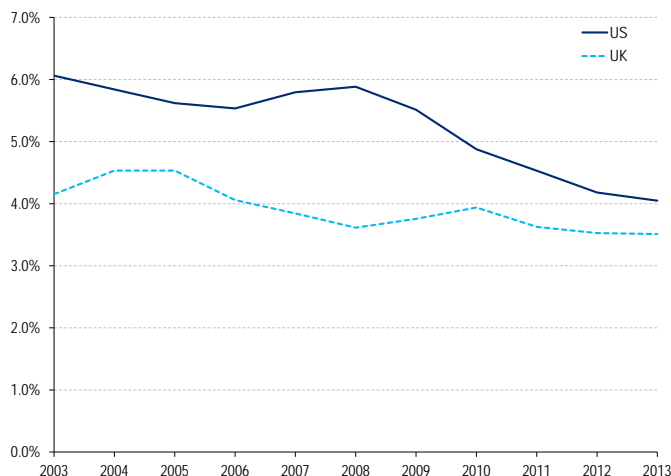
Source: Fed, BoE, DataStream, Citi Research

Figure 32. Credit Card Debt Outstanding Indexed – US vs UK



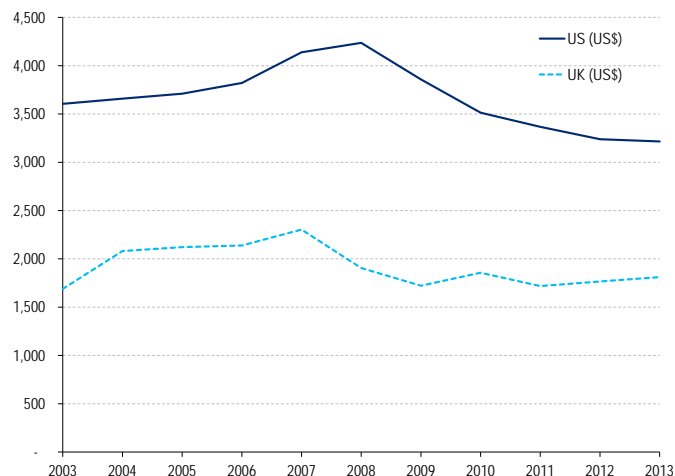
Source: Fed, BoE, DataStream, Citi Research; Note: 1Q03 value indexed to 100

Figure 33. Credit Card Outstanding Debt as a % of GDP



Source: Datastream, BoE, Fed, Citi Research

Figure 34. Credit Card Loans Outstanding per Adult Population (US\$)



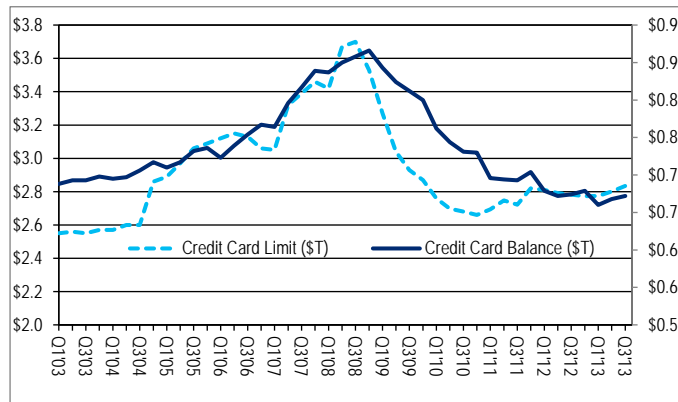
Source: Datastream, BoE, Fed, Citi Research;
Note: We take population age 15-64Yrs in US as adults and >16Yrs in UK

US card debt had been shrinking, partly due to the CARD Act, but has now stabilised and started to rise again

In the US cautious consumers have translated into an elevated payment rate in recent years. For example, payment rates averaged around 24% in 2013 vs the longer term average of around 17%. This is likely a function of higher mix of transactor customers that tend to pay their balances in full and revolving customers focusing on paying down debt, as also witnessed in the UK. In addition credit availability declined post-2008 and while it has started to rise again, it remains well below 2007 levels, partly due to the recent CARD Act that has been introduced.

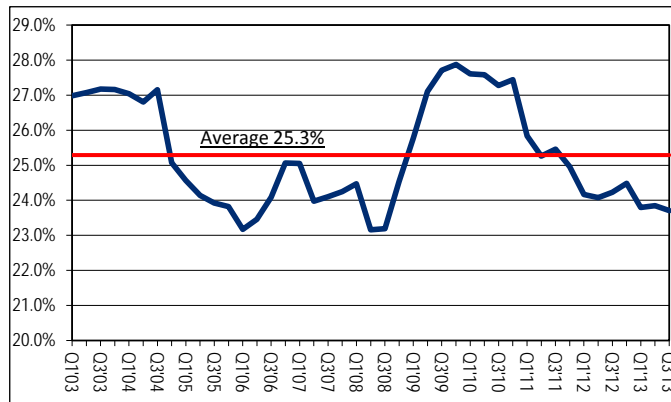
The CFPB has cited three discrete impacts from the recent CARD Act on credit availability including 1) a substantial decrease in credit cards originated to students/other consumers <21 years old, 2) applicants declined as a result of insufficient income to satisfy the CARD Act's ability-to-repay requirement and 3) a decline in the percentage of consumers receiving unsolicited credit line increases on their accounts. According to the Federal Reserve's Quarterly Report on Household Debt and Credit, total credit card limits have declined and consumers are using less of their available lending capacity, with current utilisation rates at around c24%, down from the longer-term average of 25.3%.

Figure 35. Historical US Credit Limits and Balances (\$ in T)



Source: Federal Reserve, Citi Research

Figure 36. Historical US Utilisation Rates (Card Balances / Card Limits)



Source: Federal Reserve, Citi Research

BarclayCard has captured significant market share in the US...

... and at \$17bn outstanding is now almost the same size as the UK

In recent years the large US bank card issuers (BAC, JPM) have lost share, largely driven by a repositioning of their portfolios away from subprime and renewed focus on deepening existing relationships. In contrast the card-centric names (AXP, COF, DFS) have gained share. Capital One has seen the largest growth, mainly attributable to the acquisition of HSBC's \$28bn US portfolio in May 2012. For more detail on the US card issuers please refer to [Consumer Finance: Card Issuers - Deep Dive on Card Market Share & Loan Growth Outlook](#), 11 December 2013.

Although HSBC's US cards business was highly profitable, management felt that it had limited strategic fit with the rest of the business and deemed it best to exit from the market. Another key beneficiary in the US market has been BarclayCard which has captured significant share, mirroring the growth in the UK business. Barclays' US credit card balance, at \$17bn, is now almost as big as its UK business, which has \$26bn outstanding debt despite Barclays' dominant market share position here.

Figure 37. US Credit Card Balances by Card Issuer (\$bn)

	2010	2011	2012	2013	% Chg 2010-2013
JPM	137.0	132.3	128.0	127.8	-7%
BAC	113.8	102.3	94.8	92.3	-19%
COF	53.8	56.6	83.1	73.3	36%
AXP	51.6	53.7	56.0	58.4	13%
DFS	45.5	47.0	49.6	53.2	17%
WFC	22.3	22.8	24.6	26.9	21%
USB	16.8	17.4	17.1	18.0	7%
BARC	12.0	12.8	14.4	17.1	42%
RBS	1.6	1.4	1.4	1.5	-5%
HSBC	33.7	0.8	0.8	0.7	-98%
Other	241.4	256.8	209.0	213.8	-11%
Total	729.6	704.0	679.0	683.0	-6%

Source: Company Reports, Federal Reserve, Citi Research

Notes: COF acquired a \$28bn portfolio from HSBC in May 2012 and sold \$6bn Best Buy portfolio in Sep 2013. JPM sold \$4bn Kohl's portfolio in Apr 2011.

Figure 38. US Credit Card Market Shares by Outstanding Balance (%)

	2010	2011	2012	2013	Chg 2010-2013
JPM	19%	19%	19%	19%	-0.1%
BAC	16%	15%	14%	14%	-2.1%
COF	7%	8%	12%	11%	3.3%
AXP	7%	8%	8%	9%	1.5%
DFS	6%	7%	7%	8%	1.5%
WFC	3%	3%	4%	4%	0.9%
USB	2%	2%	3%	3%	0.3%
BARC	2%	2%	2%	2%	0.8%
RBS	0%	0%	0%	0.2%	0.0%
HSBC	5%	0%	0%	0.1%	-4.5%
Other	33%	36%	31%	31%	-1.8%
Total	100%	100%	100%	100%	0.0%

Source: Company Reports, Federal Reserve, Citi Research

Notes: COF acquired a \$28bn portfolio from HSBC in May 2012 and sold \$6bn Best Buy portfolio in Sep 2013. JPM sold \$4bn Kohl's portfolio in Apr 2011.

A 25%+ US RoE appears achievable

Our US colleagues remain optimistic on the outlook for the US card networks and issuers – see [Citi's 2014 Card Payments Outlook - Room to Run Despite Outperformance; Upgrading V to Buy](#), 13 January 2014 – anticipating better volumes and card spend on the back of better consumer confidence and economic growth. In addition they believe the US card sector will continue to benefit from a stable credit environment, little impact from rising long-term rates, robust capital returns and broader secular growth trends. Figure 39 below is our US colleagues' illustrative RoE model for a large card issuer. Assuming that the credit environment does not deteriorate and competition remains manageable a 25%+ RoE appears achievable. Even under a severe bear case a 15%+ RoE still appears to be possible.

Figure 39. Illustrative US Card Issuer – RoE Deconstruction Model

	Return on Assets
Card Yield (APR)	12.5%
Cost of Funding	-2.0%
Net Interest Margin	10.5%
Fees	3.0%
Revenue Margin	13.5%
Operating Expense	-5.0%
Provisions	-4.5%
Pre-Tax Profit	4.0%
Tax	-1.5%
Post-Tax Profit	2.5%
Leverage	10x
RoE	25.0%

Source: Citi Research

If Barclays could double its market share in US credit cards (from 2.5% to 5.0%) it could add c4% to Group PBT

Our scenario analysis below shows that if Barclays were able to theoretically double its market share in US cards, from the current 2.5% to 5.0%, it could add up to 4% to our underlying Group PBT forecast (Figure 40) and c21bps to our Group RoTE.

Figure 40. Barclays – US Credit Card Market Potential (£m)

Barclays US Cards:	
2013 Market Share	2.5%
2013 Credit Card Loans Outstanding	10,301
US Credit Card Market Size	421,605
<hr/>	
Assumed Market Share	5.0%
Additional Credit Card Outstanding	10,540
Incremental Revenues	1,422.9
Incremental Costs	(527.0)
Incremental Operating Profit	895.9
Incremental Loan Losses	(492.5)
Incremental PBT Generated	403.4
<hr/>	
% of 2016 BarclayCard PBT	21%
% of 2016 Group Underlying PBT	4%
<hr/>	
Incremental RWAs	12,016
Boost To 2016 Group RoTE	0.21%

Source: Citi Research, Company Reports

Note: We prudently assume the total industry market size for US credit cards remains constant. Boost to Group RoTE based on maintaining a Group CET1 ratio of 12%+.

The most pressing regulatory issue is the outlook for interchange fees

MIFs act as a minimum price floor and determine to a large extent (in general 50% or more) the price charged by PSPs to merchants for card acceptance

The latest proposals from the European Commission are pushing for a 0.2% cap on debit card interchange fees and a 0.3% cap on credit card interchange fees

Evolving Regulation

Credit cards are a highly regulated product segment. In the UK the FCA (Financial Conduct Authority) will take over regulation of consumer credit, to include credit cards and payday lending, from the OFT (Office of Fair Trading), on 1 April 2014. We expect the initial focus of the FCA will be on APR (annual percentage rate) fees, to include risk-based re-pricing, on credit limits, and on plain language guidance.

In Europe the introduction of the SEPA (Single European Payments Area) in 2008 looked to remove the distinction between cross-border and domestic electronic retail payments and signalled the end of payment surcharges. In addition proposed new interchange regulation has been discussed since 2007. The European Commission has recently published two further papers on these subjects:

- A 2012 Green Paper on an integrated European market for cards, internet and mobile payments, focused on competition, choice and transparency for customers as well as innovation and payment security;
- A 2013 impact assessment on the proposed regulation of interchange fees for debit and credit card-based payment transactions.

This follows on from new proposals in the US, to include:

- The 2009 CARD Act (Credit Card Accountability, Responsibility and Disclosure), which tightened US card issuers' practices, largely curtailed over-limit and late fees and addressed re-pricing actions and consumer transparency
- The 2010 Durbin amendment on interchange fees which capped the price of debit card interchange at 21 cents plus 0.05% of the transaction value, an approximate 50% decline relative to average historic US interchange fees

The most pressing issue, at present, is the outlook for interchange fees in our view. Interchange fees are basically revenues offered to banks by card schemes, such as Visa and Mastercard, in exchange for issuing their cards rather than the cards of the competitors. Ultimately these fees tend to result in higher costs to merchants and ultimately their customers, as the acquiring PSPs tend to pass on the cost of higher Multilateral Interchange Fees (MIFs) to the merchants via higher Merchant Service Charges (MSCs). MIFs thus act as a minimum price floor and determine to a large extent (in general 50% or more) the price charged by PSPs to merchants for card acceptance. This is a challenge, especially for small merchants, as to whether they can then afford to accept card payments or not, due to their high cost.

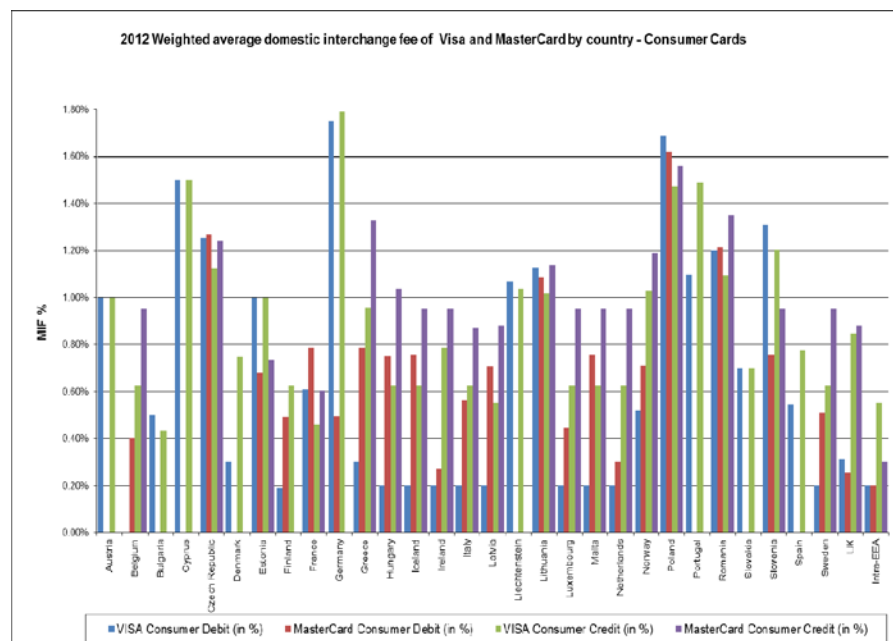
When looking at European consumer card transactions, the weighted average MIFs range between 0.1-0.2% to 1.4-1.5% among the various Member States. Country average MSC rates range between 0.3-0.4% to 1.9%. MSC rates also vary between merchants within the same Member State, as smaller merchants may end up paying average MSCs of up to 3.0-3.5% of the transaction value. The UK has relatively low debit card MIFs at c0.2-0.3%, but UK credit card MIFs, at c0.8-0.9% are towards the higher end of European peers (Figure 42). The latest proposals from the European Commission are pushing for a 0.2% cap on debit card interchange fees and a 0.3% cap on credit card interchange fees:

Figure 41. Sub-Options To Regulate a Common, EU-wide Maximum Level for Interchange Fees

Suboption	Debit Card IFs (domestic)	Credit Card IFs (domestic)
1	max 0.2% of transaction value	Not covered by legal act
2	Prohibition	Not covered by legal act
3	max 0.2%	max 0.3%
4	Prohibition	max 0.3%

Source: European Commission

Figure 42. European Consumer Cards - Average Domestic Interchange Fees by Country



Source: European Commission

The experience in the US, post the Durbin amendment, is that consumers have ended up paying more for banking services, while merchants have often failed to pass along the savings from a lower MSC to the end-consumer

Only c5% of BarclayCard's income is attributable to European interchange fees, helped by its diverse business mix

What could be the impact of this new EC regulation on card usage and profitability? Interestingly the experience in the US, post the introduction of the Durbin amendment, is that consumers have ended up paying more for banking services, such as checking accounts and debit card reward programmes, as banks have looked to offset declining card revenue income, while the merchants have often failed to pass along the savings from a lower MSC to the end-consumer. For more detail we would refer you to the work conducted by the Electronic Payments Coalition (EPC).

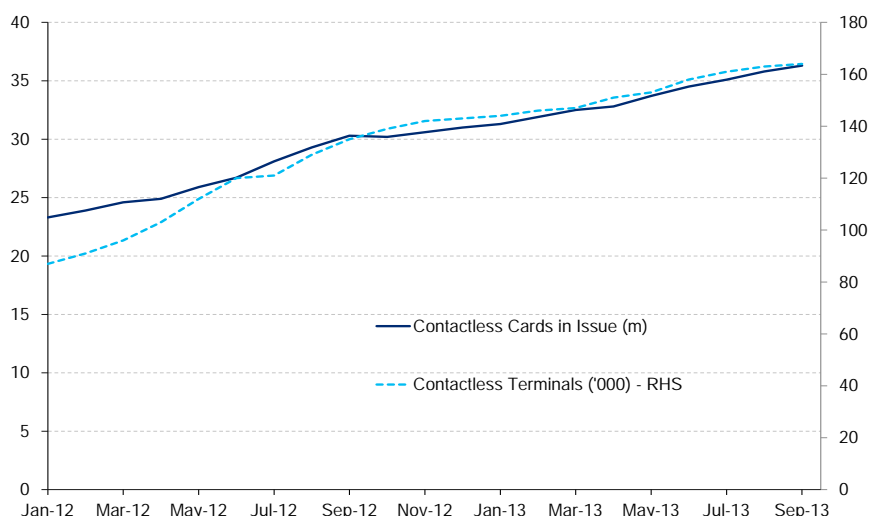
The EC cap on interchange fee is expected to come into force from 2016, but we expect the impact on the UK banks will be manageable. For example, at BarclayCard only c5% of overall income is attributable to European interchange fees, helped by its diverse business mix. In addition not all of this revenue income would be lost by the new caps and we would also expect the Barclays business model to be adapted, reducing any potential impact further.

New Innovation: An Opportunity or a Threat Going Contactless

23% of UK cards offer contactless features, while 11% of merchant terminals accept contactless payments

Since its introduction in 2007, the adoption of contactless cards has continued to gather pace in the UK. Overall c23% of UK cards in issue offer contactless features, while 11% of merchant terminals are now set up to accept contactless payments. According to the UK Cards Association the total number of contactless cards in issue in the UK increased by 26% in 2013 to 39 million and there were 94 million contactless card transactions in the UK in 2013, more than 3x the amount recorded in 2012. According to the latest Visa statistics similar growth has been seen across Europe, especially in Poland (159 million transactions) and to a lesser extent also in the Czech Republic (31 million), Slovakia (23 million) and Spain (18 million).

Figure 43. UK – Contactless Cards in Issue and Contactless Terminals



Source: The UK Cards Association

Only c0.1% of card transactions, by value, use contactless payment

In the UK contactless cardholders do not need to sign or enter a PIN to complete low value transactions, deemed to be £20 or less. However higher value transactions will still revert to the traditional cardholder verification method (cardholder signature or PIN). Despite the success in introducing contactless cards, only c0.1% of card transactions, by value, are executed using NFC (near field communications) – the technology that underpins contactless payments. The direct impact on profitability for the card issuers has therefore been relatively limited, but it is perceived to be a competitive advantage. Barclays continues to have the greatest market share of UK contactless cards in the UK, but peers are catching up.

The success of contactless cards remains to be seen

The success of contactless cards remains to be seen. Other countries where similar initiatives have been successful include Japan and Hong Kong, but in both countries this required sizeable government investment. Otherwise contactless initiatives have met with mixed success. In a survey commissioned by YouGov in 2012 80% of contactless cardholders in the UK stated they had never used their card for a contactless payment. Only 5% said they made a contactless payment more than once a week. While contactless payments are marginally faster than a chip-and-pin payment, that's not perceived to be enough of a benefit. The transaction limit, perceived risk of fraud, and limited retailer adoption (who would rather customers paid with cash on small-ticket items to avoid interchange fees) are all cited as reasons why contactless card payments are not growing faster.

Internet and mobile banking platforms, offering access to financial services, are already well developed...

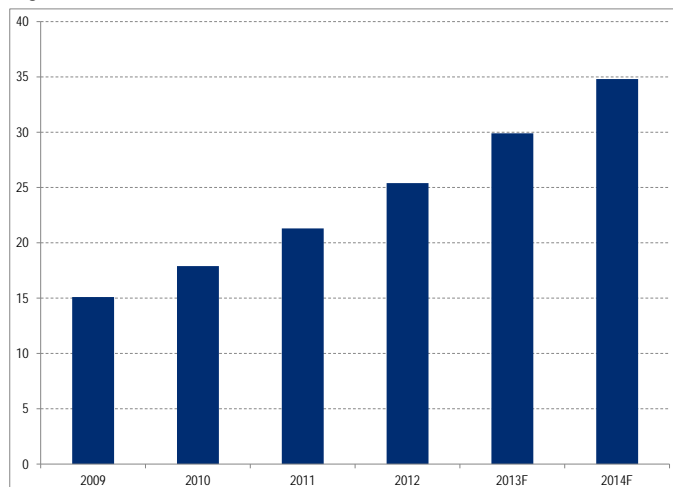
... but e-payments and m-payments are still in their infancy, relative to cards

The Next Step: Convergence of Physical & Digital

Internet and mobile banking platforms, offering access to financial services, are already well developed. According to the 2013 ING Mobile Banking Survey, 37% of European consumers already use mobile banking. The most penetrated countries include Turkey (49%), Spain and the Netherlands (both 44%). The least penetrated countries include Romania (23%), France (25%) and Belgium (26%). The UK stands at 35%, broadly in line with the European average. In the US the equivalent figure is 24% (source: Federal Reserve). However, the most common use of mobile banking is simply to check account balances or recent transactions, followed by transferring money between accounts. Mobile payments have typically lagged behind.

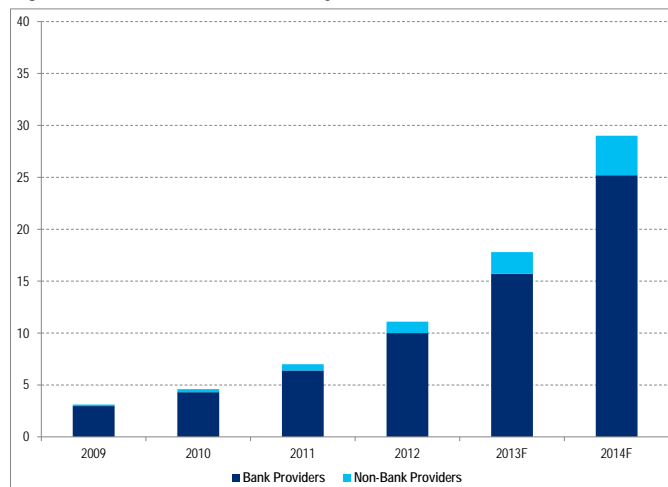
Internet payments (e-payments) and mobile payments (m-payments) are still in their infancy, relative to cards, but are growing rapidly. E-payments are usually made in one of three ways: (i) a remote payment card transaction via the internet; (ii) online-banking based credit transfers or direct debits under which the payer uses an online banking portal; (iii) payments through e-payment providers, with which the consumer has set up an individual account. Meanwhile m-payments are classified into two main categories: (i) remote m-payments often take place through card payments on mobile-supported internet sites; (ii) proximity payments generally take place directly at the point of sale, using Near Field Communication (NFC), the same technology that underpins contactless card payments.

Figure 44. Number of Global E-Commerce Transactions (Billion)



Source: CapGemini World Payments Report

Figure 45. Number of Global M-Payments Transactions (Billion)



Source: CapGemini World Payments Report

Over a multi-year transition period physical card transactions may shrink and disappear altogether, to be replaced with mobile and online payments, combined with digital wallets

Over a multi-year transition period there is a strong possibility that we see physical card transactions shrink and disappear altogether, to be replaced with mobile and online payments, combined with digital wallets. For example Visa continues to roll out its mobile wallet, V.me, in the US, Canada and Australia and is now expanding into Asia and LatAm. The Mastercard digital wallet is MasterPass which has now expanded to eleven markets, while Mastercard also continues to roll out PayPass, its NFC-enabled contactless technology, enabling a customer to tap a phone, watch or other device for a fast, secured payment. The largest digital wallet remains PayPal, while Google, Square and ISIS have also developed digital wallet offerings.

The same is true of merchant terminals, or POS (point-of-sale) acceptance devices, due to the increasing use of smartphones to accept card payments

The same is true of merchant terminals, or POS (point-of-sale) acceptance devices, due to the increasing use of smartphones to accept card payments. Developments like Square in the US provide smaller businesses with an opportunity to accept cards for the first time using mPOS (mobile points-of-sale), as they are cheaper than existing POS terminals. This is a large opportunity in Europe and the UK as <50% of small businesses currently accept card payments. However Square works on the basis of a swipe, sign and receipt format. In Europe the adoption of Chip & PIN may limit the ability to produce similar devices at an affordable cost for small businesses. Other competitors to Square include iZettle, the European pioneer, and LevelUp. In the UK, Lloyds, HSBC and RBS have all white-labelled Monitise.

The risk of disintermediation is often asked about the card networks, merchant acquirers and point-of-sale providers...

Mobile payments will remain an interesting and fast-moving field. As this technology continues to develop the risk of disintermediation is often asked about the card networks, about merchant acquirers and about the point-of-sale (POS) providers. However, the incumbents are not sitting idle and the pace of change is often measured in years, which implies that incumbents often have time to react. For example, we believe it is unlikely that the incumbent card networks will face any significant level of disintermediation from mobile payment disruptors.

Many of the newer participants will continue to rely on the incumbent processing rails – such as the traditional networks of Visa, Mastercard, etc. – as their play is often an attempt to grow adjacent markets (advertising, offers etc.). Among the merchant acquirers new entrants – such as Square, iZettle, LevelUp, etc. – have been successful at the low-end of the merchant spectrum, but lack the servicing and sales capabilities to target larger merchants, which are still dominated by the likes of BAMS, First Data, Chase, WorldPay and Fifth Third. Likewise existing POS vendors and processors remain well-entrenched at the moment given the importance of security, reliability and low-cost transaction types such as PIN debit.

... but there seems to be little direct disintermediation worry for card issuers

Furthermore there seems to be little direct disintermediation worry for card issuers in terms of the relationship with the consumer. We therefore view the direct near-term profitability implications of e-payments and m-payments as relatively limited for the banking industry, to include the UK banks. However, if the "merchant of record" model does gain significant traction, which would mean some mobile payments would appear on a consumer's bills as the payment system (e.g. PayPal), rather than the end merchant (e.g. Walmart), then the issuer may lose its end-to-end view of the transaction. This could impact its ability to service the consumer and to design overall credit scoring properly and effectively. This could also limit the issuer's role and usefulness with newer "offers-based" business models because the issuer would no longer know where the cardholder shopped.

The only risk is on data access and how this impacts issuers' ability to service consumers and credit score effectively

For more detail see:

[*'UPWARDLY MOBILE - An Analysis of the Mobile Payment Trend'*](#) (9 Mar 2012)

[*'Upwardly Mobile – Analysis of Global Mobile Payments Opportunity'*](#) (11 Mar 2012)

[*'Upwardly Mobile, Part II - Eight Crucial Questions, Answered'*](#) (27 Nov 2012)

[*'Upwardly Mobile, Part III - Mobility Unchained: Stock Implications'*](#) (16 Jan 2014)

UK Banks – Recommendations and Valuations

Company	RIC	Rec	Ccy	Share Price			Adj P/E			P/tB		RoTE		Yield	Share Performance				M Cap \$bn
				Now	Target	+/-%	2014E	2015E	2016E	'14E	'15E	'14E	'15E	2014E	YTD	1m	3m	12m	
Barclays	BARC.L	Buy	GBP	2.34	3.45	+48%	7.1x	6.1x	5.6x	0.7x	0.7x	11%	12%	5.3%	-14%	-8%	-12%	-12%	63
Lloyds Banking Grp	LLOY.L	Neutral	GBP	0.75	0.82	+9%	17.6x	11.2x	9.6x	1.5x	1.3x	15%	14%	2.0%	-5%	-7%	-4%	+58%	89
RBS	RBS.L	Sell-H	GBP	3.06	2.70	-12%	13.9x	10.8x	9.7x	0.9x	0.9x	5%	7%	0.0%	-9%	-14%	-8%	+7%	57
HSBC	HSBA.L	Neutral	GBP	6.11	6.85	+12%	10.9x	9.9x	9.0x	1.2x	1.2x	11%	12%	4.8%	-8%	-3%	-8%	-12%	190
HSBC (HK)	0005.HK	Neutral	HKD	78.3	90.0	+15%	10.8x	9.8x	8.9x	1.2x	1.2x	11%	12%	4.9%	-7%	-4%	-6%	-6%	190
Standard Chartered	STAN.L	Buy	GBP	12.4	15.5	+26%	9.6x	8.7x	7.9x	1.2x	1.1x	13%	13%	4.2%	-9%	-4%	-8%	-28%	50
Stan Chart (HK)	2888.HK	Buy	HKD	156.3	201.0	+29%	9.4x	8.6x	7.8x	1.2x	0.1x	11%	4%	4.6%	-5%	-5%	-9%	-23%	49

Source: dataCentral, Citi Research; Note: Recommendations: "H" = High Risk; Prices as at 26 March 2014

Notes

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Notes

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

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