Governance and ownership of payments systems infrastructure

Prepared for
VocaLink

27 November 2015

www.oxera.com

oxera
compelling economics

Contents

Oxera Consulting LLP is a limited liability partnership registered in England No. OC392464, registered office: Park Central, 40/41 Park End Street, Oxford, OX1 1JD, UK. The Brussels office, trading as Oxera Brussels, is registered in Belgium, SETR Oxera Consulting Limited 0883 432 547, registered office: Stephanie Square Centre, Avenue Louise 65, Box 11, 1050 Brussels, Belgium. Oxera Consulting GmbH is registered in Germany, no. HRB 148781 B (Local Court of Charlottenburg), registered office: Torstraße 138, Berlin 10119, Germany.

Executive summary

VocaLink has commissioned Oxera to provide an independent review of potential governance and ownership models for VocaLink. In the context of expected changes in the payments market and the risks these present to VocaLink, we have been asked to examine the extent to which these risks can be mitigated by alternative governance and ownership models.

This report considers the long-term sustainability of potential governance and ownership models from the perspective of the company as well as a wider set of stakeholders than the current shareholders and customers. The report provides evidence as an input into the Payment Systems Regulator's (PSR) market review of the ownership and competitiveness of infrastructure provision.[1]

The UK is recognised as having one of the world's leading payment infrastructures, for example in the area of real-time payments.[2] Within the UK market, VocaLink has developed secure, reliable and resilient payment infrastructures and introduced many new services alongside the core provision.[3] Maintaining high standards of reliability is a key consideration for the evaluation of alternative ownership models.

A defining feature of VocaLink's model of governance and ownership is that it is owned by companies operating in its own downstream market: Lloyds, The Royal Bank of Scotland (RBS), HSBC, and Barclays hold almost 80% of the share capital of VocaLink, with the remainder held by other banks and building societies.[4] Expected changes in the payment systems market present risks to the sustainability of the current model, which mean that the requirement for high standards of reliability and system availability needs to be considered alongside other objectives. The challenges of the future market for payments include:

- increasing domestic and global competition in the market for the provision of payments systems and the underlying infrastructure;
- technological advance that creates new ways to deliver value for customers and opportunities to deploy capital to finance investment;
- changing expectations of customers about how they access payment services and the quality of service they receive;
- increased scrutiny by policymakers and regulators, with the power to enforce change where necessary.

When viewed from the perspective of the company as well as a wider set of stakeholders than the current set of shareholder and customers, there may be alternative models of governance and ownership that provide better incentives for meeting the challenges of the future payments market.

First, by introducing accountability to unconnected outside investors, there would be a strengthening of the incentive to operate as a normal commercial entity. This may further assist the development of more competition in the market for

[1] Payment Systems Regulator (2015), 'Market review into the ownership and competitiveness of infrastructure provision—terms of reference', June.
[2] KPMG (2014), 'UK Payments Infrastructure: Exploring Opportunities', 31 August.
[3] Oxera (2015), 'Competition and innovation in payments: an analysis of market functioning and innovation', November, Figure 3.4.
[4] Most recent shareholdings: Lloyds Banking Group plc 25.1%, HSBC Bank plc 15.91%, Barclays Bank plc 15.18%, Royal Bank of Scotland Group plc 21.37%. Source: Orbis.

the provision of payments systems infrastructure, to the benefit of potential new infrastructure providers and their customers.

Second, by opening up ownership to parties other than the banks and building societies that compete with each other in the downstream market for retail banking services, there may be better incentives to provide innovations that focus on meeting the needs of a wider set of users.

Third, there is an opportunity to reinforce existing access arrangements through changes to the ownership models of both the payment system operators and the schemes, by providing economic incentives to facilitate access to a wider set of users.

These opportunities for improving on the current governance and ownership arrangements build on issues that have been raised previously, for example in the Cruickshank Report and by the Office of Fair Trading.[5]

This report draws out the economic implications for the future of VocaLink of the considerations described above. In particular, a key question to address is:

> **What reforms to ownership and governance structure would best mitigate risk to VocaLink, given the developments described above?**

In other words, are there more suitable models of ownership and governance for VocaLink that could more effectively achieve the following:

- **greater competition** between payment systems and providers of payment systems infrastructure;
- **wider access** to payment systems infrastructure by payments service providers and other providers of financial services;
- **further innovation** in the interests of a wider set of payment systems users;
- **shareholder value maximisation** by focusing on delivering value to a wide set of users and end-customers.

Addressing the objectives of competition, innovation, and access will require a package of changes; reform to governance and ownership of VocaLink is necessary but only part of the solution.

Experience from other sectors suggests that there is a range of potential alternative models that provide better conditions for competition, innovation, and access. However, there are no obvious and stable examples of the current model—ownership by the companies operating in its own downstream market—generating significant competition benefits or delivering timely innovation for a wider set of users.

This report considers five potential alternative models to the existing one of governance and ownership. These have been chosen because they reflect different points on a spectrum of differing degrees of outside scrutiny, financial interest, and control.

[5] Cruickshank, D. (2000), 'Competition in UK Banking: A report to the Chancellor of the Exchequer', March; OFT (2013), 'UK Payment systems—How regulation of UK payment systems could enhance competition and innovation', July.

Model 1 Enhanced transparency arrangements (e.g. publication of Board minutes).

Model 2 Enhanced corporate governance arrangements (e.g. increased voting rights for independent directors or a fully independent Board).

Model 3 External equity capital is introduced; existing owners retain a controlling stake.

Model 4 External equity capital is introduced; existing owners divest to a non-controlling stake.

Model 5 Existing owners fully divest.

Models 3–5 are compatible with either privately held share capital or a public stock market listing. However, as ownership will be more dispersed under a listed model, the extent of divestment required to cede control will be greater than under a private model.

These models have been evaluated in terms of how well they provide an ownership and governance structure that is sustainable in the long run for VocaLink. Specifically, the models are assessed for how well they deliver:

- good corporate governance;
- incentives for competition in the provision of payments infrastructure;
- wider access to payments infrastructure;
- incentives for innovation in the interests of a wider set of payment systems users;
- incentives for reliable and resilient payments infrastructure.

Under all the models there is a strong incentive to maintain high standards of reliability due to the reputational and financial impact to the company of a system failure. The way in which this objective is achieved varies across the models.

Options for reform without ownership change (models 1 and 2) include enhanced transparency requirements (e.g. the publication of Board minutes) and enhanced governance (e.g. increased voting rights for independent directors or a fully independent Board). Relative to the current model, these reforms are unlikely significantly to strength or weaken incentives to provide reliable infrastructure and wider access. Increased transparency would allow competitors to obtain more information on innovations and undermine VocaLink's ability to realise the full value of innovation. A more independent Board may be more averse to risky and innovative investments than a Board with more direct accountability to shareholders and the interests of shareholders in realising the returns to successful risk-taking. Transparency and governance reforms may therefore reduce the incentives to innovate.

The options that do not involve ownership change are also unlikely to significantly increase competition in the market for provision of payments infrastructure. As with the incentives to innovate, it could be argued that enhanced transparency would undermine VocaLink's ability to operate as a normal commercial entity and would place it at a competitive disadvantage by exposing sensitive business information and strategy to competitors.

Enhanced governance through a more independent Board not primarily accountable to shareholders could lead to VocaLink behaving less like a commercial entity. For example, the Board may direct it to prepare contract bids that are attractive from the perspective of payment service providers but which do not deliver the financial return that an entity subject to normal commercial constraints would require. This would not create incentives for new entrants to compete in the provision of payments infrastructure.

Under both models 1 and 2 VocaLink will also lack broad access to external capital to finance innovation.

Introducing external equity capital would allow VocaLink to be capitalised on a more conventional 'arm's-length' basis, and to be subject to the constraints and objectives imposed by outside investors. New shareholders may provide a different perspective and bring broader experience to the Board. Three different divestment options by the existing owners have been considered, which vary according to the degree of control retained by the existing owners.

Bringing in external equity capital will increase the focus on shareholder value maximisation. The extent to which this reduces the focus on system reliability depends on whether having reliable systems is a complement to, or in conflict with, shareholder value maximisation. External shareholders would be expected to focus more on the return on investment in system reliability than on the absolute level of reliability. Nevertheless, the financial and reputational consequences of failing to achieve appropriate reliability standards are likely to mean that reliable systems are a necessity for delivering shareholder value. Reliability incentives may even be stronger when external equity capital is at risk.

Under model 3, the existing owners retain an equity stake that allows them collectively to control VocaLink. The introduction of external equity capital will provide financial resources for innovation. By improving the incentives for value maximisation, it is also likely to encourage innovation and to provide economic incentives to facilitate wider access. There will be stronger incentives to consider the commercial interests of VocaLink relative to the interests of the shareholder banks when submitting contract bids, which improves incentives for new entrants to compete. However, many of the features of the existing model would continue due to overall control remaining with the existing owners.

Divestment that reduces the existing owners to a non-controlling stake (models 4 and 5) will allow VocaLink to operate independently of its current main customers. This will allow the identification, selection, and financing of innovations that have the greatest potential to deliver value to all users of payments infrastructure. For example, under either of these models it would be possible to form an investment committee that did not include any of the shareholder banks and could therefore undertake full scrutiny of investment proposals that involve sensitive client information. The incentive to maximise shareholder value would provide VocaLink with similar incentives to competitors and new entrants when bidding for contracts, and thereby facilitate development of competition in the market for the provision of payment systems infrastructure.

A reduction of the ownership of the main UK banks to a non-controlling stake would deliver another significant benefit to corporate governance: it enables ownership to be contested and control to be transferred to a new set of owners. This 'market for corporate control' acts as a mechanism for improving VocaLink's performance.

Models 4 and 5 differ according to whether banks retain a minority, non-controlling stake or fully divest. An advantage of the minority stake model would be the retention of specialist knowledge at Board level, which potentially mitigates risks that may arise from transition to a different ownership structure.

An advantage of the full divestment model is that it is a complete change from the previous structure, which may be perceived as providing better incentives for entry and competition.

To return to the key issue of ownership and governance reform as a way to mitigate the risks to VocaLink of the changing future payments market, the evaluation of the models against the objectives of improving competition, access, and innovation leads to two related conclusions.

First, further reforms to governance would be insufficient to achieve the objectives. Additional independence and transparency requirements may generate marginal benefits in access, but could have unintended consequences that actually harm the development of competition and incentives to innovate.

Second, there is a range of options around ownership reform, but only reforms that result in the existing owners reducing their equity interest to a non-controlling stake will increase the incentives for effective competition and innovation in the interests of a wider set of payment systems users, alongside other potential reforms to the market suggested by VocaLink's vision.

1 Introduction

The UK is recognised as having one of the world's leading payment infrastructures, for example in the area of real-time payments.[6] Within the UK market, VocaLink has developed secure, reliable and resilient payment infrastructures and introduced many new services alongside the core provision.[7] Maintaining high standards of reliability is a key consideration for the evaluation of alternative ownership models.

A defining feature of the model of governance and ownership is that VocaLink is owned by companies operating in its own downstream market: Lloyds, The Royal Bank of Scotland (RBS), HSBC, and Barclays hold almost 80% of the share capital of VocaLink, with the remainder held by other banks and building societies.[8] The sustainability of this model is at risk in the context of the expected changes in the payments market. The challenges of the future market for payments include:

- increasing domestic and global competition in the market for the provision of payments systems and the underlying infrastructure;
- changing expectations of customers about how they access payment services and the quality of service they receive;
- technological advance that creates new ways to deliver value for customers and opportunities to deploy capital to finance investment;
- increased scrutiny by policymakers and regulators with the power to enforce change where necessary;
- continued requirement for high standards of reliability and system availability.

These pressures create risks to the long-run sustainability of VocaLink. One way to mitigate these risks is through reform of the governance and ownership model of VocaLink. Reform can be considered from two angles. First, in terms of how outcomes for the company, as well as a wide set of stakeholders in the payment systems market, may be affected if the current governance and ownership arrangements remain in place. Second, by considering the scope for alternative governance and ownership models to mitigate the risk of adverse outcomes in the payment systems market.

The changing payments market will affect all payment infrastructures in one form or another. This report is concerned with analysing the current ownership and governance model of VocaLink and hence drawing out the economic implications for VocaLink of the considerations described above. In particular, a key question to address is:

> **What reforms to ownership and governance structure would best mitigate risk to VocaLink, given the developments described above?**

In other words, are there more suitable models of ownership and governance for VocaLink that could more effectively achieve the following:

- **greater competition** between payment systems and providers of payment systems infrastructure;

[6] KPMG (2014), 'UK Payments Infrastructure: Exploring Opportunities', 31 August.
[7] Oxera (2015), 'Competition and innovation in payments: an analysis of market functioning and innovation', November, Figure 3.4.
[8] Most recent shareholdings: Lloyds Banking Group PLC 25.1%, HSBC Bank PLC 15.91%, Barclays Bank PLC 15.18%, Royal Bank of Scotland Group PLC 21.37%. Source: Orbis.

- **wider access** to payment systems infrastructure by payments service providers and other providers of financial services;
- **further innovation** in the interests of a wider set of payment systems users;
- **shareholder value maximisation** by focusing on delivering value to a wide set of users and end-customers.

This report draws out the economic implications for the future of VocaLink of the considerations described above.

Addressing the objectives of competition, innovation, and access will require a package of changes—reform to governance and ownership is necessary but only a part of the solution.

VocaLink has commissioned Oxera to provide an independent review of potential governance and ownership models for VocaLink. In the context of expected changes in the payments market and the risks these present to VocaLink, we have been asked to examine the extent to which these risks can be mitigated by alternative governance and ownership models.

This report provides evidence as an input into the Payment Systems Regulator (PSR)'s market review of the ownership and competitiveness of infrastructure provision. [9] It contains the following pieces of evidence and analysis:

- a review of the existing governance and ownership model of VocaLink;
- an analysis of the effect of this model on incentives and outcomes for a wide set of stakeholders in the market for payment systems;
- lessons from reforms in payments systems outside the UK and in other financial market infrastructures and the telecoms sector;
- an evaluation of five alternative governance and ownership models:[10]

Model 1	Enhanced transparency arrangements (e.g. publication of Board minutes).
Model 2	Enhanced corporate governance arrangements (e.g. increased voting rights for independent directors or a fully independent Board).
Model 3	External equity capital is introduced; existing owners retain a controlling stake.
Model 4	External equity capital is introduced; existing owners divest to a non-controlling stake.
Model 5	Existing owners fully divest.

The report considers the long-term sustainability of these models from the perspective of the company as well as a wider set of stakeholders than the current shareholders and customers. It focuses on the incentives created by alternative models rather than their details as such (e.g. the identity of potential new owners) or their implementation (e.g. the transition path to an alternative model).

[9] Payment Systems Regulator (2015), 'Market review into the ownership and competitiveness of infrastructure provision—terms of reference', June.
[10] This is a set of plausible governance and ownership models drawn from the full range of potential models. The models have been chosen because they reflect different points on a spectrum of differing degrees of outside scrutiny, financial interest, and control.

2 Why does governance and ownership matter?

This report focuses on the governance and ownership of VocaLink as a company and the impact of this model on incentives for the infrastructure provider and outcomes for a wide set of stakeholders in the payment systems market.

The UK is recognised as having one of the world's leading payment infrastructures, for example in the area of real-time payments.[11] Within the UK market, VocaLink has developed secure, reliable and resilient payment infrastructures and introduced many new services alongside the core provision.[12] Maintaining high standards of reliability is a key consideration for the evaluation of alternative ownership models.

VocaLink's corporate governance has been reformed and developed. For example, the size of the Board has been reduced and the number of non-executive directors has increased. However, the underlying trends in the payments market, including greater demands for competition and innovation and a high rate of technological change, put the long-term sustainability of the governance and ownership model at risk.

This section sets out the economic characteristics of the current model of governance and ownership, and considers its suitability in the context of the expected evolution of the payments market.

2.1 What does governance and ownership mean in this context?

Governance of payment systems is a broader concept than governance of VocaLink as a company, and includes the payment system operators (schemes) and Payments UK. Different combinations of the same banks and building societies own or control the scheme companies and VocaLink.

This report focuses on the governance of VocaLink as a company and the impact of its ownership model on incentives.

Corporate governance can be defined as the ways in which the suppliers of finance to firms assure themselves of getting a return on their investment. [13] Moreover, the Companies Act 2006 gives Directors the duty to promote the success of the company, taking into account the effect of decision in the long term, the interests of employees, the need to foster business relationships, the impact of decision on the community and the environment, while maintaining a reputation for business conduct and fairness between members (shareholders) of the company.[14] Following the duties set out for Directors should fully enable the business to ensure that resources are allocated in a way that maximises shareholder value.[15]

It has been argued that corporate governance should be directly concerned with the maximisation of a broad set of stakeholders rather than a more narrow focus on shareholder value maximisation. However, setting managers the objective of internalising the objectives of all stakeholders is unrealistic. First, without the focus on shareholder value, managers will have few constraints on their actions

[11] KPMG (2014), 'UK Payments Infrastructure: Exploring Opportunities', 31 August.
[12] Oxera (2015), 'VocaLink's vision for payment systems: an economist's perspective', Figure 3.6.
[13] See Shleifer, A. and Vishy, R. (1997), 'A survey of corporate governance', *Journal of Finance*, **52,** 737–83; and Becht, M., Bolton, P. and Roell, A. (2002), 'Corporate governance and control', *Handbook of the Economics of Finance*.
[14] Section 172, *Companies Act 2006*.
[15] Allen, F. (2005), 'Corporate governance in emerging economies', *Oxford Review of Economic Policy*, **21**:2, 164–77.

and will be able to justify a wide range of behaviour as serving the interests of a particular set of stakeholders. Second, the natural incentive of managers will be to align with the interests of the stakeholder groups that have the most power, rather than to give all groups equal weight.[16]

In well-functioning, competitive markets, managing the company to maximise shareholder value is consistent with maximising value for customers and stakeholders more generally.[17] The dynamics that lead to this result include:

- prices that reflect the willingness of customers to pay for goods and services and the ability of companies to provide them;
- managers that have the ability and incentive to respond to changes in the market place and customer requirements;
- a rigorous process for comparing the risk–reward profiles of different opportunities based on market signals and selecting the investments expected to contribute most to value, after adjusting for risk;
- capital being raised from external providers of equity or debt, where the opportunities to create value exceed the capacity of the company to finance investments from internal funds.

In addition to maximising value for shareholders collectively, the corporate governance arrangements extend to managing conflicts between different investors, such that they are:

> the ways in which a corporation's **insiders** can credibly commit to return funds to **outside** investors and can thereby attract external financing [emphasis added].[18]

The governance literature defines two types of owner: 'insider' and 'outsider'. Outsider ownership relates to shareholders whose primary interests are to maximise the value of the companies that they invest in. Insider ownership relates to shareholders who derive private benefits in addition to the value of their shareholding. The distinction between insider and outsider ownership is important because the insiders' interests can potentially be in conflict with those of the outsiders. This can be compounded where the outsider proportion of the shareholding is dispersed among a number of investors, which reduces the incentive of any individual shareholder to exert effective monitoring over management.[19]

In summary, good governance maximises shareholder wealth within the constraints of the market and regulatory environment and manages the potential conflict between different groups of shareholders.

2.2 What does modern governance and ownership look like?

Best-practice governance and ownership arrangements are not static concepts, rather they evolve to meet the changing requirements of economies and societies. There have been many attempts to codify 'best practice' domestically and internationally, and these codes are periodically revised and updated.

[16] Vives, X. (2000), 'Corporate Governance: Does It Matter?', chapter 1 in Vives, X. (ed) *Corporate Governance: Theoretical and Empirical Perspectives*, Cambridge University Press.
[17] Assuming all relevant costs and benefits are reflected in market prices.
[18] Tirole, J. (2006), *The Theory of Corporate Finance*, p. 16, Princeton University Press.
[19] La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. (2002), 'Investor Protection and Corporate Valuation', *The Journal of Finance*, **57**:3, pp. 1147–170.

However, there is broad agreement around a number of core principles, including:[20]

- separation of the roles of shareholders and the Board;
- accountability of the Board to the company and to shareholders;
- effective monitoring of management by the Board.
- protection of shareholder rights and the proportional treatment of all shareholders.

The 2014 UK Corporate Governance Code summarises that:

> the purpose of corporate governance is to facilitate effective, entrepreneurial and prudent management that can deliver the long term success of the company.[21]

These principles of good governance are compatible with a range of ownership arrangements. However, a global trend of particular relevance to this report is the break-up of vertically integrated companies and the outsourcing of suppliers.[22] Rajan and Zingales (2000) suggest that this is a consequence of the changing nature of investments from tangible towards intangible and human capital, and an increase in international competition.

Traditionally, when investment has been focused on creating tangible assets, the value of vertical integration is derived from having legal title and control over key economic inputs. In the modern economy, investment increasingly involves the creation of intangible assets, often in the form of human capital. Companies usually obtain the right to use these assets through employment contracts with staff, which is a fundamentally weaker form of control than having legal title over tangible assets. In such an environment, the value of vertical integration is significantly reduced.

International competition has facilitated increased specialisation and has revealed the competitive strengths and weaknesses of vertically integrated companies at different points in the value chain. The opportunities for cost savings and efficiency improvements from vertical separation and outsourcing have increased.

In summary, the establishment of formal, ‘arm’s-length’ relationships between shareholders and the Board, and the trend towards voluntary vertical separation across much of the economy, are key features of modern governance and ownership models.

2.3 The future payments market

Technological advance has had a significant impact on the way companies provide products and services to customers across a wide range of retail markets. Increasingly, technology is also changing the ways in which customers pay. For example, the introduction of contactless technology by card companies has created a faster and more convenient payment method. Consumer technology companies such as Apple, Google, Amazon, and eBay have also integrated payment services within their existing customer propositions.

---

[20] Cadbury Committee (1992), ‘The Financial aspects of Corporate Governance’; Financial Reporting Council (2014), ‘The UK Corporate Governance Code’; OECD (2014), ‘OECD principles of corporate governance’.
[21] Financial Reporting Council, op. cit.
[22] Rajan, R. and Zingales, L. (2000), ‘The Governance of the New Enterprise’, in Vives, X. (ed), *Corporate Governance: Theoretical and Empirical Perspectives*, Cambridge University Press.

The payments market is evolving quickly and is characterised by a large range of opportunities to generate value for customers and intense competition to be the providers of this value. These developments also present risks to the long-term sustainability of VocaLink. It is important to reflect on the salient features of the market as these provide the context within which to assess whether the governance and ownership of VocaLink is appropriate, given these circumstances.

- **The market for the provision of payments systems infrastructure will continue to become more competitive**.

  The contracts for Bacs, FPS and LINK could be competitively re-tendered at a similar time (✂). This would potentially give alternative bidders an option of bidding for more than one contract. To the extent that VocaLink's operational model benefits from combining multiple services under a 'leveraged model'—for example, the sharing of common infrastructure and operational costs—this competitive advantage will be reduced when bidders have the chance of winning multiple contracts.

  Improvements in computing power and the development of Internet protocol-based systems mean that the functionality of systems developed in the past can often be replicated using a different and cheaper technology solution (e.g. the potential for widespread use of 'distributed ledger' technology).[23]

  The Revised Directive on Payment Services (PSD2) will facilitate entry by new payment services providers and increases the opportunities for competitor providers of payment systems infrastructure.

- **European infrastructure providers are consolidating**. Since the introduction of SEPA and common standards (ISO 20022), infrastructure providers in the SEPA area have been consolidating. This creates a more active European market, in which the UK sits, with ever-strong competitors to contest UK contracts.

- **Customer expectations are changing**. A recent report by Payments UK outlines a series of changes that customers expect from payments systems.[24] Closer relationships with all potential customers are needed to give the infrastructure provider the information and incentive to develop products and services that customers want. This is particularly important when technology and customer expectations are changing rapidly.

- **Technology creates many opportunities to create value**. Not only does technology create different ways of delivering payment services, but also different ways of delivering services that depend on payment services. This creates opportunities for payment systems to innovate and generate value for customers, particularly given the ever-closer EU market. Infrastructure providers need the opportunity and incentives to respond to market signals and maximise value in this environment. In particular, this requires optimal scrutiny of investment proposals, and access to external sources of capital to finance value-enhancing propositions.

- **Infrastructure providers have a natural incentive to create widespread value for the whole industry**. The value of an infrastructure provider depends on the value they create for customers and the share of the market

[23] HM Treasury (2015), 'Digital currencies: response to the call for information', March.
[24] Payments UK (2015), 'World Class Payments in the UK, Enhancing the payments experience—Initial Report', August.

they can acquire. If an infrastructure provider is not innovating and delivering value, it will eventually lose its competitive edge and will cease to be sustainable as a commercial entity.

- **Increased scrutiny by policymakers and regulators**. The payments industry has received increased regulatory attention since the Cruickshank Report of 2000.[25] More recently, the Payment Systems Regulator (PSR) was introduced to oversee payment systems in the UK, with a mandate to promote competition and innovation.[26] The competitiveness of the retail banking market is also under scrutiny by the Competition and Markets Authority (CMA), and the interaction with payment systems is relevant to the assessment of competition in the retail market. At the EU level, one of the aims of the Revised Payment Services Directive (PSD2) is to open up payments markets to new entrants. The governance and ownership model needs to be compliant with regulatory requirements, but also to recognise that the effect of this regulatory change should spur competition and innovation, in an ever-changing and more challenging future environment.

- **Reliability of infrastructure is a high priority**. Payments infrastructure provides a core economic function and is relied on by users to be available when expected. VocaLink has provided a secure, reliable, and resilient infrastructure. The governance and ownership model needs to maintain incentives to ensure system reliability.

The features outlined above present both opportunities and risks for VocaLink. There is potential for the company to add significant value if it is able to take advantage of the opportunities that technological advance creates for serving all customers in new and innovate ways. However, if the company is constrained in its ability to respond to the requirements of all customers then it risks displacement by a competing infrastructure provider. The commercial viability of VocaLink requires a governance and ownership model that gives the company the instruments and incentives to remain as an innovative and competitive company in the future payments market.

VocaLink's vision is for a market structure that unlocks the potential of the future payments market and facilitates competition in the provision of payments systems platforms. As an intermediate step towards this goal, there will be competition in the provision of access solutions. The vision is intended to stimulate a form of innovation that delivers value to a wider set of users and stakeholders.[27]

In summary, the extent to which alternative governance and ownership models mitigate risk in the context of the changing payments market can be assessed in terms of how they provide incentives that facilitate the following:

- **greater competition** between payment systems and providers of payment systems infrastructure;

- **wider access** to payment systems infrastructure by payments service providers and other providers of financial services;

- **further innovation** in the interests of a wider set of payment systems users;

[25] Cruickshank, D. (2000), 'Competition in UK Banking: A report to the Chancellor of the Exchequer', March.
[26] It was decided that the PSR would be a subsidiary of the Financial Conduct Authority (FCA) following an HM Treasury consultation on UK payment systems. HM Treasury (2013), 'Opening up UK payment: response to consultation', October.
[27] VocaLink (2015), 'A vision for future competitive and innovative resilient payment systems: VocaLink's input to the PSR's market reviews'.

- **shareholder value maximisation** by focusing on delivering value to a wide set of users and end-customers.

Providing incentives to maintain high standards of reliability is a minimum requirement of any alternative ownership model.

The next section reviews the current VocaLink model of governance and ownership and assesses it against these objectives.

2.4 The current VocaLink governance and ownership model

The current model has created a financially and operationally resilient and stable company. The current ownership reflects the historic operating model, whereby VocaLink (and its predecessor companies) has acted as the operational meeting point for the UK banks that owned the company. In order to manage costs appropriately, VocaLink has, in effect, acted as a joint venture, with banks pooling their resources and maximising the joint benefit to the UK financial services sector. As a result, VocaLink has a solid operational service record for its bank shareholder customers.

Financially, the joint arrangements of VocaLink's history have similarly benefitted from the collective action of banks. The shareholders have never taken dividends from the company and have had the incentive to deliver a service that meets their needs as customers. The model enabled payment systems users to work together to produce a payments infrastructure and overcome the 'free-rider'[28] and 'hold-up'[29] barriers that often strongly disincentivise such a large investment. The model has been developed over time through governance reforms.

While the current model has met the needs of the industry for a resilient operation to date, having assessed the current state of VocaLink's governance and ownership in the context of future challenges, we believe that continuing with the same structure could pose significant risks to the business. The following two sub-sections explain first the economic features of the current arrangements, and second the issues with this model in the context of the future payment systems market.

2.4.1 Economic overview of the current model

There are different combinations of the same banks and building societies that own and control each of the payment systems (the schemes) and Vocalink (the infrastructure provider). The existing ownership and control relationships result in the same banks and financial institutions having control or significant influence over the industry, including a strong influence on Payments UK. [30]

The membership of the Board of Vocalink Holdings Limited includes six representatives appointed by the shareholders, three independent non-executive directors, the chief executive officer, the chief financial officer, and the chairman.[31] The Board is now smaller and more independent than it was before. These reforms will have provided better incentives to consider a wider set of stakeholders and will have increased the effectiveness of the Board. However, Shareholder Directors still have significant influence over the Board.

[28] Tirole, J. (2006), *The Theory of Corporate Finance*, pp. 436–37, Princeton University Press.
[29] Ibid., p. 53.
[30] Accenture (2014), 'A Review of Governance and Ownership of UK Payment Systems', p. 5.
[31] Source: https://www.vocalink.com/about-us/our-people/ (accessed on 2 October 2015). The company is in the process of amending the articles of association to include an additional independent non-executive director.

At present, the joint owners and members of VocaLink and the schemes are 17 banks, including the large retail banks in the UK (Lloyds, Barclays, HSBC, and RBS) which also are the systems' biggest users.[32] The 'Big Four' banks between them own nearly 80% of VocaLink's shares, with the remainder owned by 13 other banks and building societies.[33]

For the big four banks, the share of net assets represented by their shareholding in Vocalink is very insignificant. The average value of the net assets share to each bank's market value for 2007–14 ranges from a high of 5 basis points (i.e. 0.05%) for RBS, to a low of 0.6bp (0.006%) for HSBC.[34] Maximisation of the value of VocaLink and developing innovative new services would be expected to be a low priority versus the operational importance of the services VocaLink provides. There is a risk that the banks view VocaLink as an operation to be run at minimum cost rather than as a source of innovation and value.

In relation to financial policy, VocaLink has been reliant on internal rather than external sources of long-term finance. It currently has no debt outstanding and its main long-term liability relates to a defined-benefit pension scheme (2014: £51.5m).[35] The group does not pay a dividend and is not accountable to unconnected external investors. Investments have been funded within the constraint of operating cash flows, and the company has not been capitalised as a stand-alone commercial entity operating at 'arm's-length' from its shareholders.[36]

In economic terms, the current model effectively enables common control of a sub-set of the companies operating in the downstream market and the current provider of an essential input. Although this has created a financially and operationally resilient and stable company and the model has been improved over time through governance reforms, this arrangement raises issues in the context of the future payments market.

2.4.2 The current model in the context of the future payments market

The opportunities from reform to the current governance and ownership model stem from two factors: the control currently exercised by shareholder banks; and the potential to realise value that accrues through their status as customers of the company, which may conflict with the objective of maximising the company's value. Specifically, there may be better models for incentivising competition, innovation, and access to payment systems infrastructure, which are key to delivering the potential of the future payments market.

First, by introducing accountability to unconnected outside investors, there would be a strengthening of the incentive to operate as a normal commercial entity and greater focus on the objective of maximising shareholder value. This would improve the commercial sustainability of the company and assist the development of more competition in the market for the provision of payments systems infrastructure.[37] This in turn would have benefits for potential new infrastructure providers and their customers.

Second, by opening up ownership beyond the banks and building societies that compete with each other in the downstream market for retail banking services,

[32] HMT (2013), 'Opening up UK payments: response to consultation', p. 15, paras 2.86–87.
[33] Most recent shareholdings: Lloyds Banking Group plc 25.1%, HSBC Bank plc 15.91%, Barclays Bank plc 15.18%, Royal Bank of Scotland Group plc 21.37%. Source: Orbis
[34] Based on data from Orbis and Datastream and analysis conducted by Oxera.
[35] Vocalink (2014), 'Vocalink Holdings Limited: Annual Report & Accounts 2014', p. 27.
[36] Ibid., p. 11.
[37] The current ownership structure does not prohibit entrants from competing, as demonstrated by VocaLink's unsuccessful bid for the recent Cheque & Credit Clearing Company tender.

innovations that focus on meeting the needs of a wider set of users may be better incentivised. Furthermore, as business cases for new products and services are likely to include commercially sensitive customer information on each of the shareholder banks, an alternative governance and ownership model may enable the Board of VocaLink to consider a wider range of investment propositions.[38]

Similarly, an alternative model may provide greater incentives to develop innovations that would enhance companies' ability to compete in the downstream market for retail banking services. This could enable the development of new financial services business models and greater competition.[39]

Technology and customer expectations are likely to continue advancing at speed. Payments systems and payments infrastructure have adapted and will need to continue adapting to these trends. If VocaLink were to face a more conventional set of commercial incentives, it may be more able to innovate in a way that promotes the interests of the wider users of the payment systems and improves the commercial sustainability of the company.

There is an opportunity to reinforce existing access arrangements through changes to the ownership models of the payment system operators and the schemes, by providing economic incentives to facilitate access to a wider set of users. This is important for creating the conditions that enhance competition and growth in related markets, including the development of new business models.

2.5 Conclusions

This section has considered the opportunities and challenges of the future payment systems market and the benefits that may be realised from a change to the governance and ownership structure of VocaLink.

The current model effectively enables common control of a sub-set of the companies operating in the downstream market and the current provider of an essential input. Although this has created a financially and operationally resilient and stable company, and the model has been developed over time through governance reforms, the future payments market presents challenges in relation to competition, innovation, and access to payment systems infrastructure.

In terms of the stimulation of more competition, by introducing accountability to unconnected outside investors, there would be a strengthening of the incentive to operate as a normal commercial entity, which may further assist the development of more competition in the market for the provision of payments systems infrastructure.

As regards innovation, by opening up ownership beyond the banks and building societies that compete with each other in the downstream market for retail banking services, innovations that focus on meeting the needs of a wider set of users may be better incentivised. Similarly, an alternative model may provide greater incentives to develop innovations that enhance companies' ability to compete in the downstream market for retail banking services. Reform to the current model may accelerate innovation.

---

[38] Vertical integration impairs the upstream company's ability to innovate where this requires downstream customers to disclose commercially sensitive information. Stefanadis, C. (1997), 'Downstream vertical foreclosure and upstream innovation', *The Journal of Industrial Economics*, **45**:4, pp. 445–56.

[39] This is in addition to the negative impact that significant levels of insider ownership have been found to have on corporate risk-taking, as documented in Wright, P, Ferris, S., Sarin, A, and Awasthi, V. (1996), 'Impact of corporate insider, blockholder, and institutional equity ownership on firm risk taking', *The Academy of Management Journal*, **39**:2, April, pp. 441–63.

Considering the incentives to provide access, there is an opportunity to reinforce existing access arrangements through changes to the ownership models of the payment system operators and the schemes, by providing economic incentives to facilitate access to a wider set of users.

To conclude, it is necessary to consider alternative models of ownership and governance as options that could mitigate risks to the company in the future payments market. An alternative model would provide better economic incentives to promote the interests of a wider set of stakeholders and contribute to the long-run sustainability of the company and the market.

3 Lessons from other sectors

Looking across other sectors, there is a range of potential alternative governance and ownership models. It is important to consider whether there is widespread evidence of adoption of the current model of ownership—i.e. ownership by some of the main companies that purchase services from the company. Moreover, it is important to understand the range of alternative models that are consistent with timely innovation in the interests of a broad set of customers and competition in markets for both intermediate and final outputs.

Most of VocaLink's competitors in the financial technology market have a more conventional model of governance and ownership, whereby users and owners are separated and normal commercial incentives prevail. Banks still have significant ownership interest in some payment systems, but there is a trend towards the dilution of their control and in some cases they have completely divested.

Innovation and growth has occurred where providers of financial market infrastructure have opened up their ownership and where consolidation has created companies with the scale and capabilities to be internationally competitive.

The wider trend towards vertical separation noted earlier in this report has been mirrored to some extent in the regulated telecoms sector. Vertical integration in the telecoms market has led to authorities imposing separation remedies, including divestments, where there has been evidence of adverse effects on competition in a downstream market.

Overall, there are no obvious and stable examples of the current VocaLink model—'consortium' ownership by a sub-set of the companies operating in its own downstream market—generating competition benefits or delivering timely innovation for a wider set of users.

3.1 Competitors of VocaLink

VocaLink is a technology company that provides infrastructure for the financial services industry. It experiences competition from FINTECHs (financial technology companies) such as FIS, Fiserv, and CGI, the card companies such as Visa and MasterCard, and other specialist payments infrastructure providers such as Equens and NETS.

The list of potential competitors extends to include the large American technology groups such as Google, Apple, Amazon, and eBay. All of these companies offer their own payment services and have the ambition and capability to extend their offering further into the payments market.

VocaLink's competitors exhibit a diverse range of governance and ownership models. Many of the FINTECHs and the card companies are stock market-listed and have widely dispersed ownership (e.g. FIS, Fiserv, Visa). There are also a number of privately held specialist payments infrastructure providers (e.g. NETS, SIA, Equens).

Among the specialist payment systems infrastructure providers, the trend has been towards opening up of ownership to outside investors and a dilution of the control exercised by the banks that use them. For example:

- SIA is currently owned 49.9% by FSIA Investimenti S.r.l (an Italian state owned public investment fund), 16.8% by F2i Reti Logiche S.r.l (an Italian private infrastructure fund), 8.7% by Orizzonte Infastrutture Tecnologiche S.r.l (an Italian public private equity fund), and by European banks including Intesa San Paolo S.p.A (4%), Unicredit S.p.A (4%), Deutsche Bank S.p.A (2.6%).[40]

- Equens' shareholding is split between five major German, Dutch and Italian banks: DZ Bank has a 31.1% ownership stake, ICBPI has a 20% stake, ABN Amro Bank has an 18.4% stake, ING has a 15.4% stake, and Rabobank has a 15.2% stake.[41]
- NETS was taken over in March 2014 by a consortium of buyers led by two US-based private equity funds, Bain Capital and Advent. The sale was in response to a strategic review conducted in 2013 that led NETS to conclude that it should no longer be owned by its customers and that it also required additional capital to invest in new payment systems.

These companies have used ownership change as a means to achieve scale and the capabilities to be internationally competitive. For example, SIA provides services in around 40 countries, Equens operates in the Netherlands, Germany, and Italy, and NETS operates throughout the Nordic region.

The FINTECHs have also used mergers and acquisitions to grow and expand their product offerings. Notable examples include the recent acquisition by FIS of SunGard, and the acquisitions of Open Solutions by Fiserv in 2013. By incorporating a range of payments technology companies within the same group, it is possible to provide the resources to bring innovative technologies to the market. Examples of innovative products that have been introduced by these companies include the following.

- In 2008, Fiserv launched a 'triple play' mobile banking product, providing secure banking access through text, mobile web browser, and mobile app. In 2012, it launched a real-time person-to-person payments system.
- FIS has recently introduced a cardless cash product to enable ATM cash withdrawals using a mobile app. This adds to existing mobile payments products offered by FIS, including remote check deposit, and person-to-person payments.

These companies place significant emphasis on innovation and have been recognised as innovative companies:

- FIS was named one of the Stevie Awards Most Innovative Companies of the Year at the 2015 American Business Awards;
- Fiserv's Agiliti™ product was named in 'The Innovators 2015 - Transaction Services' by *Global Finance* magazine;
- CGI won the 2014 Microsoft Intelligent Systems Partner of the Year Award and the 2014 SAP-Microsoft Unite Partner Connection Innovation Award.

The card companies also have a track record of innovation, including the introduction of chip and PIN technology, and more recently contactless card payments. As noted in a recent report, the move to contactless started in 2007, although widespread use by consumers did not take off until 2014.[42] In 2015, Visa and MasterCard have partnered with Apple and Google to enable

[40] https://www.sia.eu/Engine/RAServePG.php/P/252910010404
[41] http://www.equens.com/aboutus/organisation/governance.jsp
[42] Consult Hyperion (2015), 'The Future of Payments', a report for Payments UK (based on data from the UK Cards Association).

contactless payments on debit or credit cards to be made using Apple Pay and Android Pay.

The main lesson is that the competitors of VocaLink are companies with the scale and access to resources to be innovative. This is consistent with academic research that finds a positive relationship between ‘market-based’ systems of corporate governance (i.e. where there is a market for corporate control and change in ownership), expenditure on research and development, and growth.[43] The trend among these companies has been to open up ownership to outside investors. The future of the UK payment systems market will increase the exposure of VocaLink to these competitors and will require an ownership and governance structure that allows it to attract the resources and achieve the scale needed to be competitive.

3.2 Other financial services infrastructure

In the UK financial services market, two other significant precedents are the divestments by the owners of the London Stock Exchange and the London Clearing House (LCH). Both institutions were previously majority-owned by their users.

In the early 2000s, the London Stock Exchange created a new ownership structure based on transferable shares (not listed on the exchange). The ownership share of any single entity was capped at 4.9% of the total voting rights. The motivation for the ownership reform was to enable the institution to operate on a fully commercial basis, which was seen as essential to its future success in an increasingly competitive environment.[44] Specifically the new structure was to facilitate a clearer focus on customer needs, effective decision-making, and the flexibility to respond to changes in the business environment.

During the 2000s, the London Stock Exchange made several acquisitions including the purchase of EDX London and Proquote Ltd. The aim of the acquisitions was to improve the service offering and the market data and trading systems provided to users.[45] In 2012, the London Stock Exchange bought a 60% ownership stake in LCH.Clearnet, becoming its single largest shareholder. It has used the purchase of LCH.Clearnet to further broaden its product offering, and uses it to provide clearing services for OTC derivatives, fixed income, commodities and listed equity. [46]

The origins of LCH.Clearnet also involved user ownership. The UK predecessor to the merged entity—the London Clearing House—was owned in the 1980s by a consortium of six UK banks. This structure was reformed in the 1990s with majority ownership transferring to the whole clearing membership and three exchanges (LME, IPE, LIFFE) acquiring minority stakes.

LCH.Clearnet was created in 2003 by the merger of the London Clearing House and the Paris-based Clearnet. The merger resulted in the clearing members owning 45.1% of the shares, the Exchanges owning 45.1%, and Euroclear owning 9.8%.

[43] Carlin, W. and Mayer, C. (2000), ‘How Do Financial Systems Affect Economic Performance?’, in Vives, X. (ed) *Corporate Governance: Theoretical and Empirical Perspectives*, Cambridge University Press.
[44] International Organization of Securities Commissions (2000), ‘Discussion Paper on Stock Exchange Demutualization’, December.
[45] See http://www.londonstockexchange.com/about-the-exchange/company-overview/our-history/our-history.htm.
[46] London Stock Exchange, ‘Annual report 2014’.

The users of LCH.Clearnet continue to have a significant ownership interest since the purchase of a majority stake by the London Stock Exchange in 2012, holding between them the shares not owned by the London Stock Exchange.

Both the London Stock Exchange and LCH.Clearnet cases are examples of user-owned models being opened up to new owners. These changes in ownership have happened in an environment where technology has changed rapidly and the companies have expanded their product offerings to meet new customer requirements.

3.3 Separation in the telecoms sector

Vertically integrated structures and the issues they present in terms of competition, innovation, and access have been considered extensively by competition authorities and regulators.

The most relevant lessons come from the telecoms sector, where the speed of technological change is relatively fast, and the scope for competition is relatively large. The focus is often on joint ownership of the local access network infrastructure and the supply of services in adjacent competitive markets. These are to a large degree analogous to the concerns regarding ownership of a payment systems infrastructure provider by their banking customers.

The landmark case of ownership separation as a means to address competition concerns is the break-up of AT&T into a long-distance telephony company and seven separate incumbent local exchange carriers (known as the regional Bell operating companies, or ‘Baby Bells’).[47] The US Department of Justice considered that structural break-up would be the most effective way of introducing competition.

Following the break-up, competition developed in the long-distance call market (Sprint and MCI were major challengers) and long-distance call rates fell sharply. There was also a rebalancing of prices to reflect the underlying costs, which resulted in local call rates increasing, as the previous subsidy from long-distance calls was unwound. The equipment and R&D entities (part of the long-distance entity) were not as successful as AT&T had hoped, owing to competition from external rivals.

In the UK, the local access network is still owned by BT, which also has a significant presence in related competitive markets, including the downstream retail market. A review of the case for structural separation in 2004 resulted in the operational and legal separation of BT OpenReach from the rest of BT Group. However, BT OpenReach remains owned by BT Group.[48]

In light of concerns that operational and legal separation has not delivered the full extent of the expected benefits, Ofcom is again looking at the case for structural separation. In particular, it has been suggested that being owned by BT Group gives OpenReach an incentive to discriminate against BT’s competitors in the downstream market, in terms of pricing, terms of access, or performance, and that separation would remove this incentive.[49]

Ownership separation has also been implemented in Australia, New Zealand, and Singapore, as a means of delivering investment in new infrastructure.

[47] *United States v AT&T Co* 552 F Supp 131 (DDC 1982).
[48] Ofcom (2004), ‘Strategic Review of Telecommunications: Phase 2 Consultation Document’, 18 November.
[49] Ofcom (2015), ‘Strategic Review of Digital Communications—Discussion document’, 16 July.

One of the challenges to achieving ownership separation of vertically integrated telecoms companies has been the practical difficulty of determining where to draw the dividing line between the new entities. In addition, the transitional costs of separation have often been viewed as large. In the case of VocaLink, neither of these challenges exists, as the company is already operationally and legally separate from its customers.

The main lesson from the telecoms sector is that separation created the conditions for greater competition in the US and UK markets, and that the full benefits may not be realised until full ownership separation is achieved.

3.4 Conclusions

This section has considered whether there is any evidence of wider adoption of the current model of ownership—i.e. ownership by some of the main companies that purchase services from the company. Three areas of particular relevance were considered:

- VocaLink's competitors;
- other financial services infrastructure;
- separation in the telecoms sector.

Most of VocaLink's competitors in the financial technology market have a more conventional model of governance and ownership whereby users and owners are separated and normal commercial incentives prevail. Banks still have significant ownership interest in some payment systems, but there is a trend towards the dilution of their control and, in some cases, they have completely divested.

Innovation and growth have occurred where providers of financial market infrastructure have opened up their ownership and where consolidation has created companies with the scale and capabilities to be internationally competitive.

The wider trend towards vertical separation noted earlier in this report has been mirrored to some extent in the regulated telecoms sector. Vertical integration has led to authorities imposing separation remedies including divestments, where there has been evidence of adverse effects on competition in a downstream market.

Overall, there are no obvious and stable examples of the current VocaLink model—consortium' ownership by a sub-set of the companies operating in its own downstream market—generating competition benefits or delivering timely innovation for a wider set of users.

4 Potential alternative models

This section sets out five potential alternative models of governance and ownership and evaluates them against the criteria of:

- good corporate governance;
- incentives for competition in the provision of payments infrastructure;
- wider access to payments infrastructure;
- incentives for innovation in the interests of a wider set of payment systems users;
- incentives for reliable and resilient payments infrastructure.

The evaluation of the models against the objectives of improving competition, access and innovation leads to two related conclusions.

First, further reforms to governance would be insufficient to achieve the objectives. Additional independence and transparency requirements may generate marginal benefits in access, but could have unintended consequences that actually harm the development of competition and incentives to innovate.

Second, there is a range of options around ownership reform, but only reforms that result in the existing owners reducing their equity interest to a non-controlling stake will provide the conditions for effective competition and innovation in the interests of a wider set of payment systems users. Divestment of control could unlock the potential of the future payments market and the ability of VocaLink to compete and add value for a wider set of users.

4.1 Alternative models

The five models have been chosen because they reflect different points on a spectrum of differing degrees of outside scrutiny, financial interest, and control.

Model 1 Enhanced transparency arrangements (e.g. publication of Board minutes).

Model 2 Enhanced corporate governance arrangements (e.g. increased voting rights for independent directors or a fully independent Board).

Model 3 External equity capital is introduced; existing owners retain a controlling stake.

Model 4 External equity capital is introduced; existing owners divest to a non-controlling stake.

Model 5 Existing owners fully divest.

Models 1 and 2 both assume the retention of the existing ownership model, whereby the share capital of VocaLink continues to be owned by the main UK banks. Each model introduces a different type of governance reform.

Model 1 would require the publication of Board minutes as a means of providing transparency over decision-making and increasing the confidence of users in the governance process. This would be similar to the transparency direction issued by the PSR to the interbank operators.[50]

Model 2 would grant the VocaLink Board the independence and powers necessary to make strategic and sustainable decisions in the interests of the company for the long term. Matters reserved for the Board of VocaLink Holdings would be limited to those that are reserved for shareholders in a listed public limited company. This would be similar to the enhanced governance principles recently established in the water sector.[51]

Models 3, 4, and 5 all assume changes to the existing ownership model, with the main UK banks diluting their existing collective shareholding by selling a stake to an outside investor (or group of investors). In this context, an outside investor is defined as any investor other than a UK bank.

The differences between models 3, 4 and 5 are determined by the degree of control surrendered by the existing owners. Within each of these models there will be a range of combinations of degree of divestment and type of new investor(s). For example, under model 3, if there is a single new investor, the existing owners can divest up to a 49% stake and retain collective control. However, if the ownership of the divested stake is widely dispersed, the existing owners may be able to have effective control with a stake of less than 51%.

Models 3–5 are compatible with either privately held share capital or a public stock market listing. However, as ownership will be more dispersed under a listed model, the extent of divestment required to cede control will be greater than under a private model.

In the analysis that follows, the focus is on differing degrees of control rather than the size of divestment and type of new investor(s).

4.2 Evaluation framework

The evaluation of models depends on how well they provide an ownership and governance structure that is sustainable in the long run for VocaLink. The models are assessed for how well they deliver:

- good corporate governance;
- incentives for competition in the provision of payments infrastructure;
- wider access to payments infrastructure;
- incentives for innovation in the interests of a wider set of payment systems users;
- incentives for reliable and resilient payments infrastructure.

A key issue is payment system reliability, which is related to the concept of financial prudence. As regards the reliability of services to individual customers, this is a matter that can be addressed contractually and through service-level agreements between infrastructure provider and customer.

At the systemic level, the PSR must have regard to:

> the importance of maintaining the stability of, and confidence in, the UK financial system.[52]

[50] Payment Systems Regulator (2015), ‘A new regulatory framework for payment systems in the UK: policy statement’, March, p. 32.
[51] Ofwat (2014), ‘Board leadership, transparency and governance – principles’, January.
[52] Financial Services (Banking Reform) Act 2013, Section 49.

In the PSR's policy statement, it was decided that this would not be translated into a legal direction in relation to the financial prudence of operators or infrastructure providers.[53] This was on the basis that stability was a more direct focus of other regulators and may not be a good fit with the PSR's remit as an economic regulator.[54]

Bacs and FPS must already have regard to financial prudence under the CPSS-IOSCO principles.[55] In addition, these services are subject to supervision by the Bank of England as part of its objectives to protect and enhance the stability of the financial system.[56]

In responding to the PSR's consultation,[57] the Bank of England noted that UK payment systems have historically demonstrated a high degree of stability and reliability, and that financial stability was not a primary driver of change.[58] Nevertheless, the Bank noted that changes presented both opportunities and risks for reliability. Four criteria were established to assess changes from a financial stability perspective:

- changes should not lead to an unacceptable increase in settlement risk;
- changes should maintain or enhance the robustness and resilience of UK payment systems;
- UK payment systems should facilitate the continuity of payment services in resolution;
- the Bank's ability to effectively supervise systemically important payment systems must be maintained.

The Bank will work closely with the PSR on financial stability issues throughout the market review of ownership and competitiveness of infrastructure provision on the issue of reliability.

4.3 Evaluation of alternative models

Full assessment of the models is provided in Tables 4.1–4.5. In summary, the main findings are as follows.

- Under all the models there is a strong incentive to maintain high standards of reliability due to the reputational and financial impact to the company of a system failure. The way in which this objective is achieved varies across the models.
- The enhanced transparency requirements of Model 1 would make VocaLink not viable as a commercial entity operating in the private sector, and would undermine incentives to innovate and the ability to be an effective competitor. The model does not provide broad access to external capital, which may not give VocaLink sufficient resources to finance innovation.

[53] Payment Systems Regulator (2015), 'A new regulatory framework for payment systems in the UK', PSR PS15/1.
[54] Ibid.
[55] Committee on Payment and Settlement Systems, Technical Committee of the International Organization of Securities Commissions (2012), 'Principles for financial market infrastructures', April.
[56] Bank of England (2015), 'Payment Systems Regulator Consultation Paper—A New Regulatory Framework for Payment Systems in the UK: Bank of England Response'.
[57] Payment Systems Regulator (2014), 'A new regulatory framework for payment systems in the UK—consultation paper', PSR CP14/1.
[58] Bank of England (2015), 'Payment Systems Regulator Consultation Paper—A New Regulatory Framework for Payment Systems in the UK: Bank of England Response'.

- The governance reforms of Model 2 would significantly reduce the ability of the incumbent banks to influence innovation. However, this model does not provide broad access to external capital or a focus on shareholder value maximisation. This may not give VocaLink sufficient resources to finance innovation. Moreover, as independent directors are exposed to the downsides of risky innovations without sharing in the upsides, this model would reduce incentives to innovate. Furthermore, without the constraints imposed by external investors, VocaLink may be more likely to bid more aggressively for contracts than a normal commercial entity, which would hinder the development of competition.

- Model 3 provides the company with an injection of new equity capital and would entail the formalisation of a dividend policy. As such, it would enable the business to be capitalised on a more conventional 'arm's-length' basis, in contrast to the existing model whereby investments are financed from operating cash flow and retained earnings. Intuitively, this would be expected to increase focus on maximising shareholder value and generate improvements in competition, innovation, and access. However, the banks would still have overall control (including control over future capital calls) and would have both the incentive and the ability to run the company in their interests as customers rather than to maximise shareholder value. Indeed, in theory, there would be an added incentive for the banks to divert value from the new investors to promote their interests as customers.[59]

- Model 4 achieves the significant step of enabling ownership to be contested. The enabling of subsequent transfers of a controlling interest in the company provides a mechanism for increasing the performance of a company. If potential investors consider the company not to be delivering value commensurate with its potential, they are able to purchase a controlling stake and implement the strategic and management reforms that they consider are likely to maximise value.

  This model provides strong incentives for competition and innovation where this delivers value for customers (e.g. desired level of quality of service; competitive pricing): the company would have ongoing access to finance to support innovation and the financial return expectations of the new owners will remove the incentive for the company to bid more aggressively for contracts than other commercial entities. An advantage of the existing owners retaining a minority stake would be the retention of specialist knowledge at Board level, which potentially mitigates risks that may arise from transition to a different ownership structure.

- Model 5 would provide the clearest objective to maximise shareholder value by removing any conflict with the incentive for the main UK banks to promote their interests as customers. Full divestment provides a similar set of incentives to the model in which the existing owners retain a minority stake. An additional feature of the full divestment model is that it is a complete change from the previous structure, which may be perceived as providing better incentives for entry and competition.

[59] See La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. (2002), 'Investor Protection and Corporate Valuation', *The Journal of Finance*, **57**:3, pp. 1147–170.

Table 4.1 Model 1: Enhanced transparency requirements

Principles of good governance	Greater transparency over decision-making would act as a disincentive for the company to make changes that promote the interests of the shareholder banks over other users. There would be little impact on the incentive to maximise shareholder value. No market for corporate control.
Incentives for competition	Greater transparency over the Board's position on matters of strategic importance and commercially sensitive information would undermine the ability of VocaLink to be an effective competitor.
Wider access	Unlikely to be a significant increase in the incentive to provide wider access to non-owners.
Incentives for innovation	Some increase in incentives to innovate as the Board may be required to consider the needs of a wider group of users than the shareholder banks. Reduces the ability of individual banks to block innovations that strengthen their competitors as voting would be reported. Increased transparency would allow competitors to obtain more information on innovations and undermine VocaLink's ability to realise the full value of innovation. No access to external capital to finance innovation.
Reliability and resilience	Unlikely to be significant change in incentives for reliable and resilient systems.

Source: Oxera.

Relative to the current model, increased transparency requirements are unlikely significantly to strength or weaken incentives to provide reliable infrastructure and wider access. The company is less likely to undertake innovation as competitors would be able to obtain more information on investments and initiatives. This will also undermine the commercial viability of the company more generally and the ability of VocaLink to be an effective competitor.

Table 4.2 Model 2: Enhanced governance arrangements

Principles of good governance	Vesting more control in independent directors would reduce the incentive for the company to prioritise the interests of the shareholder banks over other users. The incentive to maximise shareholder value would be diluted, which risks the commercial viability of the company in a competitive environment. No market for change of ownership and corporate control.
Incentives for competition	Vesting more control in independent directors may place the interests of users ahead of the principle of shareholder value maximisation. This would hinder the development of competition by making the company likely to bid more aggressively for contracts than an entity subject to normal commercial constraints—i.e. delivering the required return on capital.
Wider access	Unlikely to be a significant increase in the incentive to provide wider access to non-owners.
Incentives for innovation	Some increase in incentives to innovate as the Board would consider the needs of a wider group of users than the shareholder banks. Removes the ability of individual banks to block innovations that strengthen their competitors. Independent directors would be exposed to the downside risks of innovation but not the upside benefits, which is likely to disincentivise innovation. No access to external capital to finance innovation.
Reliability and resilience	Unlikely to be significant change in incentives for reliable and resilient systems.

Source: Oxera.

Relative to the current model, enhanced governance arrangements are unlikely significantly to strength or weaken incentives to provide reliable infrastructure and wider access. A more independent Board may be more averse to risky and innovative investments than a Board with more direct accountability to shareholders and the interests of shareholders in realising the returns to successful risk-taking.

Enhanced governance through a more independent Board not primarily accountable to shareholders could lead to the company behaving less like a commercial entity. For example, the Board may direct the company to prepare contract bids that are attractive from the perspective of payment service providers but do not deliver the financial return that an entity subject to normal commercial constraints would require. This would not create incentives for new entrants to compete in the provision of payments infrastructure.

Table 4.3 Model 3: External equity capital is introduced; existing owners retain a controlling stake

Principles of good governance	New shareholders may provide a different perspective and bring broader experience to the Board. Increased incentive to operate as a commercial entity and maximise shareholder value. The company would be capitalised on a more conventional 'arm's-length' basis. New shareholders lack overall control and may have insufficient influence to effectively monitor management. The value of the capital raised would be discounted relative to the underlying value of the shares. This is because of the vulnerability of minority shareholders to the value of their stake being diverted to promote the interests of the majority shareholders. No market for change of ownership and corporate control.
Incentives for competition	The increased incentive to operate commercially and maximise shareholder value will enhance the ability of VocaLink to compete. The increase in resources to finance innovation will also enhance the ability to compete. The financial return expectations of the new owners will constrain the incentive for the company to bid more aggressively for contracts than other commercial entities. Banks would still have overall control and would have an incentive to divert value from the minority shareholders to promote the interests of the banks as customers—e.g. using the equity injection to reduce prices in future contract bids rather than to undertake value-generating investments.
Wider access	Increased incentive to provide access on terms that will grow overall revenue.
Incentives for innovation	Some increase in incentives to innovate as the minority investors would be expected to propose and support innovation that is expected to deliver at least the required return on capital. Dilutes the ability of individual banks to block innovations that strengthen their competitors. Provides a one-off capital injection that could be used to finance innovation.
Reliability and resilience	Unlikely to be significant change in incentives for reliable and resilient systems. Likely to be greater focus on the return on investment in system reliability.

Source: Oxera.

The introduction of external equity capital will provide financial resources for innovation. By improving the incentives for value maximisation, it is also likely to encourage innovation and to provide economic incentives to facilitate wider access. There will be stronger incentives to consider the commercial interests of the company relative to the interests of the shareholder banks when submitting contract bids, which improves incentives for new entrants to compete.

In terms of reliability, bringing in external equity capital will increase the focus on shareholder value maximisation. The extent to which this decreases the focus on system reliability depends on whether having reliable systems is a complement to, or in conflict with, shareholder value maximisation. External shareholders would be expected to focus more on the return on investment in system reliability rather than the absolute level of reliability. Nevertheless, the financial and reputational consequences of failing to achieve appropriate reliability standards are likely to mean that reliable systems are a necessity for delivering shareholder value. Reliability incentives may even be stronger when external equity capital is at risk.

Table 4.4 Model 4: External equity capital is introduced; existing owners divest to a non-controlling stake

Principles of good governance	The company would be controlled by owners with the incentive to operate as a commercial entity and maximise shareholder value. The company would be capitalised on a more conventional ‘arm’s-length’ basis and decisions regarding distributing or raising capital would be made on the basis of shareholder value maximisation (minority investors would have pre-emption rights). New shareholders would have overall control and the ability to effectively monitor management. Creates a market for change of ownership and corporate control.
Incentives for competition	The increased incentive to operate commercially and maximise shareholder value will enhance the ability of VocaLink to compete. The ongoing access to resources to finance innovation will also enhance the ability to compete. The financial return expectations of the new owners will remove the incentive for the company to bid more aggressively for contracts than other commercial entities.
Wider access	Significant increase in the incentive to provide access on terms that will grow overall revenue. Some incentive to provide access to companies that compete with the banks, although moderated by the role of the banks as the single largest source of revenue for VocaLink and the role of the banks as minority investors.
Incentives for innovation	Significant increase in incentives to innovate as the new investors would be expected to propose and approve investments that are expected to deliver at least the required return on capital. Incentive to raise capital to finance innovation that is expected to deliver at least the required return on capital. Removes the ability of individual banks to block innovations that strengthen their competitors.
Reliability and resilience	Unlikely to be significant change in incentives for reliable and resilient systems. Likely to be greater focus on the return on investment in system reliability.

Source: Oxera.

Divestment that reduces the existing owners to a non-controlling stake will allow the company to operate independently of its current main customers. This will allow the identification, selection and financing of innovations that have the greatest potential to deliver value to all users of payments infrastructure. For example, this level of divestment would make it possible to form an investment committee that did not include any of the shareholder banks and could therefore undertake full scrutiny of investment proposals that involve sensitive client information. The incentive to maximise shareholder value would provide the company with similar incentives to competitors and new entrants when bidding for contracts, and thereby facilitate development of competition in the market for the provision of payment systems infrastructure.

A reduction of the ownership of the main UK banks to a non-controlling stake would deliver another significant benefit to corporate governance. It enables ownership to be contested and control to be transferred to a new set of owners. This 'market for corporate control' acts as a mechanism for improving the performance of the company.

An advantage of the existing owners retaining a minority stake would be the retention of specialist knowledge at Board level, which potentially mitigates risks that may arise from transition to a different ownership structure.

Table 4.5 Model 5: Existing owners fully divest

Principles of good governance	The company would be controlled by owners with the incentive to operate as a commercial entity and maximise shareholder value. The company would be capitalised on a more conventional 'arm's-length' basis and decisions regarding distributing or raising capital would be made on the basis of shareholder value maximisation. New shareholders would have maximum control and the ability to effectively monitor management. Creates a market for change of ownership and corporate control.
Incentives for competition	The increased incentive to operate commercially and maximise shareholder value will enhance the ability of VocaLink to compete. The ongoing access to resources to finance innovation will also enhance the ability to compete. The financial return expectations of the new owners will remove the incentive for the company to bid more aggressively for contracts than other commercial entities.
Wider access	Significant increase in the incentive to provide access on terms that will grow overall revenue. Some incentive to provide access to companies that compete with the banks, although moderated by the role of the banks as the single largest source of revenue for VocaLink.
Incentives for innovation	Significant increase in incentives to innovate as the new investors would be expected to propose and approve investments that are expected to deliver at least the required return on capital. Incentive to raise capital to finance innovation that is expected to deliver at least the required return on capital. Removes the ability of individual banks to block innovations that strengthen their competitors.
Reliability and resilience	Unlikely to be significant change in incentives for reliable and resilient systems. Likely to be greater focus on the return on investment in system reliability.

Source: Oxera.

Full divestment provides a similar set of incentives to the model in which the existing owners retain a minority stake. An additional feature of the full divestment model is that it is a complete change from the previous structure, which may be perceived as providing better incentives for entry and competition.

4.4 Conclusions

The evaluation of the five models leads to the following conclusions.

Under all the models there is a strong incentive to maintain high standards of reliability due to the reputational and financial impact to the company of a system failure. The introduction of external equity capital would be expected to increase the focus on the return on investment in system reliability rather than on the absolute level of reliability. Although the way in which reliability is achieved is likely to vary across different models of governance and ownership, the viability of the business will remain dependent on achieving this objective.

Delivering good governance would be promoted by the existing owners divesting to a non-controlling stake and by the business being capitalised on a more conventional ‘arm’s-length’ basis. This would provide normal commercial incentives to generate value. Divesting to a non-controlling stake also establishes a market for control of the company, which is not enabled by enhanced transparency, governance, or the maintenance of a controlling stake.

Competition is likely to be enhanced where the existing owners divest to a non-controlling stake. The incentive to maximise shareholder value and the ability to raise external capital will enhance the competitiveness of VocaLink. Conversely, models 1–3 are likely to have adverse effects on competition, for differing reasons. Enhanced transparency is likely to undermine the ability of VocaLink to be an effective competitor. The model where governance is enhanced and the model where a minority stake is divested may lead to VocaLink bidding more aggressively for contracts than a normal commercial entity; this may hinder the development of competition by making it harder for companies to enter the market.

All of the models facilitate non-discriminatory access to payment systems infrastructure.

Enhanced transparency and governance may aid innovation. However, the strongest increases in incentives to innovate are under the models where the existing owners divest to a non-controlling stake and the objective is to maximise shareholder value. In terms of the ability to innovate, the sale of a minority equity stake or reforms to governance and transparency do not provide ongoing access to finance for innovation.

The most suitable alternative models appear to be the two models where the existing owners divest to a non-controlling stake. An advantage of the minority stake model would be the retention of specialist knowledge at Board level, which potentially mitigates risks that may arise from transition to a different ownership structure. An advantage of the full divestment model is that it is a complete change from the previous structure, which may be perceived as providing better incentives for entry and competition.

To return to the key issue of ownership and governance reform as a way to mitigate the risks to VocaLink of the changing future payments market, the evaluation of the models against the objectives of improving competition, access, and innovation leads to two related conclusions.

First, further reforms to governance would be insufficient to achieve the objectives. Additional independence and transparency requirements may generate marginal benefits in access, but could have unintended consequences that actually harm the development of competition and incentives to innovate.

Second, there is a range of options around ownership reform, but only reforms that result in the existing owners reducing their equity interest to a non-controlling stake will increase the incentives for effective competition and innovation in the interests of a wider set of payment systems users, alongside other potential reforms to the market suggested by VocaLink’s vision.

www.oxera.com

oxera
compelling economics