

Retail banking market investigation

Barriers to entry and expansion: capital requirements, IT and payment systems

14 July 2015

This is one of a series of consultative working papers which will be published during the course of the investigation. This paper should be read alongside the updated issues statement and the other working papers which accompany it. These papers do not form the inquiry group's provisional findings. The group is carrying forward its information-gathering and analysis work and will proceed to prepare its provisional findings, which are currently scheduled for publication in September 2015, taking into consideration responses to the consultation on the updated issues statement and the working papers. Parties wishing to comment on this paper should send their comments to retailbanking@cma.gsi.gov.uk by **midday Tuesday 28 July 2015**.

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The Competition and Markets Authority has excluded from this published version of the working paper information which the Inquiry Group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂]. [Some numbers have been replaced by a range. These are shown in square brackets.] [Non-sensitive wording is also indicated in square brackets.]

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Introduction

1. In July 2015 the CMA published its [updated issues statement](#), which set out progress on the investigation and a summary of our current thinking on each of the theories of harm identified (including barriers to entry and expansion) based on the evidence collected and analysis undertaken to date. This working paper complements the updated issues statement, containing further details on the evidence collected on a subset of potential barriers to entry and expansion we are investigating.
2. Our Guidelines² note that entry or expansion by firms, or the prospect of entry or expansion by firms within a short time, will often stimulate competition and can sometimes countervail against features which might otherwise give rise to an adverse effect on competition. A significant source of competitive discipline may therefore be eliminated or reduced if there is any barrier to market entry and/or expansion, whether an absolute barrier or some other form of restriction such as aspects of the market that deter entry. Our Guidelines set out four broad categories of entry barrier:
 - (a) **Regulatory barriers to entry** – The ability of firms to enter a market can be affected by the market’s regulatory framework. There is a distinction between regulatory burdens that impose costs proportionately on all firms and those that hit new entrants harder than larger banks.
 - (b) **Natural or intrinsic barriers to entry** – Firms entering the market unavoidably incur costs. These might include the cost of putting the production process in place, gaining access to essential facilities or inputs and the acquisition of any necessary intellectual property rights. An important consideration in evaluating the impact of these costs on firms’ ability to enter the market is the extent to which they are ‘sunk’ – ie cannot be recovered upon exit. Economies of scale in combination with sunk investment costs can constitute a barrier when these relate to the cost of entering or expanding in the market.
 - (c) **Strategic advantages of larger banks** – Some forms of investment by larger banks may have the effect of deterring market entry by increasing the sunk costs of entry. For example, vertical arrangements may make it difficult for an entrant to gain sufficient distribution outlets or to gain access to vital components. Further, the existence of significant switching costs for customers may be intrinsic to the market but firms may also act strategically to increase them. Such strategic entry barriers may increase

² [Guidelines for market investigations: Their role, procedures, assessment and remedies CC3](#), paragraphs 205–236.

the risks faced by entrants, and they will be proportionately higher when the sunk costs of entry are high.

(d) **'First mover' advantages** – These can result simply from the established position of the larger banks in the market. First mover advantages can make it difficult for other firms to enter a particular industry – for example, because of customer loyalty to a particular brand and the role of promotion or advertising in a market.

3. Our Guidelines explain how the Competition and Markets Authority (CMA) will assess the impact of entry barriers. The Guidelines say that we will consider how the competitive climate within a market affects the decisions of individual firms to enter or invest in that market, taking into account the advantages of established sellers. This will entail examining the factors influencing entry decisions.
4. In the context of barriers to entry and expansion, and using the categorisation above, Table 1 sets out the potential issues we have identified in the retail banking market. In this paper, we summarise the concerns raised by parties in relation to **capital requirements**, **IT** and **payment systems**. Work is ongoing in the remaining areas that are not covered by this paper and we will report on these before or at our provisional findings. We welcome views on those areas and any aspects of this paper.

Table 1: Barriers to entry and expansion

| <i>Issue</i> | <i>Potential barrier to be investigated</i> | <i>What is covered</i> | <i>CMA initial findings</i> |
|--------------------------------------|---|---|---|
| Regulatory barriers | Capital requirements | Internal ratings base approach versus standardised approach | See 'Regulatory barriers' section of this paper |
| | Bank authorisation | Access to banking licence; limited and full authorisation | To follow |
| | Anti-money laundering requirements | Money laundering regulations; systems and controls | To follow |
| Natural or intrinsic barriers | IT | IT infrastructure build; technology solutions; legacy systems | See 'Natural or intrinsic barriers' section of this paper |
| | Branches | Branch presence; branch network | To follow |
| | Access to funding | Access to wholesale/private funding | To follow |
| | Access to payment systems | Direct and indirect access to payment systems | See 'Natural or intrinsic barriers' section of this paper |
| | Full service provision | Customer acquisition and retention | To follow |
| Strategic advantages of larger banks | Access to distribution channels | Access to intermediaries; vertical arrangements | To follow |
| | Activities that increase cost of switching | Tying and bundling; long contracts; exit charges/penalties and delays | To follow |
| | Proprietary information | Access to information held that might be used for purposes of targeting/cross-selling | To follow |
| 'First mover' advantages | Brand/reputation | Advertising spend; consumer loyalty | To follow and also as part of theory of harm 1 |

Source: CMA analysis

5. Alongside this paper we have published a working paper called 'Summary of entry and expansion in retail banking'. This examines firms that have entered the personal current account (PCA) or small and medium-sized enterprise (SME) banking market organically, and those that have entered inorganically either as a result of a divestment, or expansion.
6. For the purposes of this paper, 'bank' is used to describe retail banks and building societies (mutuals). When more than one bank has provided us with the same or similar information, we may refer to them collectively as the 'parties'.

Summary of barriers to entry and expansion

7. In the following sections, we summarise the concerns raised by parties in relation to the potential barriers to entry and/or expansion in retail banking posed by capital requirements, IT and payment systems. We have also engaged with technology providers, industry bodies and relevant regulators to inform our initial thinking in this area.

Regulatory barriers

8. Banks have to meet a number of regulatory requirements to enter the banking market and, once authorised to provide banking services, must meet a number of ongoing requirements to demonstrate that they are financially sound and have high standards of conduct. Whilst regulation has an essential role to play in ensuring a well-functioning banking market and in protecting consumers, there is a risk that if regulatory requirements are set too high or applied disproportionately they may hinder competition.
9. Regulation has the potential to delay and even prevent new banks entering the UK market. It can also hinder their expansion by systematically favouring incumbent banks. This is because incumbent banks will typically have more resources to bear the fixed costs associated with regulation, and the experience to meet regulations at a lower cost than banks looking to enter the market. Moreover, regulation may favour incumbent banks.
10. This section examines one aspect of the existing regulatory requirements faced by banks in the UK, capital requirements on banks, and assesses whether they represent a barrier to entry and expansion in the banking market.

Capital regulation

11. There have been a number of recent reports examining barriers to entry and expansion in the banking market which consider potential regulatory barriers to entry and expansion. These reports have concluded that the regulations banks must meet in order to enter the UK market – the authorisation process – no longer act as a barrier to entry. However, capital regulation and, in particular, differences in the amount of capital incumbent banks are required to hold compared with new entrants and smaller banks may present a competition concern. See Appendix A, for a summary of the findings of these research reports.
12. These reports are consistent with the information we have received so far as part of our market investigation. Most new entrants that have recently applied

for, or are in the process of applying for, authorisation agree that the authorisation process is proportionate and efficient and does not present a barrier to entry. However, new entrants and smaller banks have raised concerns that capital regulations favour larger banks and as a result may act as a barrier to expansion. This section focuses on examining capital regulations. It begins by providing a brief summary of the current capital regulations, before summarising parties' competition concerns and the existing evidence to support this.

13. We continue to examine other potential regulatory barriers as part of our market investigation.

Background: The capital regulatory framework

14. Existing regulations require all banks to hold a minimum amount of capital. The aim of this is to protect customer deposits and ensure that banks are able to absorb losses in the event of becoming insolvent or near insolvent. For example, a bank that suffers losses due to some external shock or a high number of customers defaulting on their loans should be able to bear these losses without having an impact on its ability to repay its depositors, if it is sufficiently well capitalised. If on the other hand it is not well capitalised, then all other things being equal it may not be able to repay all its creditors/depositors. In this scenario, the bank may become insolvent.
15. The framework setting out capital requirements for banks is set internationally by the Basel Committee on Banking Supervision (BCBS)³ and outlined in the Basel Accords, currently Basel III. The European Union (EU) gives legal effect to these requirements through the Capital Requirements Directive IV (CRD IV), which has been transposed into UK law by the rules of the Prudential Regulation Authority (PRA), which is also responsible for compliance with these requirements, and the FCA.⁴
16. The current regulatory framework for capital applicable to UK banks is based on three pillars:

³ This is a committee made up of representatives of banking supervisory authorities from major economies and banking hubs, providing a regular forum for co-operation on banking supervisory matters and to encourage convergence toward common standards. The BCBS is part of the Bank for International Settlements (BIS). For further information, please refer to the [regulatory framework applicable to the retail banking industry in the UK working paper](#).

⁴ CRD IV is made up of the: Capital Requirements Directive (CRD) which must be implemented through national law; and Capital Requirements Regulation (CRR), which is directly applicable to firms across the EU. For further information please refer please refer to the [regulatory framework applicable to the retail banking industry in the UK working paper](#).

- (a) **Pillar I: minimum capital requirements** – This is the minimum amount of capital banks must hold to protect against credit, market and operational risk. Minimum capital requirements are set internationally, but the PRA has some limited discretion to vary these.⁵
- (b) **Pillar II: supervisory review** – This is the additional capital that banks have to hold to cover risks that are either not covered, or are inadequately covered, under Pillar I. The aim is to ensure that banks have adequate capital to support other business risks such as pension risk, legal risk, credit concentration risk and management risk.
- Pillar II also seeks to ensure that banks can meet their minimum capital requirements even during periods of severe stress – for example, during an economic downturn or financial crisis. Unlike Pillar I, Pillar II requirements are firm specific and set by the PRA.
- (c) **Pillar III: disclosure** – This aims to complement Pillars I and II by seeking to foster greater market discipline through improved disclosure of banks' capital holdings and risk management practices.

Pillar I: Minimum capital requirements

17. Under the existing capital regulations, banks are required to hold a minimum level of capital equivalent to 8% of their total risk weighted assets (RWAs).⁶ At least 6% of this must be met by Tier 1 equity and 2% by Tier 2.⁷ RWAs are used instead of total assets to calculate banks' minimum level of capital, because it is recognised that not all assets will be the same. Some assets will be riskier than others and therefore will have a greater probability of default. Similarly, some assets are likely to incur smaller losses compared with others – for example, a loan secured against a property. As a result, assets are risk weighted to ensure that there is a more efficient allocation of capital across banks, with more capital being held against riskier assets compared with low-risk assets. RWAs also create the right incentives for banks to hold and expand their proportion of low-risk assets. If capital requirements were calculated simply using total assets with no adjustment for risk, there would naturally be incentives for banks to hold riskier assets in order to maximise their return. This could potentially lead to more unstable outcomes.

⁵ Under the article 124 and 164 of the Capital Requirements Regulation (CRR), the PRA has discretion to vary risk weights for mortgage exposure and exposures secured against properties.

⁶ RWAs are a bank's total assets adjusted for their risk.

⁷ For further information on the prudential regulatory framework for banks and an explanation of the terms "Tier 1" and 'Tier 2' capital, please refer to the CMA's working paper on [regulatory framework applicable to the retail banking industry in the UK](#).

18. Risk weights can be calculated using one of three approaches:
- (a) **Standardised approach** – This is typically used by smaller banks and new entrants. It is a standard set of risk weights, which has been set by the regulator based on information from external credit rating agencies (CRAs). The approach is relatively simple and typically applies one flat risk weight for each asset or type of credit exposure.
 - (b) **Foundation internal ratings base (IRB) approach** – This allows banks to use their own internal models and data to calculate risk weights for each asset class they hold. Banks must gain approval from the regulator to use this. For foundation IRB modelling, banks can use their own estimates of the probability of default. However, the regulator provides a set of values for loss given default (share of assets lost when the borrower defaults).⁸
 - (c) **Advanced IRB approach** – This is typically used by the large, established banks and is based on a bank's own estimate of various parameters such as the probability of default by the borrower, its exposure at default, the loss given default and the maturity of the transaction. The advanced IRB approach is much more complex and allows for greater granularity in developing individual risk weights. It is based on banks' own historic data and, as with the foundation IRB, is subject to regulatory approval.
19. Even those large established banks that make extensive use of the advanced IRB approach, may also use the standardised approach for calculating risk weights for some of their asset classes. This can occur for example when a large bank attempts to diversify its portfolio into other asset classes where it has little track record in lending. A lack of historic data on lending to these asset classes means it may be difficult to accurately estimate risk weights for these assets.
20. One of the principal reasons this dual approach to the capital regulatory regime has developed is the belief that it leads to better internal risk management and a more granular approach to calculating risk weights. The capital advantages resulting from the use of IRB also create incentives on smaller and newer banks to develop better risk management techniques.

⁸ The Foundation IRB approach cannot be used for retail exposures. It is also not possible to model exposure at default under the foundation IRB approach

Competition concerns

21. A number of new entrants and smaller participants (Paragon Bank (Paragon), Metro Bank (Metro), Aldermore Bank (Aldermore), [X]) have expressed concern that differences in the methodology used to calculate risk weights between large, established banks, and new entrants and small banks places them at a disadvantage when lending. This is because large, established banks are able to follow the IRB approach, whereas new entrants and smaller banks have to follow the standardised approach (due to the high fixed costs of using the IRB approach). They argue that differences in the risk weights between the IRB and standardised approach, mean that smaller/newer banks are required to hold more capital against the same assets as large banks, increasing their cost of lending. Metro, for example, has suggested that it has to hold six to ten times more capital when securing a mortgage to a customer compared to the largest banks, on a like-for-like basis (ie loan to value and customer characteristics). The disadvantage is greater amongst safer assets such as mortgage lending and secured SME lending.
22. The lack of a track record and the relatively high fixed costs involved in developing and maintaining risk models mean that it is difficult for new entrants and smaller banks to become IRB approved. For example, under current rules, banks wishing to become IRB approved need to demonstrate that they have been using advanced risk modelling approaches for at least three years prior to the IRB permission date. They must also have at least two to five years' worth of lending data on that asset class. It is expected that this will increase to five years following forthcoming EU regulation.
23. A key implication of this difference in regulatory treatment is that smaller and newer banks wishing to compete in these markets are likely to have lower profitability (all other things being equal), impacting on their ability to expand their lending, grow their business and attract new investment
24. It has also been suggested that the capital disadvantages faced by smaller and newer banks in these core lending markets (such as mortgage lending and SME lending) means that they must instead focus on competing in other areas where they face a more level playing field in terms of capital requirements.

Does IRB lead to a competitive advantage?

25. Analysis conducted by the PRA (Table 2) shows that there are significant differences between the risk weights under the standardised approach and the IRB approach. The differences are particularly stark for safer assets such as mortgage lending. For example, risk weights for mortgage lending, can be

as much as three times higher under the standardised approach compared with the IRB approach. To illustrate the impact of this on a bank's capital holding, a bank on the standardised approach seeking to lend a £100 mortgage at 70–80% loan to value would be required to hold approximately £2.80 of capital, compared with only £1 under the IRB approach.^{9,10}

Table 2: Comparison of risk weights, standardised approach and IRB approach

| | | | % | |
|---|----------------------------------|--|-------------------------------|---------------------------------|
| | <i>Standardised risk weights</i> | <i>Exposure weighted average risk weight</i> | <i>Low range risk weights</i> | <i>Upper range risk weights</i> |
| <i>Mortgages (prime)</i> | | | | |
| 0%<=LTV<50% | 35 | 3.3 | 2.8 | 3.8 |
| 50%<=LTV<60% | 35 | 6.0 | 5.1 | 7.0 |
| 60%<=LTV<70% | 35 | 8.9 | 7.5 | 10.2 |
| 70%<=LTV<80% | 35 | 12.7 | 10.8 | 14.6 |
| 80%<=LTV<90% | 36 | 18.4 | 15.6 | 21.1 |
| 90%<=LTV<100% | 43 | 31.4 | 29.9 | 36.1 |
| >=100% | | 53.9 | 45.8 | 62.0 |
| <i>Mortgages (buy-to-let)</i> | | | | |
| 0%<=LTV<50% | 35 | 4.1 | 3.5 | 4.7 |
| 50%<=LTV<60% | 35 | 9.7 | 8.2 | 11.1 |
| 60%<=LTV<70% | 35 | 12.5 | 10.6 | 14.4 |
| 70%<=LTV<80% | 35 | 17.5 | 14.9 | 20.2 |
| 80%<=LTV<90% | 36 | 32.0 | 27.2 | 36.8 |
| 90%<=LTV<100% | 43 | 43.1 | 36.7 | 49.6 |
| >=100% | | | | |
| <i>Credit cards – revolving retail expo</i> | | | | |
| UK credit cards | 75 | 107 | 91 | 123 |
| International credit cards | 75 | 168 | 143 | 193 |
| <i>Corporate</i> | | | | |
| Large corporates | | 54.1 | 46 | 62 |
| Mid corporates | | 79 | 67 | 91 |
| SMEs | 100 | 77.7 | 66.1 | 89.4 |
| Commercial real estate | 100 | 125 | 100 | 150 |

Source: PRA.

26. The reverse is true for higher risk assets, such as commercial real estate, where risk weights are lower under the standardised approach compared with the IRB approach. A consequence of this is that new entrants may be

⁹ Please note this is an illustrative example to demonstrate how risk weights may influence capital holdings. The capital charge in this example is determined by multiplying the £100 exposure by 35% risk weight under the standardised approach and 13% risk weight under the IRB approach and applying the 8% minimum capital requirement. This results in a capital holding of £2.80 under IRB and £1 under SA. In practice, this calculation is much more complex.

¹⁰ Of the total capital held by banks, three quarters needs to be held in common equity tier 1 and one quarter needs to be held in common equity tier 2.

incentivised to have riskier portfolios because this is where they will have an advantage under the capital adequacy requirements.

The cost of adopting and using the IRB approach

27. There are significant barriers to becoming IRB approved. Banks wishing to adopt and use the IRB approach have to meet a number of upfront and ongoing costs, including:
- **Model development and maintenance** – Banks need to have robust models that estimate parameters, such as the probability of default for different exposures. These must be continually developed, validated and maintained.
 - **Data collection** – Banks need to hold significant detailed data on their assets – at a minimum between two to five years' worth of detailed lending data. Following new regulation from the EU it is expected that this will increase to 5 years.
 - **Investment in infrastructure** – This may be required to support data collection – for example, by investing in and developing a data warehouse.
 - **Governance and improvements in capability** – It may be necessary for banks to hire more experienced staff to support more developed risk management function. There may also be a need to change governance structures within an organisation.
 - **Regulatory and compliance costs** – The application process is likely to be costly and time consuming and may require additional resources and expertise. There are likely to be ongoing compliance costs, which can be burdensome.
28. EU law requires banks to demonstrate that they have been using their IRB rating system internally for at least three years before they apply for approval. New banks coming into the market are therefore unlikely to meet these requirements. They are also unlikely to want to take on the additional costs associated with having advance risk management systems, especially during the early years of their operation when they will have a number of other business costs, and other more significant areas of their business to focus on.
29. Participants that have recently undergone the IRB approval process or are in the process of becoming IRB approved estimate the total cost of the process to be between £[£] and £[£]. For example, Principality Building Society commenced development of an IRB framework in 2006, submitting a formal

IRB Waiver Application in July 2012 which was approved in August 2013. It estimated the total costs to be between £[X] and £[X]. Principality Building Society also noted that it is extremely difficult to quantify direct costs, as these were included within a broader, budgeted, investment programme which reflected the firm's desire to ensure the continuous development and improvement of its risk management capabilities. Yorkshire Building Society, on the other hand, estimate the total costs to be approximately £[X] over [X] years. This includes the cost of external contractors, IT and internal credit risk and use testing. They both report that it can take a significant amount of time to develop the required infrastructure and risk capabilities needed for IRB approval and then apply to be authorised to use their own internal risk based system.

30. The PRA has recognised that the costs of becoming IRB approved are likely to be significant and may disadvantage newer or smaller banks. As a result, and as part of its review of requirements for entering and expanding in the banking sector,¹¹ it made a number of commitments to help new banks navigate the approval process. The report¹² recognised that there was a significant distortion resulting from the two approaches to calculating risk weights. Their commitments included:
- (a) actively engaging with banks seeking IRB approval to ensure that they understand the requirements they need to meet to be granted approval;
 - (b) ensuring that this information is set out clearly in one place on the PRA's website;
 - (c) discussing and agreeing with those banks a credible plan for achieving IRB approval for part or all of their credit risk;
 - (d) providing general guidance on the areas of lending where those banks would be likely to see capital benefits by following the IRB approach;
 - (e) ensuring that approval to follow the IRB approach is achievable over three years; and
 - (f) adopting a streamlined approach to considering applications to use the IRB approach from banks that the PRA judges are not systemically important.

¹¹ For further information please refer to FSA and BoE report [A Review of Requirements for Firms Entering into or Expanding in the Banking Sector](#).

¹² For further information please refer to FSA and BoE report [A Review of Requirements for Firms Entering into or Expanding in the Banking Sector](#).

31. At this stage it is too early to tell what the impact of these commitments has been and whether participants wanting to become IRB approved have found the process clear and easy to navigate. Regardless of the process the cost of becoming IRB approved are significant

Counterbalancing factors

32. Whilst the IRB approach may give a competitive advantage to larger banks in relation to key assets such as mortgage lending and SME lending, there are a number of other requirements that have been introduced that have had the effect of counterbalancing some of these potential advantages. These include:
- (a) capital buffers for large systemically important banks;
 - (b) reduced capital requirements for new entrants; and
 - (c) the leverage ratio.

Capital buffers

33. Banks must hold a number of additional capital buffers on top of the minimum capital requirements. Large systemic banks in particular are required to hold a number of additional capital buffers. These are summarised below:
- (a) **Capital Conservation Buffer** – The CCB is designed to ensure that banks build up sufficient capital buffers which can then be drawn down when losses are incurred. This aims to ensure that banks can continue to provide credit to the real economy, even in times of stress and avoid banks having to draw down from the minimum capital requirements. When a bank breaches the buffer¹³ automatic safeguards kick in and limit the amount of dividend and bonus payments a bank can make. This prevents the bank's capital from being further eroded by such payments. Once a bank's available capital falls into the minimum capital requirement threshold it is considered near failure.
 - (b) **Countercyclical Buffer** – This aim of this is to counteract the effects of the economic cycle on banks' lending activity, thus making the supply of credit less volatile. It works by requiring banks to accumulate sufficient good quality capital during periods of high credit growth to use to absorb losses during an economic downturn.

¹³ The capital conservation buffer sits on top of the minimum capital requirements. CCB requires banks to hold 2.5% of RWA in common equity tier 1 (CET1) capital, bringing the total CET1 equivalent to 7%.

- (c) **Buffer for globally systemic institutions (G-SIB)** – An extra cushion of capital for globally systemic institutions, whose failure would be likely to have a large impact on the economy. G-SIBs are designated at an international level. For the UK, G-SIB banks are HSBCG, Barclays, RBSG and Standard Chartered.
- (d) **Buffer for Ring-Fenced Banks**¹⁴ – An extra buffer for ring-fenced banks. The buffer for ring-fenced banks will be the higher of the G-SIB buffer and the ring fence buffer.

Pillar II/Individual Capital Guidance (ICG)

- 34. There are also other firm specific capital requirements that banks must hold as part of Pillar II of the capital regulations framework. These are broken down into two categories:
 - (a) **Pillar IIA** – These are requirements set by the PRA reflecting its estimates of risks that are either not captured or underestimated under Pillar I. Its purpose is to ensure that firms have adequate capital to support the relevant risks to their business.¹⁵ Together, Pillars I and IIA are known as ‘individual capital guidance’.
 - (b) **Pillar IIB (PRA buffer)** – These requirements are also set by the PRA and reflect a forward-looking assessment of the capital required to ensure that banks can meet their minimum capital requirements even in periods of severe stress.^{16,17}
- 35. All banks are subject to Pillar II assessments, but measures are only applied when the PRA judges that they are necessary in view of the particular circumstances of a bank.
- 36. Table 3 shows the amount of capital as a percentage of the RWAs that is required to be held for each of the buffers and capital requirements, and to which banks they apply.

¹⁴ ie banks which will be required to ring-fence their retail operations under the recommendations made by the Independent Commission on Banking Standards. The systemic buffer for ring-fenced banks will be the higher of the G-SIB buffer and the ring-fenced buffer.

¹⁵ For further information please refer to FSA and BoE report [A Review of Requirements for Firms Entering into or Expanding in the Banking Sector](#).

¹⁶ For further information, please see PRA (2015) [Assessing capital adequacy under Pillar 2](#).

¹⁷ The PRA buffer will replace the capital planning buffer (CPB) from 2016.

Table 3: Summary of capital requirements for additional buffers

| | <i>Total capital requirement (%)</i> | <i>Of which Common Equity Tier 1 (%)</i> | <i>Set by</i> | <i>Applicable to</i> |
|-----------------------------|--|--|---|---|
| <i>Minimum requirements</i> | 8 | 4.5 | EU | All banks |
| <i>Capital buffers</i> | | | | |
| Capital conservation buffer | 2.5 To be phased in between 2016 and 2018 | 2.5 | EU | All banks |
| Countercyclical buffer | 0–2.5 Currently set at 0 | 0–2.5 | FPC discretion | All banks |
| <i>Systemic buffers</i> | | | | |
| Globally systemic banks* | 1– 2.5 | 1–2.5 | FSB | HSBCG Barclays RBSG Santander ¹⁸ |
| Ring-fenced banks | 1–3 | 1–3 | The authority responsible for setting the buffer is yet to be set | Ring-fenced banks |
| <i>Pillar II</i> | | | | |
| Pillar IIA | Firm specific | | PRA | All firms based on PRA assessment |
| Pillar IIB (PRA buffer) | Firm specific | | PRA | All firms are subject to an assessment by the PRA, but the PRA only sets buffers if it judges that existing buffers under CRD IV are inadequate |

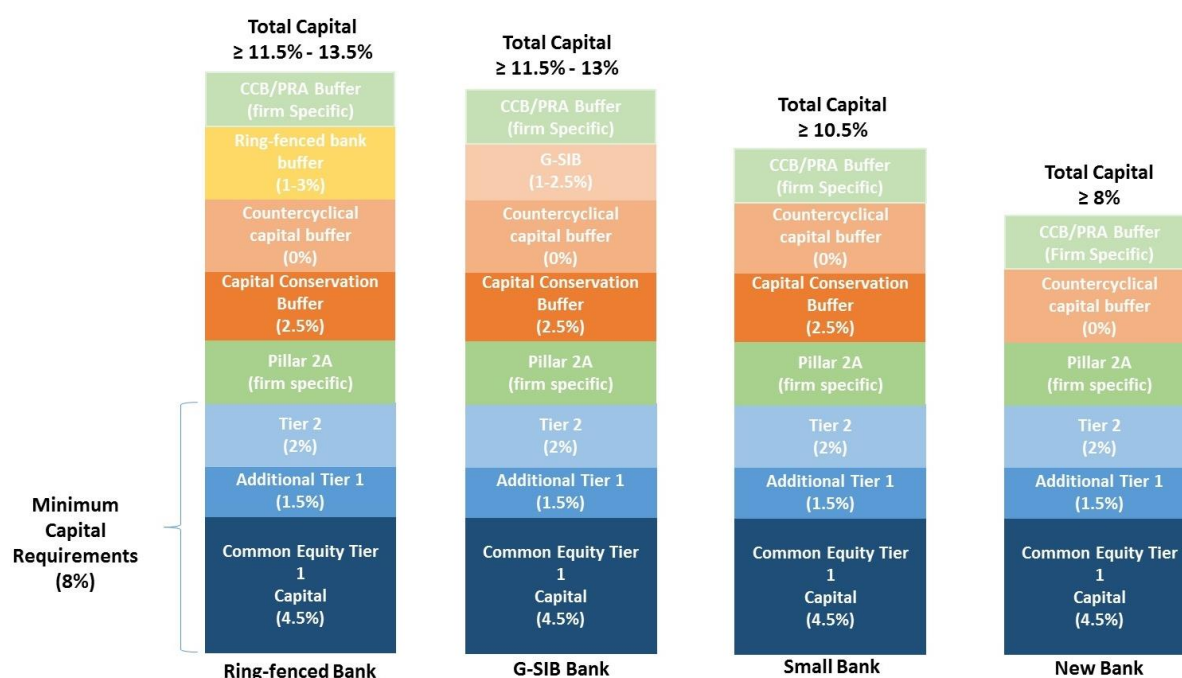
Source: CMA analysis based on information included in [Financial Stability Report, June 2014](#).

* [Assessing capital adequacy under Pillar II, Consultation Paper CP1/15, January 2015](#).

37. Figure 1 shows that capital requirements are higher overall for larger banks compared with new banks. For example, excluding capital requirements under Pillar II, the total capital requirement for a globally systemic bank or ring-fenced bank will be between 11.5% and 13.5% of RWA; this compares with approximately 10% for a new or small bank. However, whilst the overall capital requirement is higher for larger banks, this does not fully offset the difference in risk weights on some assets, in particular mortgages and SME lending between larger banks and small and newer banks. A significant advantage still remains for IRB risk weighted banks over SA risk weighted banks.

¹⁸ The banks included in the table are a subset of a longer list of globally systemic banks. This list of globally systemic banks is set by the Financial Stability Board updated annually. For further information, including information on the methodology used to identify the globally systemic banks please refer to the following [2014 Update of list of global systemically important banks](#).

Figure 1: Comparison of capital requirements, large banks versus new and small banks



Source: CMA calculation based on information from Bank of England.

Reduced capital requirements for new entrants

38. The PRA has taken a number of steps (where it has discretion to do so) to level the playing field between new banks and larger banks by altering the amount of capital required for start-up banks. Following the FCA and the Bank of England's review for firms entering and expanding in the banking sector¹⁹, the PRA agreed to implement a number of capital concessions for new banks that the PRA considered could be resolved with no systemic impact. These concessions were as follows:

- (a) New banks will be expected to hold enough capital to meet Pillars I and 2A for at least the next 12 months based on their projected business plan.
- (b) There will be no automatic Pillar 2A scalar (or capital add-ons) simply because a bank is new. Previously capital add-ons were placed on new banks to reflect their additional riskiness. Capital add-ons will now be set in a manner consistent with larger banks.

¹⁹ For further information please refer to FSA and BoE report [A Review of Requirements for Firms Entering into or Expanding in the Banking Sector](#).

- (c) The approach to calculating the capital planning buffer (CPB)²⁰ will be more flexible. The CPB will be set as the wind-down costs for a bank, typically calculated as the bank's operating cost for the next 12 months. This is expected to result in a significantly lower CPB than currently calculated under the standard methodology.
 - (d) New banks will be allowed more time than existing firms to build up the capital conservation buffer (CCB)
39. The PRA agreed that it would apply the capital concessions to banks during banks first three to five years in operation, at which point the new bank would be required to move to the same basis as larger banks. The PRA also signalled that if those banks did not satisfy the necessary conditions to use the IRB approach and the standardised approach causes significant distortions, it would consider extending these concessions beyond the three to five year period.
40. In March 2013 it published its review of requirements for firms entering or expanding in the banking sector,²¹ where it included a number of clarifications and enhancements to the new measures outlined above. These include:
- (a) A reduction in the period between which the PRA makes its capital assessments – The PRA will conduct a supervisory review and evaluation process (SERP) for new entrants on a yearly basis rather than at 12, 36 and 60 month post authorisation as set out in the initial review. This is to ensure a new bank's capital requirements better reflect its balance sheet on an ongoing basis, and reduces the risk that firms' capital requirements are disproportionate and inhibit expansion. This will revert to the two year SERP after the initial five years.
 - (b) A reduction in the initial capital required by banks that meet the definition of a Small Specialist Bank (SSB)²² to become authorised. Under the capital requirement directive (CDR) the PRA is required to refuse authorisation to banks that have an initial capital of less than €5 million. However, under article 12(4) the PRA has discretion reduce the minimum

²⁰ The capital planning buffer is the amount and quality of capital resources that a firm should hold at a given time in accordance with the general stress and scenario testing rule, so that the firm is able to continue to meet the overall financial adequacy rule throughout the relevant capital planning period in the face of adverse circumstances, after allowing for realistic management actions

²¹ For further information please see PRA (2014), [A review of requirements for firms entering into or expanding in the banking sector: one year on](#).

²² To be considered an SSB, banks have to carry out one or more of the following activities: providing basic banking services which could include current and savings accounts; lending to SMEs; and residential mortgage lending. Banks are still expected to be fully resolvable and to meet both regulators' Threshold Conditions at all times.

capital for particular categories of institution. In line with this it has reduced the initial minimum capital requirement for SSBs from €5million to €1 million or £1 million (whichever is higher), plus the capital planning buffer.

41. Based on information supplied by the PRA, all new authorised banks since March 2013 have benefited from these new concessions, eg no automatic scalar for new banks and the new approach to calculating CPB. Two to three banks have benefited from the reduced minimum capital requirements for new banks defined as SSB. At this stage, it is too early to tell whether any banks will have their capital concessions extended beyond the first three to five years as the reforms were only implemented in 2013.

The leverage ratio

42. The PRA has told the CMA that the leverage ratio, the ratio of capital to a bank's total assets acts as a constraint on the ability of larger banks to exploit their competitive advantage by expanding in asset classes where they have lower risk weights than their competitors.
43. Unlike the minimum capital requirements, where capital is calculated as a proportion of RWAs, the leverage ratio calculates capital as a proportion of total assets regardless of their riskiness. The leverage ratio is intended to complement the existing risk-weighted capital framework by placing a floor on the minimum capital that banks must hold. It guards against risk weights underestimating the true risk associated with holding those assets. Underestimation may be a result of the following:
- **Model risk** – Risk that banks underestimate or misestimate the risk of default or credit losses.
 - **Tail risk** – Historical data is useful in helping to predict future risk, but it can also fail to take account of low probability events because there is limited or no data on such events occurring.
 - **Risk gaming** – Under the existing capital framework, banks using the IRB approach are responsible for setting their own risk weights for calculating capital. There are incentives for these banks to 'opt for more conservative modelling assumptions', to underestimate the risk to reduce their capital holding requirement and/or to expand their exposure to specific assets.²³

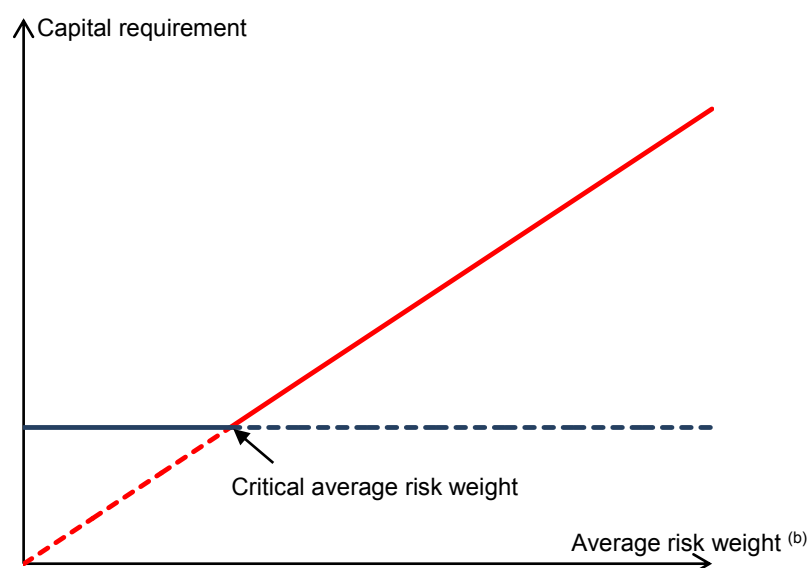
²³ Regulators can provide some protection over risk gaming, but it can be difficult given the size and scale of banks and the complexity of risk models.

44. The leverage ratio is set at 3% of Tier 1 equity and will be applied to all UK banks and building societies from 2018. However, in February the 2015 the PRA set a supervisory expectation that the eight largest domestic banks would meet the leverage ratio (HSBCG, LBG, RBSG, Barclays, Santander UK, Nationwide, Standard Chartered Bank and the Co-operative Bank) with immediate effect. In addition, these banks will be required to hold a systemic leverage ratio buffer and a countercyclical leverage ratio buffer. The buffers are to be met through CET1 capital and their size is set with reference to equivalent buffers in the risk-weighted framework.

Offsetting competitive advantages of IRB

45. The leverage ratio mitigates against larger banks having a competitive advantage by requiring banks to have an average risk weight across all their assets of at least 35%. This is equivalent to the minimum risk weight for mortgages under the standardised approach. If a bank seeks to hold large concentrations of low-risk mortgage assets, the leverage ratio will kick in, forcing banks to hold more expensive equity capital. In this respect, the leverage ratio acts as a floor on average risk weights. This is shown in the graph below.

Figure 2: Stylised capital requirements implied by the leverage ratio and the risk-weighted ratio^(a)



Source: The Financial Policy Committee's review of the leverage ratio.

Notes:

(a) The risk weighted capital requirement increases linearly (red line). The leverage ratio capital requirement stays constant (blue line). The 'critical average risk weight' is the average risk.

(b) Risk-weighted assets/total assets.

46. While it might mitigate against larger banks holding all their assets in mortgages, a well-diversified bank will still have an advantage in assets where it has a lower risk weight than the standardised approach. The leverage ratio only requires banks to have an average risk weight of 35% across all their assets, therefore large banks that are well diversified can balance their portfolios between lower and higher risk assets ensuring that overall they have an average risk weight of 35%. The leverage ratio does not fully mitigate differences between the IRB and standardised approaches.

Developments in Basel

47. Finally, there are currently a number of developments being considered internationally that may change the future approach to calculating risk weights for credit risk. These include the following:

- (a) **Revisions to the standardised approach for credit risk**²⁴ – In December 2014, the Basel Committee published a consultation on proposed revisions to calculating risk weights for credit risk. The revisions are intended to address existing ‘weaknesses’ in the standardised approach to credit risk, including lack of granularity and risk sensitivity, overreliance on the information provided by CRAs, out-of-date estimates of risk weights, and lack of comparability and misalignment with the risk weights under the IRB approach. The new proposals will seek to move from the current flat risk weights for mortgages of 25% and 100% to a more granular approach assigned by reference loan to value and debt service coverage (see Table 4).

Table 4: Loan to value (LTV) and corresponding risk weights²⁵

| <i>LTV</i> | <i>Risk weights</i> (%) |
|---------------|----------------------------|
| LTV <40 | 25 |
| 40 ≤ LTV <60 | 30 |
| 60 ≤ LTV <80 | 40 |
| 80 ≤ LTV <90 | 50 |
| 90 ≤ LTV <100 | 60 |
| LTV ≥ 100 | 80 |

Source: BCBS, [Revisions to the Standardised Approach for Credit Risk](#), consultative document, March 2015.

²⁴ BCBS, [Revisions to the Standardised Approach for credit risk](#), consultative document, March 2015.

²⁵ These figures are a preliminary estimate and may be subject to change following the consultation.

- (b) **Review of capital risk floors**²⁶ – The Basel Committee is also consulting on the design of a standardised floor to be applied to all IRB banks. This consultation forms part of broader work to reduce the observed variation in capital ratios across banks.²⁷ The objective in introducing capital floors is to ensure that the level of capital across banks does not fall below a certain level. It also seeks to mitigate against model risk, gaming risk and measurement error stemming from the IRB approach. It is intended to complement the leverage ratio. The proposal is that the floor would be set as a percentage of the standardised approach.
- (c) **Review of the structure of the regulatory capital framework** – This is a strategic review considering the costs and benefits of determining regulatory capital that reduces or removes reliance on internal models, while still being adequately risk sensitive.

48. It is unlikely that any of these proposals will be put into legislation for some time, but they demonstrate that future reform is likely to take place.

Initial conclusion on capital requirements

49. On a like-for-like basis, the IRB approach is likely to lead to significantly lower capital requirements than using the standardised approach. This is particularly apparent for mortgage lending, but also applies to SME lending. However, whilst the IRB approach and the costs of gaining IRB approval give large banks an advantage there are a number of other requirements and policy measures that partially counterbalance this advantage. These include capital buffers which are only applicable to large systemically important banks, reduced capital requirements for new entrants and the leverage ratio which aims to limit large banks' ability to concentrate all their assets in low risk lending.

²⁶ BCBS, [Capital floors: the design of a framework based on standardised approaches](#), consultative document, December 2014.

²⁷ For further information, please see BCBS, [Reducing excessive variability in banks regulatory capital ratios: A report to the G20](#), November 2014.

Natural or intrinsic barriers

50. We define natural or intrinsic barriers to entry as the costs that firms unavoidably incur when entering a market. As stated in our Guidelines, economies of scale, in combination with sunk investment costs, can constitute a barrier in cases where these relate to the cost of entering or expanding in the market.²⁸ We have identified five themes within the context of natural or intrinsic barriers in retail banking: IT, branches, access to funding, access to payment systems and full service provision.
51. This working paper sets out our initial findings on **IT** and **access to payment systems**. We plan to publish at a later date a separate paper on branches and intend to report on any remaining natural and intrinsic barriers we have identified in our provisional findings report. Full service provision will also be explored as part of our work on theory of harm 1.²⁹

IT systems and infrastructure

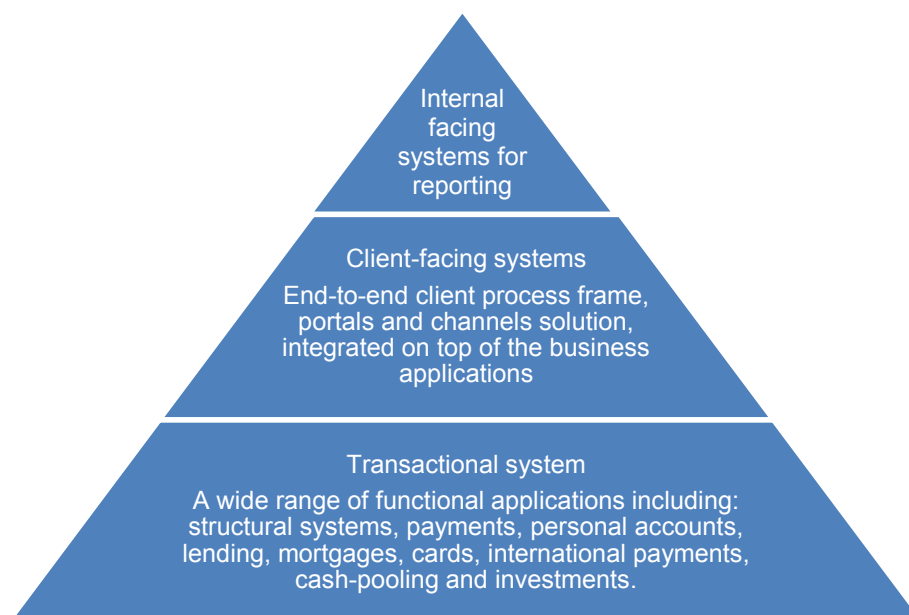
52. PCA provision and the provision of retail banking services to SMEs require the setting up and maintaining of complex IT systems. Whilst IT is an important input for the majority of industries today, IT systems that are capable of processing large volumes of transactions 24/7 are ‘mission critical’ to retail banking³⁰ and represent a key cost of entry. For entrants, the fixed costs associated with IT systems are spread over a smaller number of customers compared with larger banks’ large customer bases.

²⁸ CC3.

²⁹ See our [Statement of issues](#).

³⁰ Deloitte (2008), [When legacy is not enough](#).

Figure 3: Structure of IT systems in retail banking



Source: Based on Santander's depiction of a high level and basic overview of its IT systems.

53. HSBCG told us that IT systems have traditionally accounted for around two-thirds of the cost of market entry in retail banking. [X] Tesco Bank's experience: the IT costs associated with its PCA launch in 2014 accounted for [X]% of the total investment to implement that programme.
54. However, the advent of off-the-shelf core banking systems and pay-as-you-grow models (a charging structure based on the number of transactions processed), means that cheaper and more flexible solutions are now more readily available for new banks seeking to enter the market. Indeed, HSBCG believes that the development of 'off-the-shelf' IT solutions has virtually eliminated IT as a fixed cost of entry.
55. Atom Bank, which acquired authorisation from the PRA and FCA on 24 June 2015 and is due to launch later in the year, estimates that IT costs will account for around [X] of its first year's operating costs. Further, Temenos, a global technology provider, has analysed the performance of banks using modern core banking systems over the past five years. It suggests that banks running these systems enjoy a 28% higher return on equity and a 6.5% lower cost-to-income ratio compared with larger banks using legacy software.³¹
56. The evidence we have collected shows that firms' experiences as regards the cost of IT associated with their entry or expansion in retail banking vary widely. Some banks have incurred or been faced with very high costs of

³¹ Temenos analysis, *Profitability in the Digital Age*. Analysis carried out on 'a large data series over time and across regions'.

building, and possibly integrating, IT systems required to support the provision of PCAs (eg Tesco Bank) and SME banking products (eg Nationwide, for whom the costs, relative to other options to invest in its retail infrastructure, were a key reason for not entering the market). Others have faced much lower costs (eg Metro), particularly when outsourced solutions were adopted and integration was not required. These differences between IT costs appear to be explicable in terms of:

- (a) when the initial IT investment was made; and
- (b) the complexity of the project (for example, the extent to which it entailed integrating a new platform with legacy systems and/or migrating customers across to a new platform, as well as the nature of the products to be supported).

Timing of initial IT investment

- 57. Discussions with technology providers and banks have suggested that the IT costs associated with entering retail banking have been declining in recent years. In particular, pay-as-you-grow models mean upfront sunk costs are limited. In addition to the cost advantages afforded, new IT systems are designed to be more flexible and to facilitate the addition of new functionality.³²
- 58. Metro, which entered in 2010, selected from six potential suppliers an 'out-of-the-box' solution from Temenos to fulfil its IT needs. Metro chose to employ Temenos's pre-configured 'T24 Model Bank' solution given the high level of fit with its own business model.
- 59. According to a report by Temenos, a key requirement for Metro was that the core banking platform underpinning its operations be supplied on an outsourced basis to minimise the size of the initial capital outlay.³³ The T24 application is hosted for Metro by a third party, niu Solutions,³⁴ and accessed via the internet. Metro also has a services contract with niu Solutions to provide it with virtually all the functionality it requires outside the T24 platform. Metro pays a fixed monthly rental to niu Solutions and has an account-based pricing agreement with Temenos, which means that it pays for what it uses each month. Temenos notes that this arrangement enables Metro to better control its cash flows.³⁵

³² ACI industry guide, [Replacing legacy payment systems](#).

³³ Temenos's Metro case study.

³⁴ niu Solutions Holdings Limited.

³⁵ Temenos's Metro case study.

60. Metro told us that choosing the pre-configured ‘model bank’ solution enabled it to deploy the application in a relatively shorter time and to operate as a full service retail bank from the first day of operation. Metro estimates that it reduced implementation time by around 50% compared with Temenos’s comparable projects for customised solutions. Metro told us that using a customised alternative would also have drained the bank’s financial resources and delayed the granting of Metro’s banking licence.
61. According to its website, Temenos’s T24 solution has been developed using a service-oriented architecture that is modular, so that banks can deploy and integrate the required functionality alongside the needs of their business.³⁶ Metro supported this and explained that it has customised (and continues to customise) its core banking platform by purchasing new applications and licences that are (virtually) horizontally integrated into the T24 platform. These are, whenever possible, Software as a Service (SaaS) solutions (where a vendor hosts an application on behalf of a customer and provides access through the internet). SaaS solutions have become one of the fastest growing segments of the IT industry.³⁷ They also circumvent the need for firms to periodically update their systems: repair, maintenance and system updates can be run centrally to the benefit of all users of the applications.
62. Civilised Bank, which expects to launch in Q1 2016, will follow a similar approach to that taken by Metro. It plans to use a ‘bank-in-a-box’ solution to be supplied by Profile (a Greek technology company). Civilised Bank told us that such a system allows for substantial scalability. The core banking platform, which will be hosted in a private cloud environment, is expected to cost around £5 million.
63. Atom Bank has acquired an outsourced IT solution from FIS.³⁸ Atom told us that it wanted to enter the retail banking market with systems that are brand new, without the constraints of technology legacy and the associated costs of running legacy systems. Atom notes that the SaaS solutions that are now available avoid the need for significant upfront investment and means initial small scale is of no disadvantage.
64. Although Atom experienced some difficulties in acquiring an appropriate IT system – in particular, the due diligence involved – it told us that once an IT partner had been chosen the process was fairly straightforward. Atom told us

³⁶ [Temenos T24 Core Banking](#).

³⁷ [Software as a Service \(SaaS\)](#).

³⁸ [FIS UK](#).

that adopting SaaS solutions enables the integration of a number of technologies whilst retaining one central point of management and control.

65. Based on its anticipated SaaS contract, Atom has projected total IT costs for year 1 of £[REDACTED] (equivalent to [REDACTED]% of its total operating costs in that year).³⁹ These are forecast to grow to around [REDACTED]% of operating costs in its fifth year of operation as projected transaction volumes rise.

Complexity of the project

66. The evidence we have gathered from market participants suggests that some financial products (eg current accounts) are more expensive to support than others (eg SME lending products), and that the need to integrate new systems with existing ones can complicate (and delay) entry and increase costs substantially. Each of these is considered in turn below.

Product type

67. The information we have collected from parties and through speaking with technology providers suggests that the costs associated with developing/accessing and maintaining appropriate IT systems are likely to be lower for a specialist provider (eg one that only offers SME lending products) than for a firm that offers a broad suite of products including current accounts.
68. Fiserv, a global provider of IT solutions for the financial industry, told us that it would be possible to support a monoline business using a modified pre-paid debit card platform for an upfront investment of less than £1 million whilst the costs associated with building a core banking system that supports full service provision have for recent entrants ranged from tens to hundreds of millions.
69. In its response to the CMA's updated issues statement, TSB notes that it considers that IT costs create a considerable barrier to entry for challengers who aim to provide a full-service multi-channel offering.⁴⁰ In TSB's experience, no one IT provider is able to provide a comprehensive IT solution with all the functionality that would be required by a full-service multi-channel bank. Arguably, however, Metro's experience (described earlier) suggests that this is not a barrier for all firms. Moreover, TSB believes that, whilst it may be possible for a new or small bank to obtain IT solutions to enter retail banking, those solutions cease to be adequate as the small bank expands beyond a particular scale.

³⁹ £[REDACTED] spend consists of £[REDACTED] allocation to SaaS and £[REDACTED] for 'other IT costs'.

⁴⁰ [TSB's response to updated issues statement](#).

70. Tesco Bank told us that the transactional nature of current accounts means that the required processing speeds for a number of different payment types were greater than those required for lending and savings products. Tesco Bank's card transaction processing required uplifting to process 30 times more transactions than before launching its PCA whilst the system that processed Bacs payments needed to be 70 times faster.
71. Co-op told us that the outlay associated with IT costs in the provision of PCA services remained considerable. It believes that the size of investment required, coupled with the regulatory costs associated with capital requirements, prohibited firms from entering profitably as monoline current account providers without having a portfolio that included lending products.
72. Nationwide recently considered launching a BCA for SME customers (see our Nationwide case study for more information).⁴¹ Nationwide found IT costs to be sufficiently high, relative to other options to invest in its retail infrastructure, to be a key reason for not entering the market.
73. Nationwide estimated that the IT spend required to launch a BCA would amount to around £[£]. Nationwide also anticipated the project would require significant technology management resource and expertise, which would further increase its costs of expansion into the provision of BCAs.

Integration of legacy systems

74. Some banks⁴² have suggested that the IT systems owned by larger banks are increasingly being viewed as a disadvantage compared with the relatively low-cost solutions available to potential entrants. Whilst older systems were deployed to manage bulk and batch-based processes, there is, according to a report by ACI, little room for scalability or agility in older systems that are not designed for flexibility or real-time processing.⁴³ Because replacing systems is costly, resource intensive and disruptive (to business and its customers), larger banks tend to operate a hybrid of old and new systems: locally customising existing systems and integrating 'add-ons'. To our knowledge, only Santander has migrated onto a new platform: moving the systems used by the businesses it acquired in the UK onto a Partenon and Alhambra platform.
75. In addition to the high costs involved in maintaining legacy systems, we have gathered evidence on whether such systems can act as a barrier to expansion

⁴¹ [Nationwide case study](#).

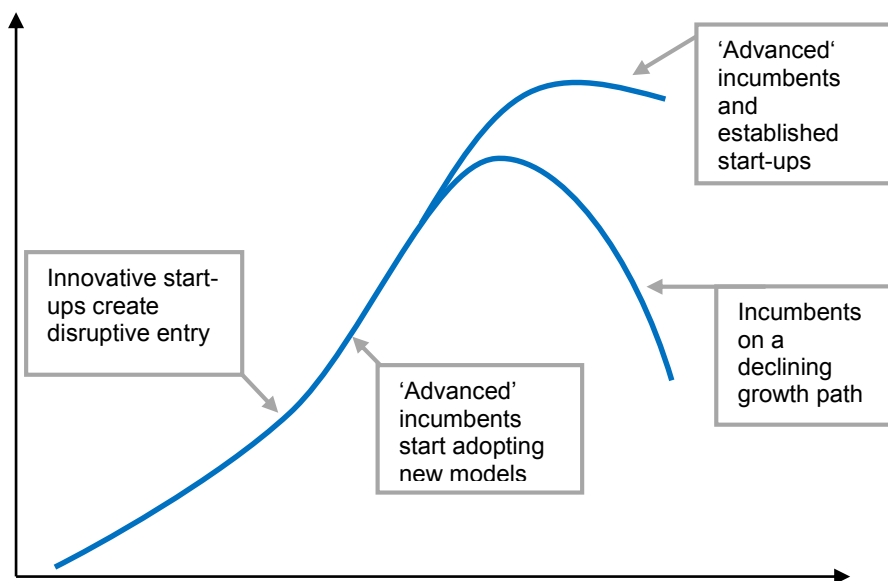
⁴² HSBG, LBG, RBSG.

⁴³ ACI industry guide, [Replacing legacy payment systems](#). ACI Worldwide delivers systems to process payments for banks, processors and retailers around the world.

for existing providers seeking to expand into new products (eg expanding from provision of savings products into PCAs).

76. A report by Deutsche Bank⁴⁴ predicts a material increase in IT spend by large banks over the next ten years. It notes that core systems are generally old and rely on too many applications patched too many times to cope with rising transaction volumes, regulatory change and digital channel changes. The required investment will, Deutsche believes, drive up to a 10% increase in overall operating costs for the banks.

Figure 4: Disruptive technology and the growth path in retail banking



Source: RBSG.

77. Figure 4 depicts RBSG's prediction that 'incumbent banks' that do not upgrade their systems and adopt new models will end up on a lower and declining growth path. RBSG told us that the impact of digital and non-bank functionality is causing it to change the way it operates its PCAs and other products.
78. RBSG describes its own IT infrastructure as a [✂]. It is currently undertaking a project to 'simplify, rationalise and increase the robustness, usability and functionality of its IT architecture and software'. The updating of its systems will be costly and time consuming but the investment is, in RBSG's view, necessary to remain competitive in what it describes as a new digital era. RBSG notes that its ability to respond quickly to shifts in the market trails that of entrants with IT systems built using the latest technology.

⁴⁴ Deutsche Bank Equity Research, UK Retail Banking 2014, *Bank to the Future*

79. In addition to the constraints on functionality and efficiency that larger banks' legacy systems impose, RBSG told us that they are extremely costly to maintain compared with newer IT systems that are available off the shelf and centrally managed and updated.⁴⁵
80. Similarly, HSBCG told us that the larger banks are required to undertake significant investments to upgrade their service offerings, and to adopt new digital and mobile technology to configure them for changing customer requirements and demands. These include investments in branches to offer self-service machines and Wi-Fi access, for example. HSBCG explained that for larger banks with legacy systems, these investments involve significant risk when they relate to new technology and IT.
81. For Tesco Bank, the launch of its PCA in 2014 required substantial investment in IT. At the point of taking full control of the business from RBSG in 2008, Tesco Bank had none of its own IT infrastructure or applications to support its banking products. In order to remove its dependency on RBSG, it acquired and built a number of IT components before migrating the existing (legacy) customer base to its own system.
82. Tesco Bank chose to use Fiserv's platform solution that has elements of off-the-shelf functionality. However, Tesco Bank told us that it required significant development and customisation to meet the needs of its customers in the UK market.
83. IT costs accounted for £[X] of the £[X] investment involved in Tesco Bank's current account launch programme. This included the integration of components from other suppliers, upgrading of 49 systems and completion of 85,000 IT tests. [X]. In addition to the above programme costs, an additional £[X] a year had been added to its existing IT support costs as a result of launching the PCA.
84. In addition to the cost implication, the end-to-end implementation, the upgrading of IT systems and the introduction of the Current Account Switch Service (CASS) were time-consuming and delayed the launch of Tesco Bank's PCA.
85. However, Barclays told us that it has been active in leading the development of innovations in retail banking, particularly in respect of payment services (such as enabling customers to pay for bus journeys with Pingit, or to pay

⁴⁵ Whilst hosted or outsourced solutions are centrally updated, off-the-shelf core banking platforms that are hosted internally require updating periodically (at the sole expense of the individual bank).

utility bills at ATMs), despite being constrained to some extent by its legacy IT infrastructure.

Summary

86. As set out above, the IT costs associated with entry or expansion in retail banking vary widely by firm. The timing of entry (ie how recently a bank entered) and the complexity of its project (in terms of the product(s) it is to supply and the extent of integration with existing systems required) go some way to explaining these differences.
87. In summary, it appears that entrants are, in the absence of legacy systems, able to enter at relatively low cost, owing to 'pay-as-you-grow' models and off-the-shelf solutions. It is less clear whether, as entrants adopting these newly available solutions expand and develop, they will encounter the same problems faced by larger banks: a patchwork of systems that are expensive to maintain and, on the whole, too costly and risky to replace. Metro told us that, so long as firms maintain some discipline about the 'add-ons' they integrate (choosing, whenever possible, SaaS solutions that are centrally updated to minimise maintenance costs), it should be possible to achieve scale and to avoid such 'legacy' issues.

Payment systems

88. To compete in the retail banking market, financial institutions require access to the payment systems infrastructure. Payment systems enable the transfer of funds between people and institutions in the UK.⁴⁶ The key retail-oriented interbank payment systems that are a prerequisite to PCA and BCA provision are:
- (a) **Bacs**: which offers a service handling electronic payment orders. It processes payments through two principal electronic payment schemes: Direct Debit and Bacs Direct Credit.⁴⁷
 - (b) **C&CC** (Cheque and Credit Clearing): which processes paper items such as cheques and credit vouchers⁴⁸ in England, Scotland and Wales. **NICC** (Northern Ireland Cheque Clearing) is the interbank payment system in Northern Ireland that processes cheques and other paper instruments.⁴⁹

⁴⁶ [The PSR and UK payments industry.](#)

⁴⁷ [The PSR and UK payments industry.](#)

⁴⁸ [Payment systems in the United Kingdom.](#)

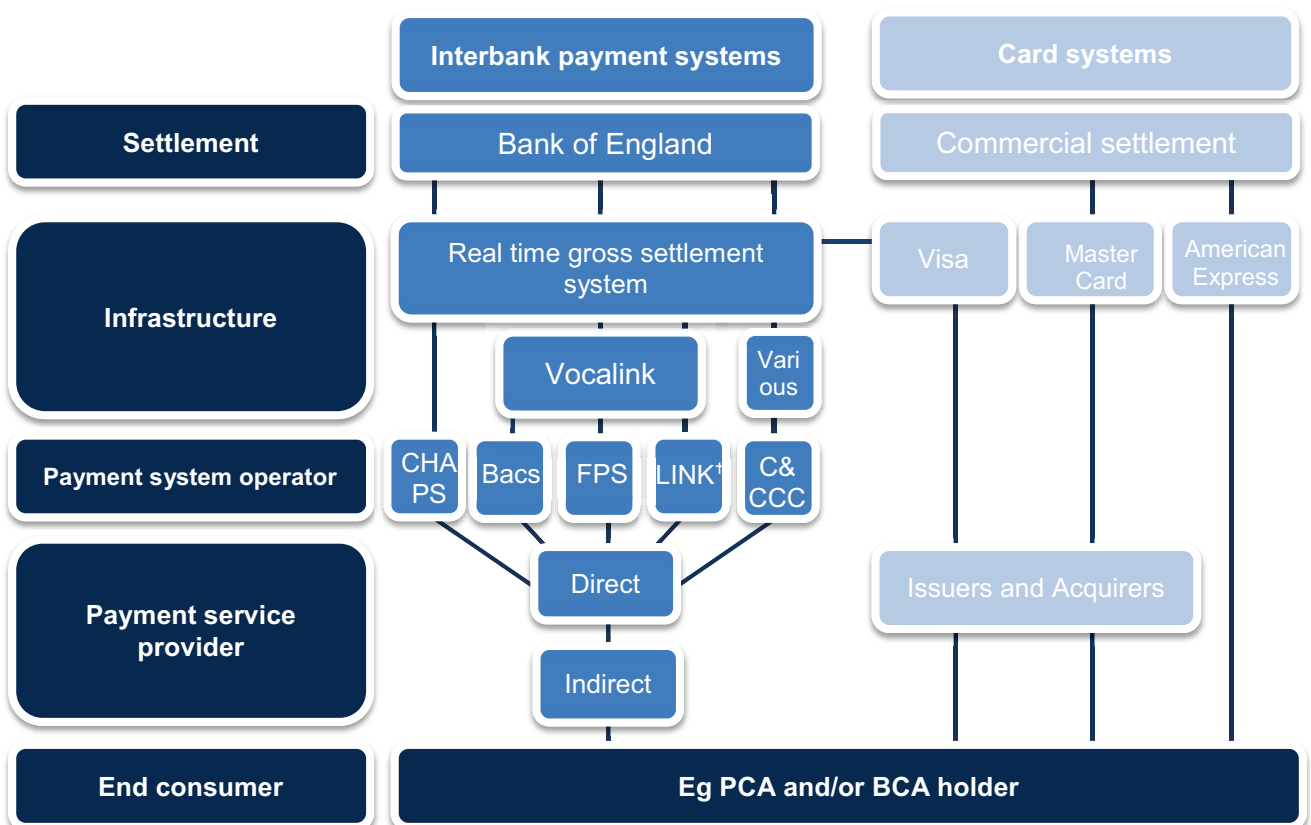
⁴⁹ No issues have been raised with us by parties in relation to NICC, and we note that NICC is not within the scope of the PSR's [Market review into the supply of Indirect Access to payment systems](#) or its [Market review into the ownership and competitiveness of infrastructure provision](#).

- (c) **CHAPS**: which is the UK's real-time, high-value sterling interbank payment system where payments are settled over the BoE's real-time gross settlement system. It provides continuous (real-time) settlement of funds transfers individually on an order-by-order basis.
- (d) **FPS** (Faster Payments Service): through which virtually all internet and telephone banking payments (as well as other services such as Paym⁵⁰) in the UK are now processed. It provides near real-time payments as well as standing orders.
- (e) **LINK** network: which enables banks' customers to access their accounts from any participating institution's ATMs.

89. Banks and building societies will usually also need access to the core UK card systems, Visa and MasterCard, for card issuance.

The structure of payment systems

Figure 5: UK payment systems



Source: CMA analysis.

† LINK does not have indirect payment system providers (PSPs).

⁵⁰ Paym enables customers to make person-to-person payments using the recipient's mobile phone number.

90. These clearing systems (with the exception of LINK and UK card operators) currently operate on a two-tier access structure with 'direct' settlement members and 'indirect' participants. Direct members own an interest in the company (eg CHAPS, Bacs) that manages and operates the payment system and may nominate a director to sit on the operator's board.⁵¹ The Payment Systems Regulator (PSR) defines a payment service provider (PSP) with indirect access as one that 'has a contractual agreement with a PSP to enable it to provide services to individuals or businesses who are not participants in the system, for the purpose of enabling the transfer of funds using that payment system'.^{52,53} Indirect PSPs are not entitled to nominate directors and therefore do not have the same opportunity to influence board-level decision-making for payment systems. For example, TSB notes that, by the nature of agency bank arrangements, indirect PSPs have less influence over the strategic direction of these systems.
91. In addition to sponsor arrangements, [X] told us that there is an emerging trend of market participants offering a limited functionality, eg 'third-party service providers' of payment systems that offer online banking-based payment initiation services.⁵⁴ The Payments Council confirmed that the implementation of the Payment Services Directive II (PSD II) will result in an opening up of the payment systems to third-party payment providers. This could ultimately change the way SMEs, in particular, make payments.

Table 5: Number of current direct participants of payment systems

| System | Current direct PSPs |
|--------|---------------------|
| Bacs | 16 |
| C&CC | 11 |
| NICC | 4 |
| CHAPS | 21 |
| FPS | 10 |
| LINK | 37 |

Source: Websites of individual payment schemes.

⁵¹ See [The PSR and UK payments industry](#), p13. It is possible that a board member of one operator also sits on the board of another operator. According to the PSR, this is not likely to happen in practice where individuals have expertise in different payment systems. Also see [A new regulatory framework for payment systems in the UK](#), p31. The PSR is introducing a direction that interbank operators (except NICC) must take all reasonable steps to ensure that individuals may not simultaneously be a director of an interbank operator and a central infrastructure provider to that payment system.

⁵² [Final terms of reference: market review into the supply of indirect access to payment systems](#), PSR MR15/1.1.

⁵³ Indirect participant and agency banks are used interchangeably in this paper to refer to a bank or building society that accesses payment systems via another bank (its 'sponsor') but it should be noted that, whilst agency banks have the use of their sponsor's unique sort codes, not all indirect PSPs do.

⁵⁴ These include Zapp and Apple Pay, which are due to launch in the UK in 2015. See, for example, The Guardian, [Zapp app to enable millions more shoppers to pay by smartphone](#) and The Telegraph, [UK banks in talks over Apple 'wave and pay'](#).

Access to payment systems

92. Scheme operators have established a range of access requirements that PSPs must meet to be eligible for direct access:⁵⁵
- (a) PSPs must hold (and therefore be eligible for) a settlement account at the BoE to gain direct access to Bacs, CHAPS, C&CC and FPS. Under the BoE's current policy, banks and building societies⁵⁶ are eligible for settlement accounts but e-money institutions and payment institutions are not.⁵⁷
 - (b) A range of technical requirements exist that require the commitment of significant time and resources to adhere to.⁵⁸
 - (c) Other requirements, such as legal, regulatory and risk management requirements, present an additional cost to prospective direct PSPs.⁵⁹
93. The PSR's access rule, which came into effect on 30 June 2015, is meant to ensure that the access requirements do not 'unnecessarily or disproportionately restrict direct participation in payment systems and do not act as a barrier to entry and expansion for new and emerging PSPs'.⁶⁰
94. As a result of the above access requirements, there is a cost and resource implication of becoming a direct access user. There is an initial cost that PSPs incur to establish direct access, as well as ongoing fees that operators charge to recover the system's costs.⁶¹
95. Direct members of the interbank payment system tend to be larger organisations (measured by total business revenue) than indirect members, and they tend to process more inbound and outbound transactions (in terms of volumes and values).⁶² This could imply that direct membership is only practical or feasible for credit institutions (banks and building societies) that process large transaction volumes.
96. Metro told us that the cost of attaining and maintaining direct member status means that any new bank wishing to provide a transactional service must accept an agency banking arrangement.⁶³ This is consistent with Atom's

⁵⁵ [Access to payment systems, CP14/1.4.](#)

⁵⁶ Defined as a deposit-taking institution that is required to report its eligible liabilities. See [Bank of England Act 1998](#), Schedule II, paragraph 1.

⁵⁷ [Bank of England Settlement Accounts](#), p9.

⁵⁸ [Access to payment systems, CP14/1.4](#), p16.

⁵⁹ [Access to payment systems, CP14/1.4](#), p16.

⁶⁰ See [PSR PS 15/1: A new regulatory framework for payment systems in the UK](#), p4.

⁶¹ [Access to payment systems, CP14/1.4](#), p13.

⁶² [§]

⁶³ [Metro case study.](#)

decision to become an indirect member based on the cost of direct access to payment systems. Metro and Atom also described the time involved in gaining direct access as an impediment. Metro explained that the timeline to join different payment schemes varies by scheme. It said that joining CHAPS, one of the simplest schemes, takes around 6 months whilst joining FPS can take up to 18 months. Atom told us that the need to run a banking licence application and engagement with payment schemes in sequence could be considered a barrier to entry. It believes that entrants are forced to make a choice between direct membership of payment systems, incurring a longer lead time and delaying launch, and an agency agreement that may not provide the entrant with the full service it requires.

97. However, the revised authorisation process ('Option B'), which was introduced by the FCA and PRA in January 2014, has been designed to enable firms to 'mobilise remaining requirements such as capital, personnel and other infrastructure' once the firm has successfully obtained provisional authorisation (which is determined within six months).⁶⁴ This should include arrangements for access to payment systems.
98. In contrast to Metro and Atom, Danske, which is a user as well as a provider of agency arrangements for clearing, told us that it does not believe that the larger banks have a competitive advantage over smaller banks in relation to such arrangements. Indeed, it believes that recent regulatory changes have meant that the regulatory requirements for access to payment systems are proportionate. Further, RBSG notes that the perceived barrier to entry that access to payment systems creates has not prevented non-bank institutions, such as PayPal, from providing significant competition in the area of payments.⁶⁵

Table 6: Direct membership of payment systems by bank⁶⁶

| | <i>Bacs</i> | <i>C&CC</i> | <i>CHAPS</i> | <i>FPS</i> | <i>LINK</i> |
|-----------------------------|-------------|-----------------|--------------|------------|-------------|
| Barclays* | ✓ | ✓ | ✓ | ✓ | ✓ |
| HSBCG* | ✓ | ✓ | ✓ | ✓ | ✓ |
| Lloyds Banking Group (LBG)* | ✓ | ✓ | ✓ | ✓ | ✓ |
| RBSG* | ✓ | ✓ | ✓ | ✓ | ✓ |
| Santander | ✓ | ✓ | ✓ | ✓ | ✓ |
| Co-op | ✓ | ✓ | ✓ | ✓ | ✓ |
| Clydesdale Bank | ✓ | ✓ | ✓ | ✓ | ✓ |
| Nationwide | ✓ | ✓ | | ✓ | ✓ |
| Virgin Money | ✓ | | | | ✓ |
| Danske† | ✓ | | ✓ | ✓ | ✓ |
| AIB | ✓ | | | | ✓ |
| Metro | | | | | ✓ |
| TSB | | | | | ✓ |
| Handelsbanken | | | ✓ | | |

Source: Payment systems websites.

⁶⁴ FCA, [Banking authorisation process](#).

⁶⁵ RBSG, [Response to issues statement](#)

⁶⁶ Building societies, with the exception of Nationwide, are indirect participants of payment systems.

*Currently offers sponsor bank services.

†Danske is not a direct member of C&CC. It is a member of [Belfast Bankers' Clearing Company](#) (BBCC), which in turn is a member of C&CC.

99. Four banks with direct access to payment systems currently provide the vast majority of sponsoring services to indirect PSPs in the UK. Barclays, HSBCG, LBG and RBSG facilitate access to the four main payment systems (Bacs, CHAPS, C&CC and FPS) for indirect participants.⁶⁷ Some sponsor arrangements will also include access to counter services and/or bank branches. For example, when LBG provides payment services to other banks, there are also arrangements for their nominated corporate customers to use LBG's branches when requested by those banks.⁶⁸
100. The majority of indirect PSPs have just one sponsor bank, but some have an agency agreement with more than one sponsor (for example, [X] accesses some payment systems via [two sponsor banks]). This is most likely to ensure security of supply (contingency arrangements) or to meet different business needs.⁶⁹

Figure 6: Sponsor bank relationships in the UK

[X]

Source: CMA analysis.

101. Aspects of indirect access arrangements have been raised with us by parties as a barrier to entry and expansion in retail banking. These fall broadly into four categories.
- (a) Quality of service provision.
 - (b) Fee arrangements between sponsor banks and indirect participants.
 - (c) Information provision by sponsor banks to enable comparison by (potential) indirect PSPs.
 - (d) Reliance by indirect participants on downstream competitors.

The evidence we have gathered in regard to each issue is set out in more detail in the following sections.

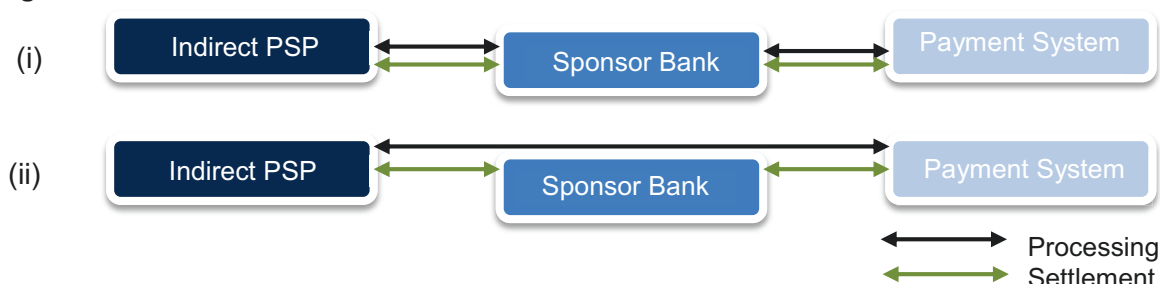
⁶⁷ [Access to payment systems, CP14/1.4](#), p11.

⁶⁸ These are operated under the standard interbank agency agreements (IBAAs) common to all main UK banks covering typical branch counter services.

⁶⁹ [X]

102. A number of banks⁷⁰ that access payment systems indirectly have told us that the quality of service they can offer their customers is constrained by the quality of service (in terms of speed, reliability and security of supply) that their sponsor bank provides, thus limiting their ability to effectively compete and innovate. We have also received evidence that the quality of service provided by sponsor banks can have an impact on the ability of indirect PSPs to participate in certain service offerings. These issues appear to be more pertinent for indirect PSPs that also have indirect technical access (see below) and arise mainly in the context of faster payments.
103. Technical access to payment systems is required for PSPs to send and receive payment messages that enable the processing of fund transfers.⁷¹ Indirect PSPs can gain technical access to payment systems either through their sponsor bank's infrastructure (indirect technical access, as represented by (i) in Figure 7) or by connecting directly into the payment system's central infrastructure (direct technical access, as represented by (ii) in Figure 7).^{72, 73} According to the PSR, only one indirect PSP has direct technical access arrangements for FPS;⁷⁴ indirect technical access may be less costly to obtain.

Figure 7: Technical access channels for indirect PSPs



Source: PSR CP14/1.4 – *Access to payment systems*, p47.

104. [X] told us that it has inferior access to faster payments compared with its sponsor bank. It told us that, whilst direct PSPs have 24/7 access to faster payments, its current arrangement entitles it to a service limited to between approximately 9am and 5pm Monday to Friday. In addition, [X]'s customers have experienced delays in payments (including employees' salaries and

⁷⁰ For example [X], Tesco Bank and Metro.

⁷¹ [Access to payment systems, CP14/1.4.](#)

⁷² Direct technical access, which is less common because of the associated costs, enables direct technical connectivity between the indirect PSP and the payment system for the processing of payments, but it still requires the use of a sponsor bank for the provision of settlement services.

⁷³ [Access to payment systems, CP14/1.4.](#)

⁷⁴ [Access to payment systems, CP14/1.4.](#)

expenses) as a result of inefficient processing or errors made by its sponsor bank.

105. Tesco Bank also accesses FPS via a sponsor arrangement with [X]. It told us that [X] transmits payments via SWIFT and, because SWIFT gateways are closed for maintenance between 4pm Saturday and 6am Sunday each week, FPS cannot be accessed during this time. This has prevented Tesco Bank from offering Paym services (which require near real-time payment capability). First Trust Bank (FTB) told us that it, too, has been prevented in the past from offering Paym because of the functionality constraints of its sponsor bank for faster payment transfers. However, FTB's sponsor bank has informed it that, with effect from June 2015, it will offer the functionality required for FTB to provide Paym services to its customers. It will be a commercial decision as to whether or not FTB subscribes to the enhanced functionality.
106. A KPMG report commissioned by the PSR notes that challenges are common with posting and reconciliation of customer accounts 24/7, as in the case of faster payments.⁷⁵ When SWIFT is used by sponsor banks to exchange messages between themselves and the agency bank, SWIFT scheduled downtime disrupts faster payments availability. Given that alternative messaging options are available, one might expect to see indirect PSPs switching sponsor banks in order to offer services that rely on near real-time settlement. However, as KPMG's report notes, this can be disruptive for agency banks and their customers because of the requirement to reallocate sort codes.⁷⁶
107. Metro has direct corporate access (DCA) to faster payments that is provided by [X]. This is a form of direct technical access whereby bulk payment files from the corporate (Metro) are submitted directly to FPS.⁷⁷ Metro told us that it has experienced outages of its faster payment functionality as a result of outages to the DCA system.⁷⁸ Metro notes that this affects only indirect PSPs accessing FPS via this arrangement, and not direct members. These outages have an impact on all Metro's customers who attempt to make transactions online, via the mobile application and/or via the contact centre. Metro customers awaiting funds are also affected by outages, as are any beneficiaries of payments made from Metro accounts.
108. Agency banks may also rely on their sponsor banks to notify them in the case of scheme outages. Tesco Bank told us that this puts them at a disadvantage

⁷⁵ [UK Payments Infrastructure: Exploring Opportunities.](#)

⁷⁶ [UK Payments Infrastructure: Exploring Opportunities.](#)

⁷⁷ [FPS and DCA.](#)

⁷⁸ [X].

compared with direct PSPs and sponsor banks that are able to receive and react to information regarding outages in a timelier manner. They gave us an example of an outage to FPS in 2014. The notification to FPS members was supported by real-time unsolicited messages (USMs) that were not passed on to Tesco Bank by its sponsor bank. Tesco Bank told us that, because the outage occurred outside normal office hours, they were not notified until the following day, which was too late to alert their customers to prevent customer detriment.

109. Three core areas of the PSR's work will look to address concerns around the quality of service provision. First, the PSR is supporting the development of technical access solutions by industry. Technology providers have told the PSR that they are looking at developing technical access solutions that would enable bank and non-bank indirect PSPs to gain improved technical access to payment systems.⁷⁹ In particular, FPS has set out its proposals for extending direct technical access.⁸⁰ The PSR believes that the progress made by industry to date is encouraging and, although it will continue to engage with industry participants, it does not deem it appropriate or proportionate to be more prescriptive on the development of technical access solutions at this time.⁸¹
110. Second, the PSR's market review into the supply of indirect access to payment systems will look to assess outcomes experienced by indirect PSPs.⁸² This will include determining whether the prevailing quality of services (and prices) is consistent with a competitive market.
111. Third, the PSR expects that the sponsor bank Code of Conduct, which is to be agreed by industry participants and approved by the PSR, will help address certain concerns regarding security of supply, contractual arrangements and the communication of information (such as information on outages). The PSR has now received the Code of Conduct from the indirect access providers and will work with them to implement it over the summer. Sponsor banks will be expected to be compliant with the Code from 30 September 2015.

Fee arrangements between sponsor banks and indirect participants

112. There is a cost implication in acquiring and maintaining direct membership of payment systems. Direct PSPs incur fees and charges that are paid to scheme operators and infrastructure providers to recover the costs of running

⁷⁹ [Access to payment systems](#), CP14/1.4.

⁸⁰ See [FPS press release](#) and [FPS report on New Access Model](#).

⁸¹ PSR, [A new regulatory framework for payment systems in the UK](#).

⁸² [Final terms of reference: market review into the supply of indirect access to payment systems](#), PSR MR15/1.1.

the interbank payment systems.⁸³ Interbank payment systems are run as not-for-profit entities and scheme operators set charges to only recover costs.⁸⁴ The costs involved in running the payment systems include the scheme operators' infrastructure and staff and administration costs. These are usually apportioned on a tiered basis according to the volume of transactions processed by each direct member.

113. Sponsor banks charge the indirect PSPs to whom they provide access to payment systems.⁸⁵ The fees and charges that indirect PSPs pay to their sponsor bank are levied on transactions. For example, indirect PSPs are charged fees on inbound and outbound payments for FPS and Bacs services, and cheque-clearing fees for C&CC services. There may also be fixed fees or fees for other ad hoc services. Tesco Bank told us that they also pay connectivity charges for each payment system they access, and the costs of changes made to those systems.
114. The per-transaction fee, which indirect PSPs focused on when speaking to us, is dependent upon the volume of transactions processed by the agency bank. This means entrants that do not have the scale advantages of larger banks are charged a higher price for access. [REDACTED].
115. Metro and Tesco Bank told us that they believe they are charged significantly for indirect access to payment systems, and that this is reflected in a mark-up on the transaction fee that the sponsor bank pays to the scheme operators. For example, Metro understands that direct members of FPS are charged a fee of £[REDACTED] per transaction, [REDACTED] of what Metro has told us it is paying to [REDACTED]. [REDACTED].
116. Handelsbanken told us that its discussions with CHAPS about becoming a direct member confirmed that the tariffs charged by sponsor banks for access to those schemes act as a barrier to entry, making direct membership a far more cost-effective option.
117. However, we are aware that it is not only the marginal cost of transactions (the clearing bank fee) that direct members of payment systems have to recover. As described earlier, there are a number of fixed costs involved in being a direct member that indirect PSPs are not explicitly charged by the scheme operator or their sponsor bank.

⁸³ [Access to payment systems, CP14/1.4](#), p13.

⁸⁴ [Ownership, governance and control of payment systems, CP14/1.3](#), p11.

⁸⁵ This is the case for indirect PSPs that have indirect technical access through an arrangement with a sponsor bank. They will have a single contractual agreement with their sponsor bank. Indirect PSPs, which have direct technical connectivity, have at least two contractual relationships: (1) with the infrastructure provider/third-party provider for technical access, and (2) with the sponsor bank for settlement and other support services.

118. The information that we have at present is not sufficient to draw any conclusions about the price of access charged by sponsor banks. We have not verified the transaction fees paid by direct members to scheme operators, and we are aware of the complexity of pricing and its dependency on transaction volumes. As noted earlier, the PSR's market review will assess indirect access offerings in terms of both quality and prices.⁸⁶

Information provision by sponsor banks

119. Information about fee structures and service provision in the payment systems industry is complex and opaque according to some parties we have spoken with. This applies to the information that is provided to both prospective indirect and direct PSPs.⁸⁷ Atom told us that there is a lack of consistency in information provision across schemes, both with regard to the type of information available and its presentation. In Atom's case, it was necessary to 'tease [information] out' of the sponsor banks. Atom (whose Chairman, Anthony Thompson, had prior experience as co-founder of Metro) believes that new entrants are not likely to be well informed and therefore may not ask the right questions. This asymmetry of information could reduce the power of prospective PSPs to compare offerings and to negotiate terms and prices.
120. TSB noted that a key criticism of payment systems with regard to new entrants has been the lack of transparency in agency bank charging arrangements. TSB told us that it is unable to judge accurately whether the fees it pays to LBG to access payment systems represent good value in comparison to those of other banks. However, Tesco Bank, which migrated from [X] to [X] for its access payment systems, told us that prices were relatively easy to compare.
121. Tariff cards, which detail the cost of access (fees) and services available to indirect access users, are obtained once negotiations between the prospective indirect PSP and sponsor bank are underway. Examples of tariff cards were collected during the OFT's Phase I market study; these are long and complex documents and not easily comparable across banks.
122. The PSR has introduced a direction requiring the four primary sponsor banks to publish access-related information. The PSR believes this will enhance transparency and improve indirect PSPs' ability to make informed choices about their sponsor services. The direction came into effect on 30 June 2015.

⁸⁶ [Final terms of reference: market review into the supply of indirect access to payment systems](#), PSR MR15/1.1.

⁸⁷ We have only heard from indirect PSPs about this particular issue – namely Atom – but the PSR notes in its consultation document, [Access to payment systems](#), CP14/1.4., that this is an issue for direct PSPs.

The PSR also supports the launch of the 'Information Hub', a website developed by industry to improve the disclosure and transparency of information for PSPs wishing to access payment systems.⁸⁸ The Building Societies Association (BSA) noted in its response to the PSR's consultation that the direction is a positive step towards 'increasing the competitive pressures on sponsor banks and strengthening the bargaining position of indirect PSPs'.⁸⁹

123. As noted earlier, the PSR also expects that the sponsor bank Code of Conduct will help address concerns around the communication of information. This will be kept under review and, subject to its findings, the PSR will consider whether it is appropriate to broaden the coverage of the direction and the Code of Conduct to include other providers of indirect access.
124. Finally, the lack of transparency and comparability of information provided by sponsor banks on prices and service offerings also potentially creates a barrier to indirect members switching sponsor banks. Switching sponsor banks is often perceived to be complex, time consuming and costly.⁹⁰ The PSR, as part of its review into indirect access to payment systems will be looking at the choice indirect PSPs face when trying to secure access to payment systems and any barriers to entry and expansion which may be preventing more PSPs from providing indirect access.⁹¹ The review will include considering the initial and ongoing elements involved in becoming a sponsor bank.⁹²

Direct reliance by indirect members on downstream competitors

125. Banks that access payment systems via an agency agreement are directly reliant upon their sponsor bank, with whom they compete in the downstream (retail) market for this service. Certain aspects of this vertical relationship could disadvantage indirect PSPs and weaken their competitive position relative to their sponsor bank.
126. First, before they can provide the indirect PSP with access to payment systems, sponsor banks must ensure that they have the capacity and capability to provide these services. In order to do so, sponsor banks may

⁸⁸ [Access to Payment Systems](#).

⁸⁹ [BSA response to PSR CP14-1: A new regulatory framework for payment systems in the UK](#) (provided to the CMA by the BSA).

⁹⁰ [8].

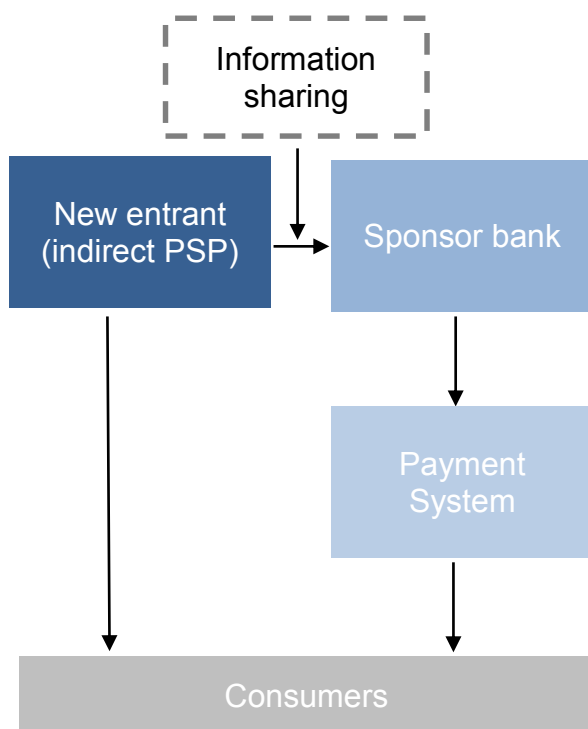
⁹¹ [Final terms of reference: market review into the supply of indirect access to payment systems](#), PSR MR15/1.1, p8.

⁹² [Final terms of reference: market review into the supply of indirect access to payment systems](#), PSR MR15/1.1, p8.

obtain potentially commercially sensitive information about the agency bank's business strategy and projected sales volumes and values.

127. Currently, there is no legal framework or incentive structure governing the handling of that information. The PSR's policy statement notes that the purpose of the Code of Conduct is to address concerns about the supply of indirect access provided by sponsor banks.⁹³ This includes concerns around the sharing of commercially sensitive information with sponsor banks that are also downstream competitors.
128. Although one PSP noted its concern around the sharing of potentially commercially sensitive information with its sponsor bank in response to the PSR's consultation,⁹⁴ we do not have evidence from indirect PSPs to suggest that the requirement to share information with their downstream competitors has had any implications for competition in the retail banking market.

Figure 8: Information sharing between the indirect PSP and its sponsor bank



Source: CMA.

129. Once an indirect PSP has secured access to payment systems, information sharing should be limited. Metro told us that transactions are delivered through a 'straight-through process' via secure messaging links, and that they

⁹³ [A new regulatory framework for payment systems in the UK.](#)

⁹⁴ [Access to payment systems, CP14/1.4](#), p40.

have not encountered any issues with information sharing at any stage of the commercial relationship.

130. Second, and linked to the quality of service provision discussed earlier⁹⁵, the nature of the vertical relationship between sponsor and agency banks may limit or reduce incentives for the sponsor bank to improve the services they provide to indirect PSPs. It may also give sponsor banks an incentive to charge a higher price of access to their competitors.
131. Metro commented in its case study submission on the reliance of indirect PSPs on their competitors to access payment systems; it believes that 'the evidence points to the fact that payment systems must be independent of banks'. Handelsbanken told us that the main driver in its decision to become a direct member of CHAPS in 2013 was a desire to gain independence from third parties (sponsor banks). Handelsbanken is also currently seeking direct access to LINK.⁹⁶

Summary on payment systems

132. As set out in this section, we have received evidence from a number of indirect participants of payment systems that the current system does not work well and disadvantages smaller players and entrants to retail banking. However, we have not received evidence of prospective entrants or larger banks having been prevented or significantly impeded from entering or expanding in the market as a result of the costs or other challenges associated with obtaining and maintaining access to payment systems.
133. We are continuing to liaise closely with the PSR in respect of the issues identified above, which are being considered as part of the PSR's ongoing work programmes.
134. We are also aware that a number of positive industry-led developments are underway that could bring about significant changes to UK payment systems in the near future.
- (a) In December 2014, FPS set out its proposals for extending participation opportunities.⁹⁷ As Craig Tillotson, Chief Executive of FPS, explains in an update,⁹⁸ the essence of its vision is for commercial 'aggregators' to provide direct technical access to its central infrastructure (run by VocaLink) for bank and non-bank PSPs, and in particular for new or small

⁹⁵ See paras 102-111

⁹⁶ A process that Handelsbanken notes had to date been problem free.

⁹⁷ FPS, [A Vision for a New Access Model](#).

⁹⁸ FPS, [New Access Model](#).

banks. FPS defines these aggregators as organisations, typically FinTech vendors (but could also include PSPs), that combine demand from one or more PSPs seeking direct technical access to FPS.

- (b) VocaLink is due to launch a new payments application called Zapp later this year. Zapp will enable real-time payments on people's mobile phones through their existing mobile banking application. First Direct, Santander, Nationwide, Metro and HSBCG have all signed up to use Zapp, which means, according to Zapp's website, that 35% of UK bank accounts (18 million customers) will be set up with Zapp when it launches.⁹⁹ Danske told us that it has engaged with the Zapp team and is evaluating the options for launch to customers; however, investment has not been committed for launch in 2015. Twenty-three retailers are also supporting the launch of Zapp, including Thomas Cook, House of Fraser, Sainsbury's and Shop Direct.

⁹⁹ [Zapp full partner list](#).

Appendix A: Summary of findings of previous reports

| <i>Name of previous report</i> | <i>Authorisation process</i> | <i>Capital and liquidity regulation</i> | <i>Other regulation</i> |
|---|---|--|--|
| Office of Fair Trading (OFT), Review of barriers to entry, expansion and exit in retail banking (2010)* | The authorisation process was found to be a barrier to entry because of the length and uncertainty of the process, but initiatives had been put in place to improve this. At the time it was too early to tell if these had been effective. | Potentially a high barrier to entry for new entrants and smaller firms because of disproportionately high capital requirements compared with larger banks. | Consumer credit licences, consumer protection regulation and money laundering regulations were also reviewed but not identified as barriers. No consistent evidence was received. However, some smaller organisations did raise anti-money laundering regulation as a barrier to entry by deterring potential switchers. |
| Independent Commission on Banking, <i>Final report recommendations</i> (2011)† | | Consistent with the OFT, this report found that small banks may be disproportionately affected by prudential regulation creating barriers to entry. It found that small and new banks use the standardised approach to calculating capital. This can produce higher risk weights than the internal ratings base approach leading banks to hold more capital. | No others identified. |

| | | | |
|--|---|--|---|
| Financial Services Authority (FSA) and Bank of England (BoE), A review of requirements for firms entering or expanding in the banking sector (2013) ^{†,§} | The findings of this review were consistent with the OFT report. It revealed that applicants were concerned about the lack of certainty and the length of the authorisation process. In response, BoE and FSA introduced a series of reforms, including commitments to provide firms with greater clarity about the authorisation process and the option of granting authorisation (but with a restriction on the amount of deposits that can be accepted) earlier in the process such that firms can invest in building a fully functioning bank with the certainty of being authorised. Entrants had highlighted that they found it difficult to raise the initial capital and invest in key infrastructure without assurance of authorisation. | The review committed to offering a number of capital concessions to new banks that the Prudential Regulation Authority (PRA) judged could be resolved in an orderly fashion with no systemic impact. These capital concessions would apply following authorisation and in the three to five year period after entry. The PRA also committed to 'actively engage with new entrants and small banks prepared to put the necessary work to move to the internal ratings base approach to the calculation of its credit risk'. | The review also considered conduct regulation and high-level standards of business, but no concerns were raised by new banks. |
| Financial Conduct Authority (FCA) and CMA, Banking services to small and medium-sized enterprises, (2014) | This report found that reaction to the revised changes had been positive. Since the review had been completed, there had been an increase in the number of firm in pre-application discussions and the number of banks going through the authorisation process. It also found that most going through the process were satisfied. | The report found that capital requirements did not specifically act as a barrier to entry, possibly reflecting previous changes in capital requirements for new entrants introduced by FCA and PRA. But concerns were raised about the impact of capital requirements on the ability of small banks to compete. This was attributed to differences in the methodology used for calculating capital between large and small banks. | No others identified. |

Source: CMA analysis.

**Review of barriers to entry, expansion and exit in retail banking*, OFT, November 2010.

†*Final report recommendations*, Independent Commission on Banking, September 2011.

‡*A review of requirements for firms entering into or expanding in the banking sector*, FSA and BoE, March 2013.

§This review was implemented following the report from OFT and the Independent Commission on Banking.

¶See above for further information on the capital concessions that have been applied to banks.