Payment Systems Regulator

Market review of card scheme and processing fees

Final report

March 2025

MR22/1.10

Contents

Note: The places in this document where confidential material has been redacted are marked with a [✁].

1 Executive summary

Introduction

1.1 This report sets out the findings of our market review of the scheme and processing fees associated with Mastercard and Visa (the card schemes), the two largest card payment system operators in the UK.

1.2 Cards are the most popular way for consumers to pay for goods and services in the UK. In 2023, 61% of all payments in the UK were made using cards, making up almost 86% of the total value of retail transactions.

1.3 Every time a consumer initiates a card payment with a Mastercard or Visa-branded card, the merchant acquirer receives a range of scheme and processing services from Mastercard or Visa, some of which are mandatory, or 'core', and some of which are optional.[1] The merchant acquirer pays scheme and processing fees to Mastercard or Visa for these services (and also pays interchange fees to the card issuer; interchange fees are outside the scope of this review). Acquirers provide a range of services that businesses and other organisations (merchants) need in order to take card payments. Their costs are ultimately recovered from fees charged to these merchants and – to some degree – reflected in prices that people and businesses face when making purchases using cards.

1.4 Card payments are critical to the smooth running of the UK economy, as they enable people to pay for their purchases and merchants to accept payments for goods and services. They are a well-established method for consumers to make payments, and their use is growing. Mastercard and Visa are central to this; over 95% of transactions using UK-issued cards are made on their rails. However, merchants have raised concerns about the cost of accepting cards and their limited ability to understand or negotiate fees. Based on the evidence we have gathered as part of this market review, we estimate that UK businesses pay at least £170 million more, annually, for scheme and processing fees than they did seven years ago. This increased cost of doing business in the UK impacts on UK businesses' ability to invest and grow, and could lead to direct economic constraints, particularly for small merchants.

Why we have carried out a market review

1.5 Market reviews, in line with our competition, innovation and service-user objectives, are one of the principal ways in which the PSR investigates the market for payment systems, or the markets for services provided by payment systems, to see how well they are working for service users (those who use, or are likely to use, services provided by payment systems).

1 See paragraphs 2.4 and 2.5 for definitions of types of fees.

1.6 A considerable number of stakeholders, including individual UK merchants and UK merchant associations, as well as acquirers, consistently raised concerns about Mastercard and Visa increasing fees to an extent that cannot be explained by changes in the volume, value or mix of transactions. In light of these concerns, we conducted a market review into Mastercard and Visa's scheme and processing fees using our powers under the Financial Services (Banking Reform) Act 2013 (FSBRA). In addition to card fees, we considered payments that the card schemes make to service users, as well as other fees and payments relating to the card schemes' scheme and processing activities.

1.7 The objective of this review was to understand whether the supply of scheme and processing services is working well having regard to our competition, innovation and protection of service users objectives, specifically:

Competitive constraints

- To what extent Mastercard and Visa face competition in providing scheme and processing services to acquirers and issuers in the UK (including core and optional services).
- The extent to which there are alternative payment methods in the UK, including whether they exert competitive constraints on the card schemes, and if there are barriers to entry and expansion for alternative provision.
- The bargaining position of issuers and acquirers, as the main clients of the card schemes, that purchase scheme and processing services.

Pricing and profitability

- The factors considered by Mastercard and Visa in setting fees charged to issuers and acquirers, and whether fees have increased over time.
- The profitability of the schemes in the UK.

Quality of service

- How the provision of scheme and processing services to issuers and acquirers affects merchants.
- The relationship between the card schemes and their customers, including outcomes for these customers.

1.8 We published our interim report in May 2024 and received 24 written responses, from the card schemes as well as a range of merchants, acquirers and industry bodies. The card schemes broadly disagreed with our findings, arguing that the market is competitive and market outcomes positive. Merchants, acquirers and industry bodies were broadly supportive of our findings but expressed disappointment that the remedies we were considering did not go far enough to address the consequences of the lack of competition.

1.9 We have taken into account, responded to and engaged with written responses to our interim report and any other additional representations that stakeholders made after the consultation closed. We have based our conclusions on information and evidence received in previous phases of this review as well as additional evidence gathered since publication of the interim report.

Key findings for acquirers and merchants

1.10 We have found that Mastercard and Visa are subject to ineffective competitive constraints in the supply of scheme and processing services to acquirers and merchants in the UK and have varying degrees of constraint across their optional services. In summary, these findings are:

- Given the widespread use of Mastercard and Visa in the UK, their cards are must-take for merchants in the UK. As a consequence, Mastercard and Visa must be offered by all acquirers, which would otherwise face, as one acquirer put it, 'critical and existential losses'.
- Existing alternative payment methods to cards do not exert effective competitive constraints on the fees charged by Mastercard and Visa for scheme and processing services. In reaching this finding, we considered the current and likely future use of card based (for example, digital wallets such as Apple Pay) and non-card based (for example, account-to-account payments and digital currencies) alternative payment methods. While new entrants are considered as potential competitors by Mastercard and Visa, they are unlikely to serve as a competitive constraint on cards in the short to medium term. Specifically, digital wallets have adopted a 'card friendly' approach and Buy Now Pay Later providers constitute a limited threat and often use card rails. Although significant work is being done to ensure that open banking is increasingly an alternative to card payments, given the time it will require to evolve and scale, open banking is unlikely to result in a competitive constraint on the schemes in the short to medium term. Core scheme services cannot, by definition, be sourced from alternative providers as these services are a condition of participation in a card payment system.
- Core processing services could, in principle, be offered by alternative processors, but this is not the case in the UK: no processors other than Mastercard and Visa currently offer these services and we found significant barriers to entry exist for third-party processors.
- Acquirers typically pass-through scheme and processing fees in full to merchants. They therefore have reduced incentives to resist fee increases from the schemes. While acquirers have an incentive to negotiate individual discounts, the evidence indicates that they are rarely able to do so.
- The availability of effective alternatives is likely to vary across the many optional services that Mastercard and Visa supply to acquirers and merchants. In particular, available alternatives appear to be limited for some of these services. Mastercard and Visa are in a stronger position than alternative providers of optional services owing to the costs, challenges, and complexity acquirers would face when implementing these alternatives. In addition, acquirers and merchants have limited ability to steer consumers towards alternative payment methods.

Financial outcomes

1.11 We have considered a range of indicators in order to assess market outcomes, including pricing and profitability. Our findings were consistent with our finding of a lack of competitive constraints:

Pricing

- Mastercard and Visa's revenues from scheme and processing fees have risen substantially in recent years. Revenue from the acquiring side accounts for most net scheme and processing fee revenue in the period 2017 to 2023.
- The overall fee levels charged by Mastercard and Visa to acquirers for core scheme and processing services have risen in recent years – average core fees (as a proportion of transaction value) have increased in real terms by at least 25% between 2017 and 2023. We have been unable to calculate what proportion of this increase can be attributed to increased costs faced by Visa and Mastercard in providing these services because we do not have sufficiently reliable UK cost data.
- We have seen little evidence that fee increases are linked directly to any changes in relevant costs or that new fees are set on the basis of detailed cost analysis. Additionally, the sample of fee changes we have reviewed indicates that Mastercard and Visa do not record in writing all the factors considered by decision-makers when approving fee changes, limiting our understanding of the drivers of fee changes.

Profitability

- The evidence we have gathered from Mastercard and Visa, including bespoke datasets prepared for this market review, is consistent with a finding that their margins are higher than would be expected in competitive markets. We found that there was a sizeable gap between the margins of comparable companies operating in more competitive markets, which are in a range of 12% to 18% in the period 2018 to 2023, and the margin range derived from Visa's financial information as well as the upper end of the margin range derived from Mastercard's financial information.
- In view of the limitations of the data available, we do not consider that we could reach firm conclusions on the schemes' UK profitability. This is because Mastercard and Visa do not report financial performance for their respective UK businesses, and because there are large discrepancies in the schemes' financial performances across the datasets we have looked at.
- We consider that in order to reach a firm view of the level of economic profits, we would require the collection of data more suitable than the data provided by the schemes.

Non-financial outcomes

Innovation

1.12 Mastercard and Visa provide valuable services to merchants and consumers and have introduced innovations that have benefited card users in recent years. However, we consider that the current level of fees charged is not a necessary condition to support the level of investment and innovation in the card industry. Increased competition would lead to more innovation to the benefit of card users.

Transparency and complexity of pricing information

1.13 We considered the service-user outcomes of scheme participants and have found that Mastercard and Visa do not provide sufficiently clear and detailed information to acquirers, resulting in their receiving complex or incomplete information on core and optional scheme and processing services and fees. This is demonstrated by:

- Acquirers telling us that the billing information they receive in relation to scheme and processing fees (both mandatory and optional) is overly complex and lacks transparency. Some of the largest acquirers in the UK told us that they need to purchase additional services or consultancy services from the schemes to properly understand their fees and services, and several acquirers reported their 'accidental' purchase of some services.
- Acquirers raising problems with behavioural fees, including acquirers being unable to identify the merchants triggering the relevant fees and therefore being unable to pass the relevant fee on to the specific merchant that triggered it. As a result, fees are passed through to the acquirers' wider merchant base rather than those specific merchants incurring the fees, undermining the stated purpose of the behavioural fees (to incentivise or disincentivise specific merchant behaviours). Again, acquirers told us that they need to purchase additional optional or consultancy services from the schemes to properly understand behavioural fees.
- Acquirers telling us that they had encountered delays in the resolution of their queries to the schemes and received insufficient notice periods to implement changes required to avoid behavioural fees.
- Acquirers reporting difficulty in accessing relevant information through online portals provided and operated by the card schemes. This ranges from the online portal search functionality not working, to historical information, such as billing information, being deleted.

1.14 Overall, we have found evidence that acquirers' abilities to access, assess and act on relevant pricing information is below what we would expect in a well-functioning market. On accessing information in particular, we have found that the information that acquirers receive from Mastercard and Visa can be insufficient to understand the fees they are charged. This affects acquirers' ability to act on this information and can impact their merchants. For these reasons, we found that the issues relating to the provision of information by Mastercard and Visa to acquirers are sufficiently material to warrant intervention under our service user objective.

Key findings for issuers

1.15 We also considered whether Mastercard and Visa face competitive constraints on the issuing side. We found that the card schemes face some competitive constraints on the issuing side of the market. These constraints are mainly a result of competition between Mastercard and Visa, rather than with providers of other payment methods, as each scheme competes to win issuing portfolios:

- Issuers negotiate bespoke contracts with the card schemes, including across debit, credit, and commercial card portfolios. Mastercard and Visa are the only schemes invited by issuers to participate in tenders, and incentives and rebates form an important part of the negotiations. Mastercard and Visa compete to win issuer business, which exerts a direct constraint on the net level of scheme and processing fees charged to issuers for those cards, leading to lower net fees for issuers.
- When convincing issuers to switch between the schemes, higher incentives are usually required, as migrating is costly and considered as risky by issuers. These incentives range from financial incentives, such as upfront sign-on bonuses, technology investment and marketing support, to non-financial considerations, such as open banking capabilities.
- Competition between Mastercard and Visa has resulted in high incentives to issuers, in some cases more than totally offsetting the core fees charged to issuers. The evidence also indicates that incentives have become larger in recent years, reflecting increased competition between the schemes. On the other hand, we note that issuers have differing degrees of bargaining power – larger issuers typically receive larger incentives. Moreover, issuers' choice of card scheme can also be influenced by non-financial elements in their offerings. Product differentiation may therefore mitigate price competition.
- We note there are other considerations emerging from the evidence base which we may wish to revisit or explore in due course. This includes the relative levels of revenue that the card schemes generate from the acquiring side versus the issuing side of their networks, and the impact of incentives being used to secure issuing portfolio on competition between cards and other payment methods.

Next steps

1.16 In the coming weeks we will be publishing a consultation on our proposed approach to remedies.

1.17 That consultation will set out a range of remedy options, which we have developed to address the issues identified in this report. Our consultation will outline our views on effectiveness and an initial cost-benefit analysis as well as seeking stakeholder views on the proposals and current assessment.

1.18 Subject to consideration of submissions following our remedies consultation, we plan to issue a consultation on our provisional remedies decision, which will be followed by a final remedies decision.

2 Introduction

This is the final report of our scheme and processing fees market review. The aim of the market review was to understand if the supply of scheme and processing services is working well, having regard to our competition, innovation and protection of service-user objectives.

In this report, we present our findings on why increases to scheme and processing fees are unlikely to reflect the interest of all users of the Mastercard and Visa payment systems and why this warrants regulatory intervention.

The aim of our review

2.1 Our aims were to:

- understand whether the supply of scheme and processing services is working well having regard to our competition, innovation and protection of service users objectives[2]
- identify possible actions, if any, to remedy or mitigate any problems we may find[3]

2.2 This review focuses on the scheme and processing fees associated with Mastercard and Visa, the two largest card payment system operators in the UK.[4] Schemes other than Mastercard and Visa account for a very small proportion of overall UK transactions across all card types.

2.3 We have considered these issues in accordance with our legal framework, including our general duties[5], objectives[6], and regulatory principles.[7]

Definitions

2.4 For the purposes of this market review, we define scheme and processing fees as below:

- **Scheme fees** are fees charged by a card payment system operator in return for services relating to participation in the card system. These include any non-mandatory services provided by the card payment system operator.
- **Processing fees** are fees charged by processing entities to their customers (issuers and acquirers) for authorisation, clearing and settlement services for card payments. These include additional card payment functions, such as anti-fraud reporting.[8]

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2 MR22/1.2, *Final terms of reference* (October 2022), paragraph 1.1.

3 MR22/1.2, *Final terms of reference* (October 2022), paragraph 1.1.

4 MR22/1.2, *Final terms of reference* (October 2022), paragraph 1.1.

5 FSBRA, section 49.

6 FSBRA, section 49(2) and 50 to 52.

7 FSBRA, section 53.

8 Relevant charges could be made by any company within the same corporate group as the card payment system operator. We also recognise that processing services may be provided by third parties. The scope of this market review does not extend to fees set by third-party processors; however, we account for third-party processing services when examining constraints faced by Mastercard and Visa in their decisions about their processing fees in Chapter 4.

2.5 We categorise scheme and processing fees as follows:[9]

- **Mandatory fees (sometimes referred to as core scheme fees)** are scheme fees on services that an acquirer or an issuer has to buy from a card scheme operator as a condition of participation in a card payment system.
- **Core processing fees** are those that an acquirer or issuer must pay as a condition for processing transactions through a processor.[10]
- **Optional fees** are fees on services that are complementary to the core scheme and processing services and that an acquirer, issuer or merchant does not have to buy as a condition of participation in a card payment system, nor as a condition for processing transactions through a processor. This includes services that an acquirer or issuer can source from alternative suppliers, and those that can only be sourced from the card scheme operators but that an acquirer or issuer can choose not to buy.[11]
- **Behavioural fees** are fees that a card scheme operator charges to disincentivise specific behaviours from acquirers, issuers or merchants, or to incentivise them to adopt specific technical solutions. This can include steering them towards the adoption of particular process, technology or behaviour. Behavioural fees are, at least in principle, avoidable.

2.6 Our terms of reference set out our commitment to focus on scheme and processing fees set by Mastercard and Visa, including any changes in the fee levels, for 'UK-related' transactions, (i.e., where at least one of the issuer, acquirer, merchant or card-holder is UK-based).[12] In relation to fees, we have examined:

- scheme and processing fees set by Visa and Mastercard (including, but not limited to, mandatory fees, optional fees, and behavioural fees)
- payments that Visa and Mastercard make to service users, (including, but not limited to, marketing incentive payments or rebates on scheme and processing fees)
- other fees and payments relating to Visa and Mastercard's scheme and processing fees

2.7 Within this structure of fees, we also consider payments made by Mastercard and Visa to service users. For example, this could include marketing assistance payments, incentive payments or rebates on scheme and processing fees.

Issues this market review addresses

2.8 In November 2021, we published the findings of our card-acquiring market review (CAMR). As part of the market review, we analysed the fees that acquirers paid to card payment systems. We found that scheme and processing fees (which we referred to as 'scheme fees' in the market review) paid by acquirers increased significantly over the period 2014 to 2018 as shown in Figure 1. We also found that a substantial proportion of these increases were not explained by changes in the volume, value or mix of transactions.

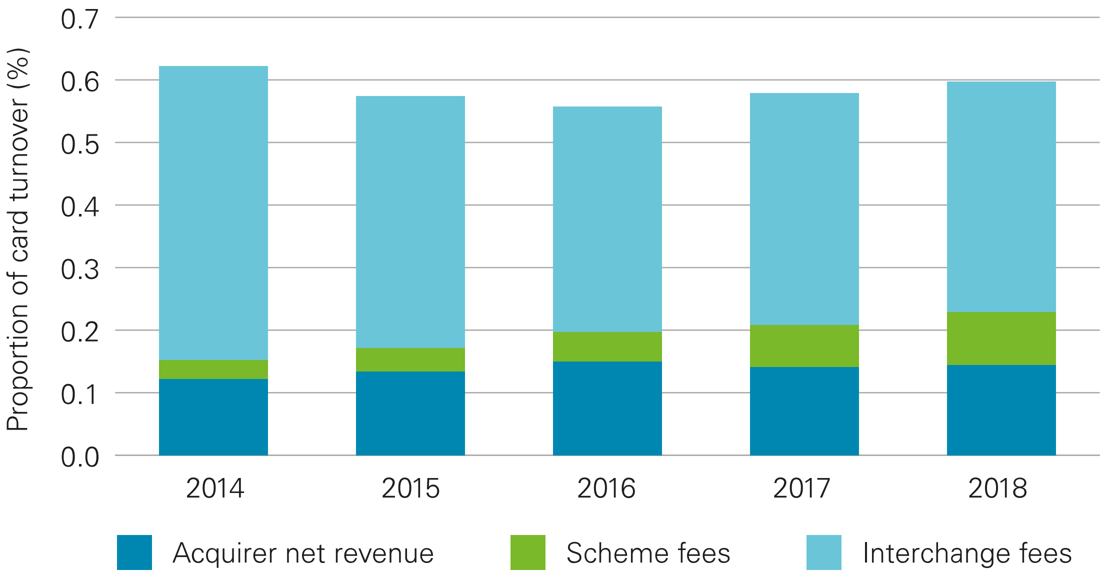
9 Further detail is set out in Chapter 3.

10 For processing fees, no fee is strictly speaking mandatory, as a result of the separation between scheme and processing entities. See further paragraphs 3.28 to 3.29.

11 Our understanding of optional services has evolved as the market review progressed. This implied that data collection towards the beginning of the review was based on a partially different understanding of optional services, resulting in data that is not fully consistent with our current definition.

12 MR22/1.2, *Final terms of reference* (October 2022), paragraph 2.10.

Figure 1: Average merchant service charge as a percentage of card turnover split by acquirer net revenue, scheme and processing fees and interchange fees



Source: MR18/1.8, Card-Acquiring Market Review: Final report, paragraph 5.13 and Figure 11. Scheme fees (shaded green) in this figure includes scheme and processing fees.

2.9 Various stakeholders have also raised concerns about scheme and processing fees increasing since 2018.

2.10 A survey carried out by the British Retail Consortium found that:

- Retailers spent £1.64 billion on processing card transactions in 2023, up from £1.26 billion in 2022.[13]
- In 2023, scheme fees saw a further increase from the previous year; 28% as a percentage of turnover for debit cards, 8.7% for credit cards and 227% for commercial cards.[14]

2.11 Given the prevalence of card use, discussed in Chapter 3, it is important to assess whether the market is working well, or whether regulatory intervention might be required.

Scope of our market review

2.12 In this market review, we have examined whether the supply of scheme and processing services is working well having regard to our competition, innovation and protection of service-users objectives. We have focused on the Mastercard and Visa card schemes given their size. In addition, concerns stakeholders have raised with us about card payment system scheme and processing fees largely relate to Mastercard and Visa.

13 British Retail Consortium (BRC), *Payments Survey 2024*, page 13.

14 British Retail Consortium (BRC), *Payments Survey 2024*, page 15.

2.13 As set out in our terms of reference, we have aimed to understand whether the increases in scheme and processing fees discussed above were a consequence of the lack of effective competitive constraints Mastercard and Visa face when setting scheme and processing fees. We have therefore:

1. assessed the constraints that Mastercard and Visa face
2. further explored the outcomes for customers of Mastercard and Visa scheme and processing services in the UK

2.14 In developing our competitive assessment, we have considered not only any constraints that Mastercard and Visa may impose on each other, but also constraints that might derive from the presence of other providers of scheme and processing services, and of payment methods alternative to Mastercard and Visa schemes.

2.15 In assessing the outcomes for customers, we have focused on price changes over time. In particular, we have looked at trends in card scheme revenue between 2017/2018 and 2023, analysed the drivers of fee changes, and used econometric analysis to estimate changes in average fee levels, controlling for any changes in transaction value, volume and mix. We have not received sufficiently reliable data on relevant cost levels and whether these have changed over time, but we have assessed the card schemes' profitability. While an imperfect proxy, looking at profitability should also allow us to control for the costs associated with any material changes in the quality of services provided to customers.

2.16 Separately, we have considered the main ways that card schemes' customers access, assess, and act on information from Mastercard and Visa, examining the information that issuers and acquirers receive from Mastercard and Visa about their services and the fees they incur. The aim of this analysis is to assess whether the level of transparency and complexity of this information creates poor outcomes for customers, for example by raising their costs or distorting their abilities to respond to the schemes' price signals.

2.17 While some stakeholders have expressed concerns about the bundling of core and optional services, we have not investigated this as part of this review. We consider that bundling is a possible symptom of market power; the PSR may choose to investigate this further as a separate piece of work.

What we have done

2.18 In the course of this market review, we took the following actions:

- In November 2021, we announced our market review of card fees.
- In January 2022, we sent Mastercard and Visa initial information requests. These requests informed the draft terms of reference for our market review into card scheme and processing fees.
- In June 2022, we published our draft terms of reference.
- In July 2022, we held roundtables and consulted on our draft terms of reference with a number of stakeholders.
- In October 2022, following feedback from our consultation and further engagement we published responses to our consultation alongside *our final terms of reference*.

- We considered responses to the following public consultations:
  - our February 2023 call for evidence on the competitive constraints Mastercard and Visa face in setting scheme and processing fees[15]
  - our February 2023 working paper on our proposed approach to analysing the profitability of the schemes[16]
  - our June 2023 working paper on recent changes to scheme and processing fees[17]
- In September 2023, we published a summary of stakeholder responses to our February 2023 publications, alongside the non-confidential version of those responses.[18]
- We considered responses to six working papers provided confidentially to Mastercard and Visa in December 2023, setting out aspects of our analysis pertaining to each scheme.[19]
- In May 2024 we published our interim report. We received responses to the consultation on our interim report from 24 stakeholders (including five merchant associations, who together represent thousands of merchants), which we have considered in setting out our final findings in this document. We have published non-confidential versions of these responses alongside the final report.
- In the period since the publication of our interim report, we gathered a limited amount of additional evidence in relation to optional services, pricing and fee data, profitability, and the schemes' annual customer surveys in order to supplement the analysis set out in the interim report and (in relation to the schemes' annual customer surveys) to better understand certain points raised in the schemes' interim report submissions.[20]

2.19 Throughout the market review, we engaged with a range of stakeholders to gather evidence. This engagement took various forms, including formal information gathering requests, voluntary questionnaires, roundtable discussions and bilateral meetings. Specifically, we engaged with:

- the card scheme operators, Mastercard and Visa
- American Express
- 18 issuers, accounting for over 90% of Mastercard's and Visa's UK card transaction value in 2021
- 21 acquirers, accounting for over 90% of UK card transaction value in 2021
- four providers of other payment methods – three of the digital wallets most widely used in the UK and a Buy Now Pay Later (BNPL) provider (Klarna)

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15 MR22/1.4, Competitive constraints in card payments systems working paper (February 2023).

16 MR22/1.5, *Approach to profitability working paper* (February 2023).

17 MR22/1.6, An updated version of our June 2023 working paper, reflecting our response to stakeholder feedback, is provided as Annex 8 to this report.

18 MR22/1.7, *Stakeholder input (and non-confidential responses) to the competitive constraints call for evidence and profitability working paper* (September 2023). MR22/1.8, *Stakeholder roundtables on scheme and processing fees summary* (September 2023).

19 Specifically, this exercise focused on aspects of the content set out in Annexes 1, 6, 7, 9 and 10 (competition in other payment methods, descriptive data analysis, econometrics, revenue generation and profitability).

20 On optional services, see Annex 4, paragraphs 4.15-4.16; on pricing and fee data, see Chapter 6, paragraphs 6.46 and 6.65; on profitability, see Annex 10, paragraph 2.23; on the schemes' annual customer surveys, see Annex 12, paragraph 12.15.

- five payment initiation service providers (PISPs), including many of those mentioned in Mastercard's or Visa's internal documents
- three firms providing services to issuers or operating as processors in other countries, including those indicated by Mastercard as potential entrants into the UK's core processing services market
- 18 merchants
- five merchant associations
- three other industry associations

Who this affects

2.20 The analysis outlined in this report will be of particular relevance to:

- four-party card scheme operators
- card issuers
- card acquirers
- merchants

2.21 Other stakeholders that may be interested in this report include:

- industry groups and trade bodies
- providers of other payment methods
- payment facilitators

Equality and diversity

2.22 We have considered the equality and diversity issues that may arise from our current analysis, including the detriment we see and the remedies we are contemplating. We do not consider that our proposed remedies would negatively affect any of the groups with protected characteristics under the Equality Act 2010.

2.23 We will continue to consider equality and diversity implications during the consultation period to our remedies consultation and as our thinking evolves. We will also revisit these considerations after we receive any relevant feedback.

Our powers, objectives and approach

2.24 We conducted this market review using our powers under Part 5 of the Financial Services (Banking Reform) Act 2013 (FSBRA). FSBRA gives us wide-ranging powers to take action, including the power to impose general and specific directions[21] and requirements[22], if we consider it appropriate following our review.

21 FSBRA section 54.

22 FSBRA section 55.

2.25 Any decision to exercise these powers is informed by our regulatory principles and payment systems objectives. FSBRA requires us to have regard to certain factors, including our regulatory principles[23], and in so far as is reasonably possible, to act in a way which advances one or more of our payment systems objectives[24] when deciding whether to impose a general direction. We will also have regard to our payment systems objectives and regulatory principles when deciding whether to impose specific directions or requirements in the context of a market review.

2.26 In order to assess whether it would be appropriate to intervene through directions or requirements in the context of a market review, we first consider how well markets for payment systems, or services provided by payment systems, are working in line with our objectives. These are to:

- promote effective competition in the market for payment systems, and markets for services provided by payment systems in the interests of those who use, or are likely to use, payments systems (the 'competition objective')
- promote the development of, and innovation in, payment systems in the interests of those who use, or are likely to use, services provided by payment systems, with a view to improving the quality, efficiency and economy of payment systems (the 'innovation objective')
- ensure that payment systems are operated and developed in a way that takes account of, and promotes, the interests of those who use, or are likely to use, services provided by payment systems (the 'service user objective')

2.27 We note in particular that pursuant to section 50(3) of FSBRA we may have regard to a range of considerations in assessing the effectiveness of competition in the relevant market, including:

a. the needs of different persons who use, or may use, services provided by payment systems (sub-paragraph (a))
b. the ease with which payment service providers can change the payment system they use to provide their services (sub-paragraph (f))
c. the level and structure of fees, charges or other costs associated with participation in payment systems (sub-paragraph (k))
d. the ease with which new entrants can enter the market (sub-paragraph (l))
e. how far competition is encouraging innovation (sub-paragraph (n))

23 Namely, the importance of maintaining the stability of, and confidence in, the UK financial system, the importance of payment systems in relation to the performance of functions by the Bank of England in its capacity as monetary authority, and our regulatory principles in section 53 FSBRA (s. 49 (3) FSBRA).

24 Our statutory payment system objectives are set out in sections 50, 51 and 52 FSBRA.

2.28 In this report we have therefore considered whether the supply of scheme and processing services, in particular the level and structure of scheme and processing fees, is working well by reference to our objectives. Our assessment is set out in the following chapters:

a. **Nature of competition:** Whether the schemes face competitive constraints on the acquiring side (Chapter 4) and on the issuing side (Chapter 5) of their network; this is in particular relevant to assess the effectiveness of competition in serving the interests of users on both sides of the market.

b. **Market outcomes – pricing, profitability, innovation and quality:** Whether pricing and non-pricing outcomes – such as trends in fees, profitability levels, and quality and innovation – are consistent with those expected in a market that is working well (that is, where the level and structure of scheme and processing fees serve the interests of users on both sides of the market and promote innovation) (Chapter 6).

c. **Market outcomes – transparency and complexity of pricing information:** Whether the ways that card schemes' customers access, assess, and act on information from Mastercard and Visa is consistent with what we would expect to see in a well-functioning market (Chapter 7).

3 Background

This chapter provides an overview of:

- cards in the UK and the role they play
- the four-party card scheme model, the key parties and their role, and the main fees
- our approach to analysing competition faced by four-party card scheme operators

Prevalence of cards in the UK and the role they play

3.1 Cards play a significant role in the UK payments market, as the most popular method to make retail payments:

- Data from UK Finance shows that there were an estimated 29.1 billion transactions made in 2023 using either a debit or credit card worth an aggregated value of £985 billion.[25] In 2023, 61% of all payments in the UK were made using cards and over 97% of all UK adults now hold at least one debit card and 65% hold a credit/charge card.[26]
- Data from the British Retail Consortium (BRC) shows that in 2023 consumer credit and debit cards accounted for 85.7% of the total value of retail transactions in the UK.[27]
- In 2021, Mastercard and Visa together accounted for over 95% of all UK debit and credit card payments by value.[28]

3.2 Figure 2 shows how payment volumes have changed between 2012 and 2022, and projections until 2032. In 2012, cash was the most popular method of payment. However, since then, the use of cash has declined substantially, while cards have grown and are expected to grow even more.

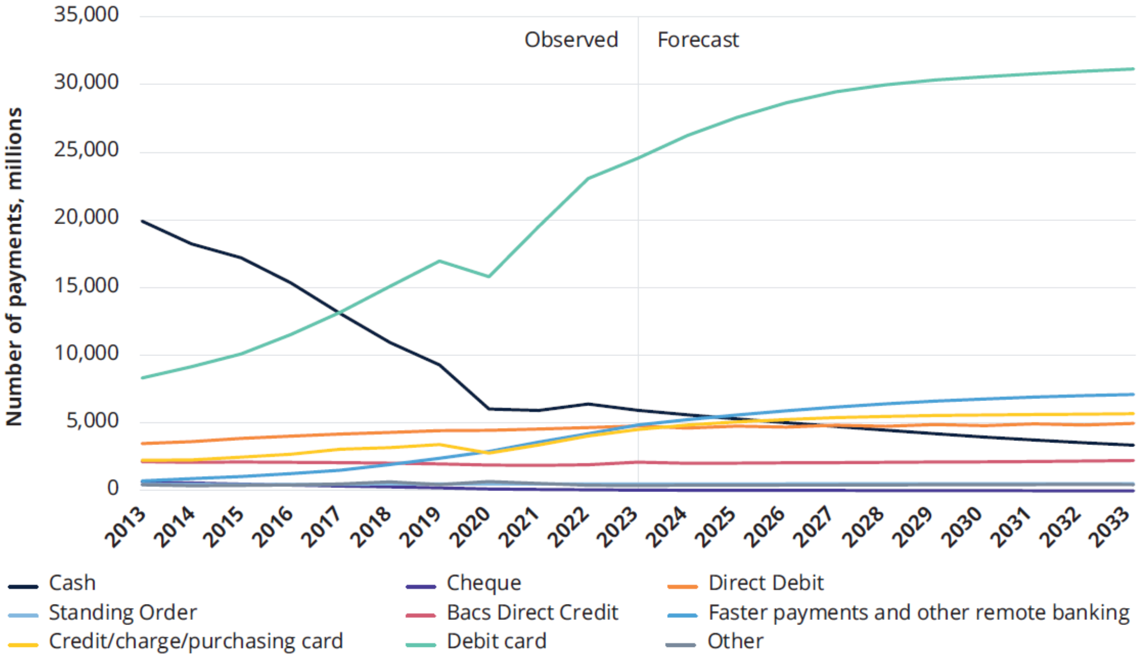
25 UK Finance, *UK Payment Markets 2024*, page 115.

26 UK Finance, *UK Payment Markets 2024*, pages 7 to 10.

27 British Retail Consortium (BRC), *Payments Survey 2024*, page 3.

28 See Annex 1, paragraphs 1.308 and 1.309.

Figure 2: Payment volumes (millions), 2013 to 2033



Source: UK Finance, [UK Payment Markets Summary 2024]

3.3 This substantial growth in card usage points to a UK market growing more reliant on cards as a means of payment.

3.4 Payments can be made through cards either directly, or by linking cards to digital wallets, such as Apple Pay, Google Pay or PayPal, which provide an interface between consumers and merchants.[29] In recent years, payments made with cards linked to digital wallets have accounted for an increasing proportion of all card payments in the UK, both online and in-store.

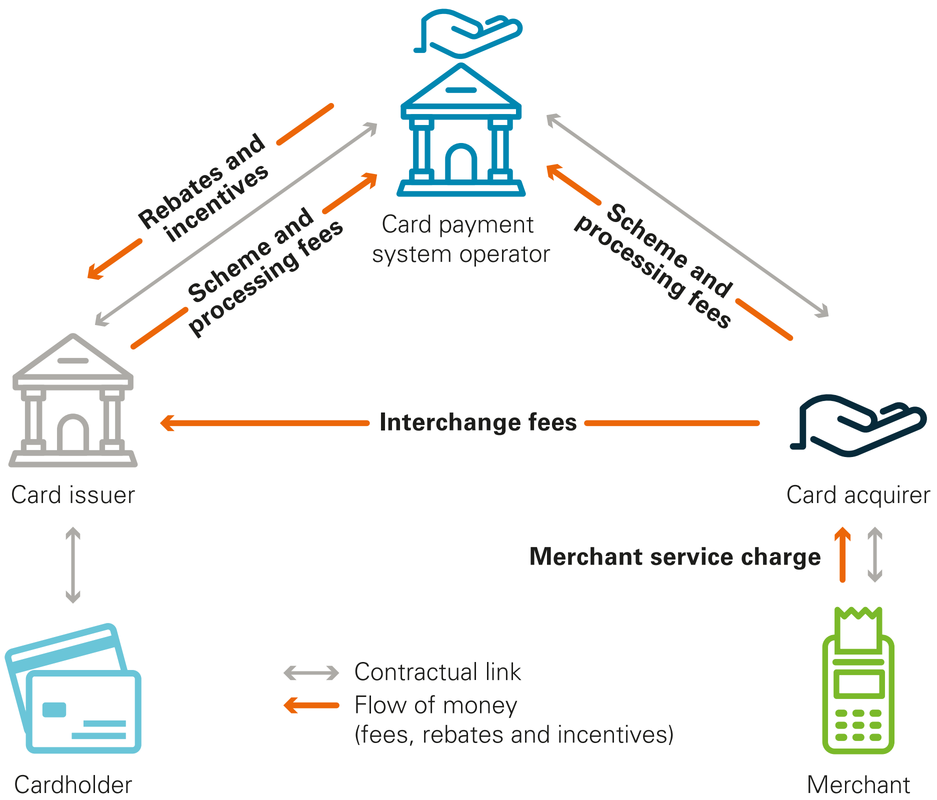
29 We define the different types of digital wallets in Chapter 4, paragraph 4.119.

Four-party card payment systems

Overview

3.5 Card payment systems enable people to make payments using cards. Mastercard and Visa operate what are known as four-party card payment systems or four-party card schemes.

Figure 3: Structure of a four-party card payment system



3.6 The five main parties that make up the four-party model are:

- **Card scheme operators** administer card payment systems. They manage the 'scheme rules' that govern how card payments are made and set the basis for which issuers, acquirers, merchants, cardholders and other parties participate in the card payment system. The card scheme operator typically has contractual relationships with issuers and acquirers but no direct contractual relationships with cardholders or merchants.
- **Issuers**[30] are banks or other organisations licensed by card payment system operators to provide cards to cardholders.
- **Acquirers** are banks or other organisations licensed by card payment system operators to process card payments on behalf of merchants. By providing card-acquiring services to merchants, as well as other products and services, acquirers play a core role in the functioning of card payment systems. In onboarding merchants, the acquirer assumes responsibility for the risks associated with granting them access to the card payment system.[31]

30 Can also be referred to as the *issuing bank* or *card issuer*.

31 We describe the role of acquirers in further detail in [Annex 1 of the CAMR Final Report] (November 2021), paragraphs 1.39 to 1.49.

- **Merchants** are organisations that accept card payments, for which they need card-acquiring services. Merchants can contract with acquirers or payment facilitators[32] to obtain these services.
- **Cardholders** are individuals or businesses that use cards to buy goods and services.

3.7 A high-level overview of the fees between parties in a four-party card payment system includes:

- **interchange fees (IFs)**, which acquirers pay to issuers each time a card is used to buy goods or services.[33] These per-transaction fees are usually levied as a percentage of the transaction value, but can vary depending on transaction and IF type
- **scheme and processing fees**, which acquirers and issuers pay to Mastercard and Visa
- **rebates and incentives**, which Mastercard and Visa pay to issuers (and occasionally to acquirers); as set out in Chapter 5, in some instances incentives more than totally offset the fees charged to issuers
- **merchant service charge (MSC)**, which is the total amount merchants pay to acquirers for card-acquiring services. This comprises interchange fees, scheme and processing fees and acquirer net revenue[34]
- **cardholder fees**, which cardholders may pay to the issuers

3.8 The schemes' rules are central to the four-party model. To participate in the scheme, issuers and acquirers must agree to adhere to the same set of rules, practices and standards and purchase certain mandatory services that preserve the integrity of the system. Mastercard submitted that it is the existence and universal application of these rules that creates the trust in card payments, which is essential for both cardholders and merchants, and without this, it is not possible for merchants to accept its cards.[35]

Pricing of card-acquiring services

3.9 Card acquirers charge merchants for accepting credit and debit payment cards through the MSC.

3.10 As set out in our *CAMR Final Report*[36], merchants, depending on their size, have one or more of the following pricing options for card-acquiring services[37]:

- interchange fee plus (IC+) pricing, whereby for any given transaction an acquirer automatically passes through (at cost) the IF applicable to that transaction

32 A payment facilitator is a payment service provider (PSP) that enables merchants to accept card payments via a payment gateway. The payment facilitator contracts with an acquirer who retains responsibility for allowing merchants to access the card payment systems. The acquirer is also liable for the merchant's and the payment facilitator's compliance with the rules set by the card scheme operator.

33 The IF is typically deducted from the transaction amount that is paid by the issuer to the acquirer. Acquirers then typically pass the IF on to merchants through the MSC, so it represents a cost to merchants of accepting card payments.

34 Acquirer net revenue includes the costs the acquirer incurs (other than IFs and scheme and processing fees) to provide card-acquiring services, plus the acquirer's margin.

35 Mastercard response to PSR working paper dated 23 February 2023 [✂].

36 We have adjusted the description of IC++ contracts above to align with the definitions used in this market review. Specifically, we have referred separately to scheme and processing fees whereas in the CAMR final report we used the term 'scheme fees' to refer to scheme and processing fees.

37 MR18/1.8, *Market review into the supply of card-acquiring services: Final report*, pages 31 to 33, paragraphs 3.63 to 3.71, and *Annex 1*.

- interchange fee plus plus (IC++) pricing, whereby for any given transaction an acquirer automatically passes through at cost the IF and other scheme and processing fees applicable to that transaction[38]
- standard pricing, whereby for any given transaction an acquirer does not automatically pass through at cost the IF applicable to the transaction and the pricing option does not satisfy the criteria for IC+, IC++ or fixed pricing
- fixed pricing, whereby a merchant pays a fixed, periodic fee for card-acquiring services, the amount of which does not depend on the volume or value of transactions it accepts or the characteristics of these transactions, within specified limits

3.11 We found in our *CAMR Final Report* that although IC++ pricing accounts for the largest proportion of transactions by value, the vast majority of merchants are not on IC++ contracts, with over 95% having standard pricing.[39] Merchants on IC++ pricing are typically the largest merchants, generally with an annual turnover above £50 million.[40]

Our approach to analysing competition faced by four-party card scheme operators

3.12 In this section, we outline the approach we have followed in our review when analysing competition faced by four-party scheme operators such as Mastercard and Visa. We first explain why we consider it is appropriate to assess separately the competitive constraints that a card scheme operator faces on each side, responding to representations on this point from Mastercard and Visa. We then set out our approach to identifying the most significant relevant competitive constraints faced on each side by Mastercard and Visa.

Why we assess the competitive constraints on each side separately

3.13 Four-party card schemes like Mastercard and Visa are two-sided networks. They serve issuers and cardholders on one side (the issuing side), and acquirers and merchants on the other side (the acquiring side). For the card payment system to function, it requires participation of both sides of the network. On the acquiring side, merchants must be willing to accept cards from the scheme; on the issuing side, issuers need to be convinced to issue the scheme's cards to their customers, and cardholders must be willing to use those cards when making payments.

3.14 The value of a card scheme for customers on one side depends on its adoption (and use) by customers on the other side – merchants are willing to accept cards from a scheme (or may feel compelled to do so) if many consumers want to pay with such cards, while the value of a card for cardholders depends, among other factors, on the extent of its acceptance among merchants. As a result, the decisions made by a card scheme operator on one side of the network may be affected by the competitive constraints that it faces on the other side.

38 At the time of the transaction, the acquirer may also pass-through other card scheme and processing fees that are not directly attributable to transactions.

39 MR18/1.8, Market review into the supply of card-acquiring services: Final report, page 32, paragraph 3.64.

40 MR18/1.8, Market review into the supply of card-acquiring services: Final report, page 7, paragraph 1.15 and CICC (1441 to 1444) – Judgment (CPO Applications) from 8 June 2023, paragraph 86.

3.15 In their responses to the interim report, Mastercard and Visa submitted that any competitive analysis of card schemes must jointly consider the acquiring and issuing sides:

- Mastercard submitted that '[t]he competitive dynamics on each side are inextricably linked and cannot be considered separately and in isolation'; '[the] competitive success [of any payment scheme] and the value it provides on either side is affected by its competitive success on the other side'. It also told us that 'where the scheme fails to provide great service to merchants such that they accept the scheme and support its use, the scheme's offering to cardholders would be lower quality and [the scheme] risks losing cardholders and issuers (and vice versa)'.[41] Mastercard also told us that competition for the holding and use of payment methods by cardholders influences the fees that schemes can charge to acquirers and merchants: the competitive pressure from alternative payment methods ensures card schemes are providing attractive services to cardholders, which makes cards attractive to merchants.[42]
- Visa submitted that '[a] key feature of "platform markets" such as cards is that a full understanding of the competitive constraints that the platform firm faces is only possible by analysing competitive constraints jointly on both sides of the platform'.[43] Visa told us that 'not doing so means that any assessment will not reflect the true competitive pressures that the platform firm faces'. Visa also submitted that the competitive constraints it faces in attracting card users affect both its ability to set prices on the issuing side and its ability to set prices on the acquiring side, since any reduction in the acceptability of Visa by merchants could also harm usage of cards by consumers,[44] and that it is incentivised to maximise transaction volumes, leading to a structure of fees that is aligned with overall welfare.[45]

3.16 In general, competitive constraints on one side of a platform can affect choices on the other side. However, in the case of card schemes in the UK, we have seen no evidence that competition on one side is constraining pricing on the other side. This is consistent with the economic literature, which indicates that, in the absence of competitive constraints on the acquiring side, competition on the issuing side would not constrain the fees that card schemes charge to acquirers, and may even result in upward pressure on those fees.[46] We note Mastercard's submission that pressure from alternative payment methods makes it necessary for card schemes to provide attractive services to cardholders. However, the economic literature shows that it is exactly the benefit that cardholders associate with the use of cards, compared to alternative payment methods, that allows card schemes to charge high fees on the acquiring side.[47]

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41 Mastercard response to MR22/1.9 (21 May 2024), page 10.

42 Mastercard response to MR22/1.9 (21 May 2024), page 12.

43 Visa response to MR22/1.9 (21 May 2024), Technical annex 1, paragraph 1.14.

44 Visa response to MR22/1.9 (21 May 2024), Technical annex 1, paragraph 1.14. See also [✂].

45 [✂].

46 The economic literature typically deals with interchange fees, but its insights can be extended to the case of scheme and processing fees. For example, Guthrie and Wright (2007) show that, with homogeneous multi-homing merchants, acquiring-side fees are independent of issuing-side competition; with heterogeneous merchants, issuing-side competition leads to higher acquiring-side fees. Guthrie, G. and Wright J., 2007, Competing Payment Schemes, *The Journal of Industrial Economics* 55(1): 37 to 67.

47 In the economic literature, this mechanism is called 'merchant internalisation'. See for example Wright, J., 2012, Why payment card fees are biased against retailers, *RAND Journal of Economics* 43(4): 761 to 780.

3.17 Competitive conditions may be very different on the two sides of a network. As analysed in Chapters 4 and 5, this is the case for card schemes. The alternatives available to issuers are different from those available to acquirers or merchants, and the ability to substitute cards from one scheme with other cards or payment methods is very different between issuers/cardholders and acquirers/merchants. This has significant implications for the decisions that a card scheme operator makes in relation to the services provided, and the fees charged, on each side.

3.18 As we explain in Chapter 4, while UK merchants accept both Mastercard and Visa cards, and potentially further additional payment methods, consumers tend to have a single preferred payment method for any particular type of purchase; this is often a payment card (as seen in paragraphs 3.1 and 3.2 above). The market is therefore characterised by what Professor Mark Armstrong defines as a 'competitive bottleneck', in which users on one side – merchants – multi-home, while users on the other side – cardholders – typically single-home.[48] In such scenarios, as Armstrong explains, 'it does not make sense to speak of the competitiveness of "the market." There are two markets: the market for single-homing agents which is, to a greater or lesser extent, competitive, and a market for multi-homing agents'.[49] The difference in competitive conditions between the two sides makes it appropriate to assess them separately for each side.[50]

3.19 Responding to the interim report, Mastercard and Visa made two further submissions on specific features of competition in two-sided markets:

- Visa submitted that there is nothing unusual or wrong about competitive constraints that differ across the two sides of a platform market. Whenever users on one side of a platform have more elastic demand (e.g., consumers choose between different payment methods at point-of-sale) and users on the other side have less elastic demand (e.g., merchants seek to accept a range of payment methods based on consumer preference), platforms will typically recoup more revenue on the side of the market with less elastic demand. This competitive outcome is not unique to payment systems and can be observed across a range of two-sided markets'. According to Visa, 'economic theory or literature does not support an assumption that asymmetric competitive constraints and pricing in two-sided markets lead to inefficient or harmful outcomes'. Visa also noted that ' [g]iven the range of factors that would be expected to enter into the pricing decisions of a two-sided platform, it would be surprising if it were possible to identify a mechanical link between cost changes and pricing'.[51] Rather, Visa submitted, it is necessary for regulators to investigate actual market behaviour and outcomes to determine whether the overall price structure between the two sides of the market and non-price outcomes are socially efficient.[52]

48 Mastercard submitted that the payment sector is characterised by multi-homing for both consumers and merchants (Mastercard response to MR22/1.9, page 20). It stated that '[w]ith the increased entry of innovative products, consumers increasingly have multiple options at the point of checkout' and that the possibility of multi-homing has risen (Mastercard response to MR22/1.9 (21 May 2024), page 13). However, as we explain in Chapter 4, paragraph 4.114, the degree of multi-homing among consumers is still too limited to affect the competitive constraints card schemes are subject to.

49 Armstrong, M., 2006, Competition in two-sided markets, *RAND Journal of Economics* 37(3): 668 to 691.

50 This is consistent with the approach followed by the Competition and Markets Authority (CMA) when assessing competitive effects in mergers involving two-sided platforms. See the CMA's *Merger Assessment Guidelines*, 4.24(b).

51 [✂].

52 Visa response to MR22/1.9 (21 May 2024), Technical Annex 1, paragraph 1.15. See also [✂].

- Mastercard submitted that two-sided markets are characterised by specific competitive dynamics that would be missed in a static assessment of competition on each side. In particular, Mastercard told us, 'a new provider with an innovative offering can attract sufficient customers to achieve a critical mass on one side of the market, which can be used to gain traction on the other side. Through these inter-relationships, even a small competitive advantage can lead to meaningful shifts in market share'. According to Mastercard, the risk of the market 'tipping' towards an alternative payment method creates competitive pressure on larger payment providers to continue to provide great outcomes to all their users or risk losing their position. In particular, Mastercard told us that as predicting market tipping is inherently difficult, the uncertainty drives ongoing innovation from both entrants and incumbents like Mastercard and Visa, who know it may be too late to respond once a challenger's innovation is visible.[53]

3.20 We agree with Visa that it is not uncommon for competitive conditions to differ between the two sides of a platform market. However, we note that, in the absence of acquiring-side constraints, card schemes will likely have an incentive to set higher acquiring-side fees than would be socially optimal.[54]

3.21 While we agree with Mastercard that two-sided markets can tip, with a single provider quickly capturing a very large market share, this is not necessarily the case for all two-sided markets. Predicting whether a market is prone to tipping is challenging.[55] Moreover, some of the features that facilitate tipping, such as single-homing[56], also makes it more difficult for new competitors to emerge. In the economic literature and regulatory decisional practice, tipping markets are seen as characterised by structural risks for competition, as they can result in the establishment of powerful market players with an entrenched market or gatekeeper position.[57] There is therefore no theoretical reason why the inter-relationships between the two sides of the market should necessarily result in significant competitive pressure on major providers, as Mastercard submits, rather than shielding the same providers from competition. The question is an empirical one, and we have addressed it in the case of card schemes by carefully assessing the evidence on competition from alternative payment methods, adopting a forward-looking approach. Our analysis is developed in Chapter 4.

3.22 For the reasons discussed in this section, it is appropriate to assess separately the competitive constraints that a card scheme operator faces on each side, while considering the interactions between the two sides where relevant.

53 Mastercard response to MR22/1.9 (21 May 2024), pages 20 to 22.

54 This result is well-established in the economic literature. See, for example, Rochet and Tirole (2011). Rochet, J.-C. and Tirole, J., 2011, Must-take cards: merchant discounts and avoided costs, *Journal of the European Economic Association* 9(3): 462 to 495. While the economic literature expresses this result in terms of interchange fees, we consider its insight can be extended to the case of scheme and processing fees. As noted by Rysman and Wright, positive scheme and processing fees (which the authors refer to as switch fees) could be set to acquirers and negative scheme and processing fees (i.e., subsidies) could be set to issuers, to mimic any interchange fees. See Rysman, M., & Wright, J. (2014). The economics of payment cards. Review of Network Economics, 13(3), 303-353.

55 See Bedre-Defolie, Ö., and Rainer Nitsche, 2020, When Do Markets Tip? An Overview and Some Insights for Policy, *Journal of European Competition Law & Practice* 11(10): 610 to 622.

56 See Rysman, M., 2009, The economics of two-sided markets, *Journal of Economic Perspectives* 23(3): 125 to 143.

57 See, for example, European Commission Press Release, 2 June 2020.

Our approach to identifying the most significant relevant competitive constraints faced on each side

3.23 In the following paragraphs, we set out our approach to identifying the most significant relevant competitive constraints faced on each side by Visa and Mastercard. We then assess the competitive constraints that Mastercard and Visa face in the provision of scheme and processing services to the acquiring side in Chapter 4, and on the issuing side in Chapter 5.

3.24 We have not tried to determine 'bright line' or finely delineated market definitions (i.e., of products in and out of a particular market), but instead we have sought to describe the relevant products, looking at the degree of demand-side substitution and, where relevant, supply-side factors. This forms the starting point for assessing the strength of the various constraints in relation to the provision of each service, as set out in Chapters 4 (acquiring side) and 5 (issuing side). In particular, we consider below:

- whether it is appropriate to consider different products or services separately or jointly
- whether alternative payment methods are relevant for our assessment
- what geographic scope to use as the basis of our assessment

3.25 In stakeholders' responses to our interim report, we have not received comments critical of the approach described below.

Product scope

3.26 On each side of the network, Mastercard and Visa supply a wide range of products and services. Each offers different types of cards – debit and credit, consumer and commercial – and a large number of services. In this section we explain that we have identified the following services as relevant for the purpose of our analysis of competitive constraints on both the acquiring and issuing side:

- scheme and processing services
- core and optional services

3.27 We then set out further potential segmentations:

- segmentation based on credit and debit cards
- segmentation based on consumer and commercial cards
- segmentations based on transaction type
- segmentations based on the types of merchants served

Core scheme and processing services

3.28 The Interchange Fee Regulation (IFR)[58] introduced a separation between scheme and processing activities, requiring card schemes and processing entities: to be independent in terms of accounting, organisation and decision-making processes; not to bundle scheme and processing services and not to cross-subsidise these activities; and not to make the provision of a scheme service conditional on the acceptance of a processing service (or vice versa). As explained in Annex 3, Mastercard and Visa have separated their scheme and processing businesses.

3.29 The separation means that, at least in principle, acquirers and issuers may be able to source processing services from providers other than Mastercard and Visa. Third-party processors operate in several European countries, though not in the UK.

3.30 For these reasons, when assessing competitive constraints on the acquiring side, we have considered the constraints that may apply specifically to processing services given that there is scope, in principle, for alternative processors.

3.31 In view of the above we have defined on the acquiring side:

- a group of **core or mandatory scheme** services; these are the services that acquirers or issuers must purchase if they participate in a card scheme
- a group of **core processing** services; these are services that acquirers and issuers must purchase in order for their transactions to be processed (i.e., authorisation, clearing and settlement)

3.32 On the issuing side, however, we have not distinguished explicitly between scheme and processing services, as the evidence we have collected on competitive constraints encompasses both types of services.

Optional services

3.33 For each of scheme and processing services, there are also services that are ancillary to the core services, providing additional value to customers or integrating Mastercard's and Visa's core offering. Acquirers and issuers are not required to purchase these services from Mastercard or Visa and can, at least in principle, source them from alternative providers, self-supply, or not use those services at all.[59] Each of these services can be defined as an optional service.

58 Official Journal of the European Union, Regulation (EU) 2015/751 of the European Parliament and of the Council of 29 April 2015 on interchange fees for card-based payment transactions. Following the UK's withdrawal from the EU, the IFR is now retained EU law, which applies in the UK as amended by the Interchange Fee (Amendment) (EU Exit) Regulations 2019.

59 Mastercard and Visa, however, may categorise their fees in different ways. There are several different categories of fees, including behavioural, optional and mandatory, but there are no formal definitions of these terms in the industry. Visa explained that the terms 'mandatory' and 'optional' are often used internally in its business; however, no official definitions exist. In providing information on the optionality of each fee category, Visa relied on the judgement of its employees. Mastercard refers to optional fees in the context of fees for services that certain issuers and acquirers make use of while others do not.

3.34 The range of alternatives available to customers may be wider for certain optional services than for core services. Moreover, given the variety of optional services offered by Mastercard and Visa, available alternatives may differ between optional services. For this reason, in our assessment of competitive constraints on the acquiring side, we have also considered constraints specific to individual optional services. While Mastercard and Visa offer a large number of optional services, to keep our analysis manageable we have focused on those services that we considered more significant in terms of the share of scheme revenue that these generate.[60,61]

Segmentation based on credit and debit cards

3.35 Both Mastercard and Visa offer credit and debit cards. There are arguments for analysing competitive constraints separately for these two types:

- Issuers that provide both types (for example, large retail banks) often procure these separately and may use a different scheme for their credit and debit card offerings.
- From the consumer perspective, credit and debit cards are often used for different purposes and other payment methods may be closer alternatives to one type of cards than to the other.
- Some of the fees that the card schemes charge vary depending on whether a credit or debit card is used.

3.36 Having said that, on the acquiring side:

- All acquirers provide acquiring services for both debit and credit card services (provided by both schemes). While, in principle, a merchant may accept a scheme's debit cards but not its credit cards (or vice versa), this is extremely rare in practice.
- Based on the evidence we have received, the competitive constraints that Mastercard and Visa face in setting fees do not appear to materially differ between credit and debit card transactions. Neither the schemes' internal documents we have reviewed nor third-party submissions highlight substantial differences in competitive conditions between debit and credit cards.

3.37 For these reasons, in this report we do not present separate assessments of competitive constraints for credit and debit cards on the acquiring side.[62]

3.38 On the issuing side, it is plausible that competitive conditions may have differed, at least historically, between credit and debit cards – Mastercard has historically had a larger share in credit cards, and Visa on debit. However, for the purposes of our analysis, the distinction is not crucial, given that, as shown in Chapter 5, the evidence we have found of competitive constraints encompasses both credit and debit cards.

60 The criterial we have used in selecting the optional services to focus on are discussed in Annex 4.

61 We have not specifically assessed competitive constraints on the supply of optional services to issuers.

62 We have, however, mentioned differences between credit and debit cards when relevant in our competitive assessment. Neither Mastercard nor Visa have raised concerns with this approach.

Segmentation based on consumer and commercial cards

3.39 As with the distinction between debit and credit cards, there are factors indicating that the competitive conditions that prevail for consumer and for commercial cards may in principle differ. On the issuer side, consumer and commercial cards are often (although not always) procured separately, while, on the acquiring side, the schemes charge different scheme and processing (and interchange) fees.

3.40 In practice, however, the evidence we have collected does not point to substantial differences when assessing the strength of the competitive constraints that Mastercard and Visa face on consumer and commercial cards:

- On the acquiring side, the evidence does not point to significant differences in the effectiveness of competitive constraints.
- On the issuing side, the evidence on competitive constraints on Mastercard and Visa encompasses both consumer and commercial cards.

3.41 In our analysis of competitive constraints, we have therefore considered consumer and commercial cards jointly.

Segmentations based on transaction type

3.42 Cards are used as payment methods in different payment 'environments'. Possible segmentations include:

- Card Present (CP) payments, which are typically made in a physical store, versus Card Not Present (CNP) payments, which are typically made online.
- Spontaneous payments versus regular payments (see paragraph 3.45).
- Domestic versus cross-border transactions.

3.43 There are reasons for considering these segments separately. For example, some scheme fees differentiate between CP and CNP transactions, and between domestic and cross-border payments.[63] The alternatives available to consumers and merchants may also differ across transaction types. For example, cash can be an alternative to cards for CP payments, but not for CNP payments.[64] Some Mastercard documents also discuss competition specific to particular transaction types.[65]

3.44 However, for the purpose of our analysis, we considered that the differences were not substantial enough to warrant separate assessments for different transaction types. We have therefore developed a single analysis but have considered, where relevant, the differences between transaction types in our competitive assessment.

63 Examples are presented in Annex 8.

64 See the analysis in Chapter 4.

65 See Annex 1, paragraphs 1.39 to 1.47.

Segmentations based on the types of merchants served

3.45 Cards are accepted as payments by a wide range of merchants. They are accepted both by merchants serving consumers (consumer to business (C2B) transactions) and by merchants catering to other businesses (business to business (B2B) transactions). Merchants serving consumers also vary depending on whether they predominately receive regular or spontaneous payments:

- regular payments are those made by consumers at consistent intervals (such as yearly, monthly or weekly) and which consumers are committed in advance to pay; examples include rent, mortgage repayments, utility bills and subscription fees
- spontaneous payments are those items of spending that an individual is not committed in advance to making

3.46 The competitive constraints that cards face may differ across merchant types. For example, as discussed in Chapter 4, the possible alternative payment methods differ between B2B and C2B transactions; as a result, the share of card payments differs markedly between C2B and B2B payments. Some Mastercard and Visa documents also discuss competition specifically for B2B transactions. Specific payment methods can also be more suitable to either regular or spontaneous payments. For example, Direct Debit is typically used for regular payments only.

3.47 While we recognise the possibility of a difference in competitive constraints between different merchant types, we have not developed separate analyses. This is because card fees do not typically vary according to the identity of the merchant or the type of good or service sold. In Chapter 4, however, we discuss the extent to which alternatives available only for specific types of merchants can constrain Mastercard and Visa's fees on the acquiring side.

Alternative payment methods

3.48 When assessing the competitive constraints Mastercard and Visa are subject to, we have sought to consider all the services alternative to Mastercard's and Visa's card scheme (i.e., not competing for the provision of specific core or optional services as defined above) that could impose a constraint on the schemes. This has led us to identify different sets of potential alternatives on the acquiring and issuing sides.

3.49 On the acquiring side, we have considered the alternatives to Mastercard's and Visa's card schemes that could potentially be available to either acquirers or merchants. We have assessed the constraints that result from the availability of payment methods which merchants could, at least in principle, use as alternatives to cards. Our analysis, therefore, considers the extent of competition not only from other card schemes, but also from a range of card-based and non-card-based payment methods, including digital wallets, Buy Now Pay Later (BNPL) solutions, open banking payments, cryptocurrencies, and cash.

3.50 On the issuing side, we have focused on competition for card-issuing contracts.[66] We consider that, in the UK, the provision of debit and credit cards is a standard component of the service that retail banks offer to their customers. Therefore, we do not consider that, currently, other payment methods could be an alternative to cards from the issuer's perspective. Similarly, three-party card schemes such as American Express are typically not an alternative, as they do not rely on third-party issuers. We have therefore focused on the competition between four-party card schemes and, in practice, between Mastercard and Visa, as these are typically the only two schemes competing for issuing contracts in the UK.[67]

Geographic scope

3.51 Mastercard and Visa offer broadly the same services at European (or, in some cases, global) level. However, the competitive conditions they face are likely to differ across countries:

- While Mastercard and Visa set some scheme and processing fees at the same level across Europe, many other fees are set at different levels in different countries.
- As discussed in Chapter 4 in the case of processing services, the presence of alternative providers varies across countries.
- Different countries vary in relation to the presence and use of alternative payment methods.

3.52 For these reasons, we have assessed the competitive constraints that Mastercard and Visa face on a UK basis. We have however considered the extent to which competitors operating in other countries may be able to enter the UK market and may therefore be imposing a competitive constraint on Mastercard and Visa.

Summary of our approach to the analysis

3.53 For the reasons discussed above, in the following chapters we analyse the competitive constraints that Mastercard and Visa face separately for the acquiring and the issuing side, while considering the possible interactions between the two sides.

- On the acquiring side, we assess separately the constraints that Mastercard and Visa face due to competition in the supply of (i) core scheme services, (ii) core processing services, and (iii) a range optional services, including from alternative payment methods. Where relevant we have considered in our competitive assessment (i) the differences between transaction types and (ii) the extent to which alternatives available only for specific types of merchants constrain the schemes.
- On the issuing side, we focus on the constraints due to competition between Mastercard and Visa and do not explicitly separate between core scheme services, core processing services, or optional services.

3.54 On both sides, we jointly considered the constraints that apply to credit or debit cards and to consumer or commercial cards.

3.55 Our analysis is conducted on a UK basis.

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66 We recognise that card schemes may have to compete with other payment methods to win the preference of cardholders. However, we have not assessed this form of competition in our analysis.

67 For co-branded cards, we have also considered competition from American Express.

4 Competitive constraints on the acquiring side

Four-party card schemes like Mastercard and Visa are two-sided networks, serving users on both sides of the payment system they operate: issuers and cardholders on one side (the issuing side), and acquirers and merchants on the other side (the acquiring side).

For the reasons considered in Chapter 3, paragraphs 3.13 to 3.22, we assess the extent to which Mastercard and Visa are subject to effective competitive constraints on the supply of scheme and processing services separately for the acquiring and for the issuing side. This chapter sets out our assessment of the competitive constraints that Mastercard and Visa face on the acquiring side. Competitive constraints on the issuing side are considered in Chapter 5.

This chapter includes an assessment of the extent of the competitive constraints that Mastercard and Visa face in the supply of core scheme services, core processing services, and a range of optional services offered to acquirers and merchants, including from the availability of alternative payment methods and from current or potential providers of processing services and of optional services.

We have found that:

- Mastercard and Visa do not face effective competitive constraints in the provision of core scheme services and core processing services
- Mastercard and Visa are subject to varying degrees of constraint across their optional services, with stronger indications that a lack of effective alternatives results in the schemes not facing effective competitive constraints in the supply of some of these services

Introduction

4.1 As set out in Chapter 3, on the acquiring side we have defined separately core scheme services, core processing services, and a range of optional services. Therefore, in this chapter, we assess the strength of the competitive constraints that Mastercard and Visa face separately for these different types of service. However, for the purposes of this market review, we did not seek to carry out a detailed assessment of competitive constraints for each individual optional service, but instead focused on those which we considered more significant (based primarily on the revenue generated by Mastercard and Visa from the services).

4.2 Competitive conditions can be different between the different types of core and optional services, reflecting differences in the alternatives available to acquirers or merchants. In particular, competitive conditions in the supply of core scheme services, which acquirers have to purchase from the scheme operator as a condition for their participation in a scheme, may in principle be different from those in the supply of core processing services (as in principle these could be offered by processors other than Mastercard and Visa).

Moreover, competitive conditions can further differ for at least some optional services, which are complementary to core scheme and core processing services, and for which direct alternatives may be available. In addition, as set out in Chapter 3, we have also considered competitive constraints arising from alternative payment methods which do not provide core or optional services defined above (see paragraphs 3.48 and 3.49 above).

4.3 On the acquiring side of the network, Mastercard and Visa usually only have a direct commercial relationship with acquirers. However, we assess that potential competitive constraints can come from three levels:

- **Acquirer-level constraints:** These are present if acquirers can use alternative suppliers when providing merchants with access to card payments (or have sufficient countervailing buyer power to negotiate lower fees). Any such alternatives would result in a direct competitive constraint on Mastercard and Visa.
- **Merchant-level constraints:** These are present if merchants can either negotiate Mastercard's or Visa's prices down, substitute cards with alternative payment methods, either fully or partially, or source optional services from alternative providers. This ability could result in an indirect competitive constraint on the fees that Mastercard or Visa could charge to acquirers, and that acquirers pass through to merchants.
- **Wallet-level constraints:** These arise from choices made by operators of payment methods that can use Mastercard or Visa's payment infrastructure or choose alternative payment rails. The main examples are digital wallets, which may support multiple underlying payment rails and potentially influence users' choice of payment rail.

4.4 In this chapter, we consider for each service all three levels of competitive constraint.

4.5 While the analysis developed in this chapter is framed in terms of constraints on Mastercard's and Visa's fees, the existence or absence of effective competitive constraints also has implications on non-price features of the services that the schemes provide to acquirers and merchants, as competitive constraints affect firms' incentives to innovate and improve the quality of their services.[68]

4.6 The rest of this chapter is structured in five sections:

- In the first section we assess the extent to which acquirers, merchants and wallets are able to substitute Mastercard or Visa cards with other payment methods. The constraints potentially arising from this ability would apply to all the types of core and optional services defined above.
- The following three sections consider for each of core scheme services, core processing services and optional services the degree of competitive constraints arising from either the availability of alternative providers of the respective services or, in the case of some optional services, of alternative ways in which acquirers and merchants can satisfy the same business needs.
- The final section presents our conclusions on the competitive constraints that Mastercard and Visa face on the acquiring side.

68 See also Chapter 6, paragraphs 6.183 to 6.185.

Competitive constraints from the availability of alternative payment methods

4.7 In this section, we consider to what extent the availability of alternative payment methods results in competitive constraints on Mastercard and Visa. Such constraints would be present if acquirers, merchants or wallet operators could move away, either totally or partially, from either Mastercard's or Visa's card schemes, relying on other payment methods instead. These competitive constraints would potentially apply to all the services that Mastercard and Visa offer to acquirers – core scheme services, core processing services and optional services. We develop the analysis by considering in turn the three levels at which the potential constraint could be exercised, as defined in paragraph 4.3 – the acquirer level, the merchant level, and the wallet level.

4.8 Our assessment is limited to competitive constraints on the acquiring side – specifically constraints that may affect the fees Mastercard and Visa charge to acquirers and those aspects of service quality that are specific to the acquiring side (some of which are discussed in Chapter 7). We acknowledge that each scheme also faces a degree of competition (from each other and from other payment methods) on the issuing side, i.e. in relation to the adoption and use of their cards by consumers. Indeed, Mastercard's and Visa's internal documents contain discussions of the competition they face from alternative payment methods, which we summarise in Annex 1.[69] This can give the schemes an incentive to invest to improve the convenience of card payments for cardholders (see Chapter 3, paragraph 3.16). This form of competition, however, does not directly constrain the schemes on the acquiring side, and therefore does not directly affect factors (such as fees and elements of service quality) that are specific to the acquiring side. In our analysis, therefore, we consider this form of competition only to the extent that it has indirect impacts on acquiring-side constraints – for example, by affecting merchants' ability to steer their customers towards alternative payment methods.

Acquirer-level constraints

4.9 To assess acquirer-level constraints, we have considered whether acquirers can credibly offer their merchants access to only one of Mastercard's or Visa's schemes.

4.10 As summarised below, evidence shows that acquirers could not credibly refuse to participate in either scheme in response to an increase in scheme or processing fees:

- Almost every acquirer responding to our information requests told us that they have to offer acquiring services for both Mastercard and Visa because otherwise they would lose potential customers (that is, merchants) or would fail to acquire them.[70] One acquirer explained that not offering Visa or Mastercard would entail 'critical and existential losses' for its business, and most likely any other payment processing provider to merchants.[71] Similarly, another told us that Visa and Mastercard are the 'bare minimum payment methods' and that it would 'be unthinkable to attempt to compete with even just one of the two'.[72]

69 Mastercard's and Visa's submissions and internal documents on the competitive landscape they operate in are discussed in Annex 1, paragraphs 1.12 to 1.69.

70 Stakeholder responses to PSR information requests dated 11 January 2023 [✂] and 8 February 2024 [✂].

71 Stakeholder response to the PSR information request dated 11 January 2023 [✂].

72 Stakeholder response to the PSR information request dated 11 January 2023 [✂].

- Acquirers' lack of choice is also [✂]. An internal document from 2017 comments on the [✂].[73]
- All of the 17 acquirers we engaged with offer acquiring services for both card brands.[74]

4.11 We therefore consider that, at the acquirer level, Mastercard and Visa do not face any competitive constraint as a result of the availability of alternative payment methods.

Merchant-level constraints

4.12 If merchants can substitute Mastercard's or Visa's payment cards (fully or partially) with alternative payment methods (including the other scheme's cards), it could result in an indirect competitive constraint on the fees that Mastercard or Visa could charge to acquirers, which acquirers pass through to merchants via the MSC. This constraint would apply similarly to all scheme and processing fees, which for merchants are components of the MSC.[75]

4.13 In principle, merchants can respond to increases in the MSC attributable to rises in scheme and processing fees by:

- limiting card acceptance (for example, by declining or restricting acceptance of certain cards)
- continuing to accept cards but steering consumers towards alternative payment methods

4.14 The ability and incentive of merchants to take any of these actions would depend on the availability of alternative payment methods and the costs merchants would incur in both adopting and using them. This includes both the cost of the alternative payment methods and the potential revenue losses resulting from increased friction at checkout or from consumers' inability to use their preferred payment method.

4.15 Our analysis of merchant-level constraints is structured in six sections:

- The first two sections summarise the relevant submissions from Mastercard and from Visa on the overall strength of competitive constraints from alternative payment methods. More detailed submissions on specific payment methods are reported in later sections where relevant.
- The third section explains why, when considering merchant-level competitive constraints, we focus on those merchants that receive predominately spontaneous consumer payments.
- The fourth section considers merchants' ability and incentive to decline or limit card acceptance.

73 [✂].

74 More detailed evidence on this point is provided in Annex 2, paragraphs 2.25 to 2.30.

75 Merchants' ability to choose between acquirers, and the resulting competition in the acquiring market, also give acquirers an incentive to look for a processor providing the best combination of price and service quality, and to negotiate individual discounts on scheme and processing fees. This form of constraint from merchants (which operates through choices made by acquirers) will be considered in the section on competitive constraints specific to core processing services. Merchants may also have the ability to choose whether to use specific optional services, therefore imposing a competitive constraint on Mastercard's and Visa's optional fees. This will be discussed in the section on competitive constraints specific to optional services.

- The fifth section focuses on the ability and incentive of merchants to steer consumers towards alternative payment methods. In this context, we consider the payment methods potentially available to merchants.
- The last section presents our conclusions on merchant-level constraints.

What Mastercard told us

4.16 Mastercard explained that when it competes for the use of its cards, it does so for each transaction and against both other card schemes and a wide array of payment methods, including cash, Direct Debit, Faster Payments, Buy Now Pay Later (BNPL), digital wallets and Open-Banking-enabled credit transfers.[76] Mastercard submitted that card schemes are constrained by merchants, who can choose which payment method to accept and not accept.[77]

4.17 Mastercard also told us about possible future developments which may impact UK payments[78]:

- Big tech firms could develop in-house processing to utilise their large customer base, which could create new methods to make payments that are alternatives to cards.
- Embedded finance integrates financial products directly into a merchant's products and services. By creating distance between the payment method and the final consumer, it would give merchants increasing ability to influence payment methods.
- Technological and regulatory changes have led to new providers and new competitive dynamics, with stablecoins and central bank digital currencies being one future development.[79]

4.18 Mastercard told us that the payments landscape in the UK encompasses many different types of transactions, varying according to who is making or receiving the payment (including consumers, government and businesses), the value of the transaction, whether the transaction is in store or remote, the extent to which the payment is recurring, or the type of merchant sector.[80] For some types of transactions, Mastercard noted that cards are far from being the most common payment method and a large number of transactions which could take place on cards currently are made through other payment methods (including cash, Direct Debit, and Faster Payments).[81] Although direct competition with some alternative payment methods may be concentrated on specific payment types, Mastercard submitted that the competitive implications affect all the segments in which cards operate, because the core product offering of card schemes is largely the same across the different segments.[82]

4.19 Mastercard submitted that widespread entry and expansion of new payment providers is not required in order for card scheme operators to be competitively constrained: the credible threat of entry is sufficient to lead to competitive constraints, even if the market shares of entrants are small. Mastercard told us that this is particularly the case in

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76 Mastercard response to PSR working paper dated 23 February 2023 [✁].

77 Mastercard response to PSR working paper dated 23 February 2023 [✁].

78 Mastercard response to PSR working paper dated 23 February 2023 [✁].

79 Further details on Mastercard's submissions on the competitive landscape it operates in are provided in Annex 1, paragraphs 1.19 to 1.20, 1.49, 1.53.

80 Mastercard response to PSR working paper dated 23 February 2023 [✁].

81 Mastercard response to PSR working paper dated 23 February 2023 [✁].

82 Mastercard's submissions on this point are presented in greater detail in Annex 1, paragraphs 1.36 to 1.38.

payments, which are subject to the prospect of tipping points. In particular, multi-homing can be expected to facilitate rapid switching to a new payment method if this method offers substantial mutual advantages to merchants and customers. Mastercard submitted that, because of this risk, incumbent payment platforms need to compete on innovation, quality and pricing in order to maintain their market share. Mastercard further submitted that this leads to positive competitive outcomes in the payments market without necessarily significant volatility in market shares.[83]

4.20 In response to our interim report, Mastercard submitted that its proactive response to future threats is evidenced by the various innovations and product enhancements it has undertaken, and that the continued and careful consideration of these competitive threats is evident from Mastercard's internal documents. For example, Mastercard told us that, in response to the threat of shifting market dynamics and increasing competition, its internal documents outline several proactive measures Mastercard is taking to maintain its competitiveness, enhancing user experiences and security, enriching its propositions and providing choices across digital transactions.[84]

4.21 Observing that the interim report found that Mastercard's cards are cheaper for merchants to accept than other payment methods, Mastercard submitted that this is evidence that it faces constraints on its pricing.[85]

4.22 Mastercard submitted that, while the evidence presented in the interim report shows that currently the majority of merchants do not have the incentive to steer away from Mastercard given its attractive offering and pricing below alternatives, it also demonstrates that they have the ability to do so. Mastercard told us that whether any merchant has an incentive to steer is an outcome of the competitive process rather than a feature of it, and that the key question to be asked is whether merchants have the ability (that is, the effective means) to steer.[86]

What Visa told us

4.23 Visa submitted that merchants and consumers can access a wide range of card payment schemes (including American Express, Diners Club International, JCB, Mastercard, UnionPay and Visa), open banking-enabled payments, real-time account-to-account payments, digital wallets (including PayPal, Revolut, Google Pay, Apple Pay and Samsung Pay), and BNPL services. It noted that card payments from any scheme accounted for only a small proportion of total payment flows in the UK (approximately 13% in 2021) with payments using a Visa card accounting for an even smaller proportion (approximately 9% in 2021).[87]

4.24 Visa told us that merchants may choose not to accept certain payment options if they consider the benefits of accepting a particular payment option do not outweigh the costs. Visa submitted that merchants have agency to not accept a payment method and can nudge customers towards different payment methods that are better suited to their needs. Differences in the cost of acceptance will therefore feed into merchant decisions on which payment methods to offer and how to present these to customers. Therefore, the costs to

83 Mastercard response to PSR working paper dated 23 February 2023 [✂]. Mastercard's submissions on this point are presented in greater detail in Annex 1, paragraphs 1.50 to 1.52.

84 Mastercard response to MR22/1.9 (21 May 2024), page 22.

85 Mastercard response to MR22/1.9 (21 May 2024), page 15.

86 Mastercard response to MR22/1.9 (21 May 2024), page 24.

87 Visa response to PSR working paper dated 23 February 2023 [✂].

merchants are a constraint on Visa's price setting.[88] The dynamic character of the UK payments landscape means that Visa has to invest in several areas to ensure that it continues to be the chosen payment method by being convenient, fast, efficient and safe while also delivering value for each transaction.[89]

4.25 Visa also told us, in 2022, that dynamic development of the UK payment landscape was expected to intensify[90]:

- Open banking[91] was forecast to be used by 60% of the UK population by 2023, with users reportedly increasing by over 100% during 2022, and had already enabled the entry and expansion of many providers. The dynamic development of the UK payment landscape was expected to intensify further as the New Payments Architecture facilitates the expansion of account-to-account retail payments, and could strengthen innovation and competition between payments systems as well as payment solutions.
- HM Treasury and Bank of England initiatives for stablecoins and cryptoassets could mean that a 'digital pound' is launched, which would be designed for everyday payments by households and businesses.
- Payment solutions providers like Revolut and Monzo, and big tech players like Amazon and Apple have established consumer bases and are increasingly leveraging these to provide alternative payment solutions for payment users.[92]

4.26 In response to our interim report, Visa submitted that there are clear examples of rapid market disruption in other European countries which illustrate that the payment landscape can rapidly evolve in response to entry and expansion. For example, in Sweden, in 2023, BNPL accounted for a materially larger share of e-commerce transactions than credit and debit cards. In Denmark, the digital wallet MobilePay only took three years from launch to obtain 3 million users (out of a total population of approximately 5.9 million) and now has more than 4.4 million users. In Poland, the account-to-account solution offered by Blik, launched in 2015, accounted for almost 70% of e-commerce spending in 2022. Visa submitted that this, and other factors, point to and further support the magnitude of the threat from alternatives and the need for Visa to respond competitively to this.[93]

Why we focus on spontaneous consumer payments

4.27 Merchants operating in different sectors differ in terms of the types of payment they predominantly receive. In this sub-section we consider which types of payments and, therefore, which types of merchants, matter most when assessing merchant-level constraints on card schemes. In other words, we identify the segments where competitive alternatives should be present in order to effectively constrain Mastercard and Visa.

4.28 As seen in paragraph 4.18 above, Mastercard has stated that the implications of competitive constraints affecting card schemes on specific payment types affect all the segments in which cards operate, because the core product offering of card schemes is largely the same across the different segments.

88 Visa response to PSR questions dated 12 January 2022 [✂].

89 Visa response to PSR questions dated 9 November 2022 [✂].

90 Visa response to PSR questions dated 9 November 2022 [✂]; Visa response to MR22/1.6 (30 June 2023) [✂].

91 See paragraph 4.72 for open banking statistics.

92 Further details on Visa's submissions on the competitive landscape it operates in are provided in Annex 1, paragraphs 1.13 to 1.17 and 1.54 to 1.55.

93 Visa response to MR22/1.9 (21 May 2024), Technical Annex 1, paragraph 1.12.

4.29 We recognise that scheme and processing services, and the associated fees, are largely the same irrespective of the sector in which a payment is made. However, whether competitive constraints in specific segments have the potential to constrain scheme and processing fees would depend on the proportion of transaction volume and value that those segments account for.

4.30 UK Finance's *UK Payment Markets* report published in 2024 and the accompanying *UK Payment Statistics* include data on the use of different payment methods in 2023 in the UK across different segments. The report distinguishes between business and consumer payments. It defines business payments as payments made by any type of organisation, including commercial organisations, government, and not-for-profit organisations[94]; consumer payments include all payments made by individuals, including payments to businesses and to other individuals. Within consumer payments, the report distinguishes between spontaneous payments (that is, those items of spending that an individual is not committed in advance to making – for example, each month) and regular payments (that is, those payments which are made at consistent intervals such as yearly, monthly, or weekly, and which consumers are committed in advance to make).[95] The data shows that card transactions are concentrated in a small number of segments. In particular:

- consumer payments accounted for approximately 95% of card transactions by value[96] and 98% by volume[97]
- within consumer payments, spontaneous payments accounted for around 97% of card transaction volumes, with just 3% being made for regular payments[98]

4.31 The use of other payment methods varied substantially across segments: while Faster Payments and Bacs Direct Credit accounted for the vast majority of transactions (by volume and by value) in business payments[99] and Direct Debit accounted for most of the volume of regular consumer payments[100], the use of these payment methods for spontaneous consumer payments was minimal.[101] These large differences in the use of payment methods reflect the fact that different payment methods are better suited to different types of payments.[102] As a result, the competitive constraint that, for example, Direct Debit may impose on payment cards in the context of recurrent payments is likely to be more significant than the constraints it imposes for spontaneous payments. Conversely, payment cards are better suited to consumer payments, and especially to spontaneous payments, which are Mastercard's and Visa's core business [✂].[103]

94 UK Finance, *UK Payment Markets 2024*, page 87.

95 See *UK Payment Markets 2024*, page 60. The report also disaggregates spontaneous payments by sector – retail, travel, entertainment, person-to-business (P2B), person-to-person (P2P), and financial. See UK Finance, *UK Payment Markets 2024* and *UK Payment Statistics 2024*.

96 Based on data from UK Finance, *UK Payment Markets 2024*, page 24 and *UK Payment Statistics 2024*, Table 27.2.

97 Based on data from UK Finance, *UK Payment Statistics 2024*, Tables 27.1, 30.1 and 31.1.

98 Based on data from UK Finance, *UK Payment Statistics 2024*, Tables 30.1 and 31.1.

99 For volume data, see UK Finance, *UK Payment Markets 2024*, page 89; for value data, see UK Finance, *UK Payment Statistics 2024*, Tables 27.2 and 28.2, and *UK Payment Markets 2024*, page 24 (data for business payments can be obtained subtracting values for consumer payments from total values).

100 Based on data from UK Finance, *UK Payment Markets 2024*, page 66.

101 Moreover, within spontaneous payments, the use of Faster Payments was concentrated in two specific sub-segments – P2P and Financial payments. See UK Finance, *UK Payment Markets 2024*, pages 61 and 64.

102 This was recognised by Mastercard, who submitted that 'different payment options may be more or less suited to different payment needs' (Mastercard response to PSR 'Market review of card scheme and processing fees' and 'Market review of UK-EEA consumer cross-border interchange fees' draft terms of reference). A similar point is made in a Mastercard internal document February 2021, which states that [✂].

103 For example, a 2022 Mastercard internal document [✂]. A Visa document from 2022 refers to [✂].

4.32 We consider that given the small proportion of card transactions taking place in the UK outside of the spontaneous consumer payments segment, alternatives only available outside of this segment represent an extremely limited competitive constraint on Mastercard's or Visa's scheme and processing fees. Let's assume, for example, that cards faced a stronger competitive constraint in business payments and in regular payments than they did in spontaneous consumer payments. A small fee increase that led to a reduction in the volume of card transactions in business payments and regular payments would easily still be profitable in the absence of a constraint in spontaneous consumer payments, given that business payments only account for around 5% of overall card transactions by value[104] and around 1.8% by volume, while regular payments account for an additional 3.4% by volume.[105]

4.33 Mastercard and Visa may be able to compete in segments where payment methods like Direct Debit are more prevalent not through pricing, but by offering non-card payment methods. An internal Visa document from 2018 notes that [✁].[106] Consistently, an internal Visa document from 2022 states that [✁].[107,108] Mastercard [✁].[109,110] If Mastercard and Visa can compete in different segments with different services, the competitive constraints faced in one segment are unlikely to constrain their fees in other segments.

4.34 For these reasons, we consider the competitive alternatives that Mastercard and Visa may face outside of their 'core business' of spontaneous consumer payments result in an extremely limited constraint on their scheme and processing fees. In the remaining elements of our analysis, therefore, we focus on competitive alternatives available to merchants that receive predominately spontaneous consumer payments, which constitute the bulk of card transactions in the UK.

Declining or limiting card acceptance

4.35 We have considered whether declining or limiting card acceptance may be deployed by merchants to avoid increases in scheme or processing fees. In this subsection we look at whether merchants receiving predominately spontaneous consumer payments would have the incentive to decline or limit card acceptance in response to increases in scheme or processing fees.

4.36 According to UK Finance, in 2023 cards accounted for 80% of all spontaneous consumer payments in the UK, with the same being the case for retail payments and even higher proportions being reported for the travel and entertainment segments.[111] In 2021, Mastercard and Visa respectively accounted for [✁] and [✁] of all card transactions by volume (and for [✁] and [✁] by value).[112]

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104 Based on data from UK Finance, *UK Payment Markets 2024*, page 24 and *UK Payment Statistics 2024*, Table 27.2.

105 Based on data from UK Finance, *UK Payment Statistics 2024*, Tables 27.1, 30.1 and 31.1.

106 [✁].

107 [✁].

108 Evidence from Visa's documents related to this point is included in Annex 1, paragraphs 1.250 to 1.253 and 1.330 to 1.334.

109 [✁].

110 Evidence from Mastercard's documents related to this point is included in Annex 1, paragraphs 1.246 to 1.249.

111 See UK Finance, *UK Payment Markets 2024*, pages 61 and 64.

112 PSR analysis of data submitted by card schemes. As Mastercard won issuing contracts with some large UK issuers in recent years (see Chapter 5), the proportion of Mastercard and Visa's combined transaction value attributed to Mastercard has increased from [✁] to [✁] between 2021 and 2023.

4.37 Given the significant market presence of both Mastercard and Visa in the UK, we consider that declining Mastercard and/or Visa would have a major effect on a merchant's business. In such a scenario, customers denied their preferred payment card might buy instead from an alternative merchant who continues to accept it. Indeed, it is the fear of losing customers that results in merchants typically accepting cards even when these are more costly to them than alternative payment methods – a situation often referred to as the must-take status of the Mastercard and Visa card schemes.

4.38 When compared to the relatively limited impact that an increase in scheme or processing fees has on the overall MSC[113], the effect on merchants of declining card acceptance in response to an increase in scheme and processing fees would make this an unviable option for most merchants: the loss in sales margin would be significantly larger than any savings on payment costs.

4.39 We recognise that for specific payment segments, the effect on a merchant's business of declining card acceptance may be more limited, especially if card payments are less prevalent. Merchants may therefore be more willing to limit card acceptance for these types of payments. This may be the case, for example, with regular consumer payments, for which non-card payment methods are a widely adopted option. However, as discussed above, this is unlikely to result in an effective competitive constraint.

4.40 We also recognise that some merchants might be less constrained by the risk of losing customers, if they enjoy a particularly strong position in the markets in which they operate. This may give them sufficient bargaining power to negotiate lower scheme or processing fees, especially if they account for a substantial volume of card transactions. We note, for example, that in 2021 Amazon announced its intention to stop accepting Visa credit cards and that this decision was later reversed [✂].[114,115] The constraint that these merchants can exert on the cards, however, has an effect only on the level of the fees charged to them, not on what other merchants pay.

4.41 The evidence we received from merchants is consistent with this assessment. We asked merchants if, in the last five years, they had changed, or considered changing, their acceptance of some or all types of Mastercard- and Visa- branded cards. Most merchants that responded to our information request indicated they had not.[116] Only two out of nine merchants indicated that they had made changes to the type of cards they accept by no longer supporting credit cards[117] or personal credit cards.[118] We note, however, that payments to these two merchants fall in the 'financial payments' category, where alternatives to cards are widely used[119], and that one of these merchants is [✂] not subject to competition and may therefore have more freedom over the payment methods it accepts.

113 For more details, see paragraph 4.105.

114 Further evidence on [✂] is presented in Annex 2, paragraphs 2.66 to 2.67.

115 Mastercard mentioned the case of Google's decision to turn off card acceptance for its ad services (Mastercard response to MR22/1.9 (21 May 2024), page 26). This is another case of a merchant with a particularly strong position in its market.

116 Stakeholder responses to PSR information request dated 11 January 2023 [✂].

117 Stakeholder response to PSR information request dated 11 January 2023 [✂].

118 Stakeholder response to PSR information request dated 11 January 2023 [✂].

119 UK Finance defines consumer financial payments as those consumers payments that fall into the following categories: (a) spontaneous payments made for one-off transactions such as transferring money to a savings or ISA account or paying off part of a credit card balance; and (b) regular payments such as mortgages, savings, investments, insurance, pensions, loans, and regular payments for credit card bills (see *UK Payment Markets 2024*, pages 63 and 66). According to UK Finance, in 2023 55% of spontaneous financial payments were made through Faster Payments. See UK Finance, *UK Payment Markets 2024*, page 64.

4.42 Evidence from merchant surveys conducted by Visa in 2019 and 2022[120] is also consistent with our assessment. It shows that declining card acceptance in response to an increase in scheme and processing fees would be an unviable option for most merchants due to the adverse effects of doing so, especially those in industries where the majority of payments are spontaneous consumer payments. Respondents were asked to indicate on a scale from 1 to 5 with which of the two following statements they agreed more: (i) 'my business couldn't survive if it didn't take card payments', and (ii) 'my business would be fine if it didn't take card payments'.[121] Around half of the respondents largely agreed with the former statement, with around 30% agreeing with the latter. A further approximately 20% did not have a strong view either way.[122] The data from 2019 (but not 2022) can be disaggregated by industry. The percentage of respondent merchants agreeing with the statement that their business couldn't survive if it didn't take card payments was particularly high in those industries where the majority of payments are spontaneous consumer payments: 75% of respondents agreed among wholesale and retail merchants, and 65% among accommodation and food merchants; only 9% of respondents among wholesale and retail merchants and 19% among accommodation and food merchants agreed with the statement that their business would be fine if it didn't take card payments. We acknowledge that respondents in industries less exposed to spontaneous consumer payments (for example, manufacturing) are more likely to agree with the second statement, suggesting they also have some bargaining power. However, as we concluded in paragraph 4.34, this is unlikely to be sufficient to effectively constraint Mastercard and Visa's scheme and processing fees.

4.43 From the above, it is clear that UK merchants in industries where the majority of payments are spontaneous consumer payments cannot be expected to respond to an increase in scheme and processing fees by declining the card brand as a whole. Thus, our view is that Mastercard and Visa have must-take status, as there is only very limited scope for such merchants to decline or limit acceptance of either card brand.

Consumer steering towards alternative payment methods

4.44 As seen in paragraph 4.19, Mastercard submitted that, in order for alternative payment methods to impose a competitive constraint on cards, it is sufficient for a credible threat of entry to be present, even if the market shares of entrants are small.

4.45 We agree with Mastercard that market shares may not be a good proxy for the competitive constraint that alternative payment methods impose on card schemes. However, we disagree that a credible threat of entry of alternative payment methods is sufficient to impose a competitive constraint on cards on the acquiring side. Alternative payment methods, whether already in the market or potentially entering, can impose constraints on acquiring-side scheme and processing fees only if merchants had effective methods to steer consumers away from cards and towards these alternative payment methods (and had sufficient incentive to do so), or felt able to decline cards in favour of these payment methods. In the absence of effective steering methods, the mere threat of

120 In the 2019 and 2022 surveys, anonymous responses were collected from 2,000 and 1,000 UK SME merchants (defined as having less than 250 employees) respectively. In 2019, the vast majority of merchants had fewer than ten employees. The data is not disaggregated in this way in 2022. Visa response to the information request dated 10 October 2024 [✂]. Further information on and assessment of Visa's merchant surveys is included in Chapter 6, paragraphs 6.161 to 6.162 and 6.165.

121 The question was not included in the merchant survey that Visa conducted in 2024.

122 51% of respondents in 2019 and 49% in 2022 selected either 1 or 2 on the scale; 28% of respondents in 2019 and 32% in 2022 selected either 4 or 5. Visa response to the information request dated 10 October 2024 [✂].

entry of new payment methods is not in itself sufficient to impose a competitive constraint on card schemes.[123] While widespread steering is not necessary in order for a competitive constraint to exist, a credible threat of steering is required.

4.46 In our analysis, therefore, we have considered whether merchants may be able to constrain scheme and processing fees by steering consumers towards alternative payment methods, for example by:

- introducing card surcharges or offering discounts or bonuses for using an alternative payment method (to the extent permitted under UK law)
- providing information on the fees facing a merchant
- asking the consumer to choose a different payment method
- presenting website payment options in a way that nudges consumers to use an alternative payment method (for example, by making these methods more prominent)

4.47 For a merchant wanting to reduce its exposure to scheme and processing fees, there are two key questions:

- What alternative payment methods are available to a merchant?
- What are the likely costs and risks of trying to steer potential consumers to use an alternative payment method instead of a Mastercard- or Visa-branded card; in particular, the risk of losing the transaction altogether?

Alternative payment methods

4.48 Consumers use a number of payment methods in the UK and many UK merchants accept several payment methods in addition to Mastercard and Visa cards. In this sub-section, we assess merchants' ability and incentives, currently or in the short to medium term, to steer their customers away from either Mastercard or Visa cards and towards:

- other card schemes, including the possibility of steering customers from Mastercard to Visa or vice versa
- digital wallets and Buy Now Pay Later (BNPL) solutions
- open banking payments and other real-time payments
- cash
- cryptoassets[124]

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123 As seen in paragraph 4.19, Mastercard submitted that rapid switching to a new payment method can happen if this method offers substantial mutual advantages to merchants and consumers. If we accept this argument, given that consumers have the greatest influence over the payment method chosen to complete a transaction, in order to avoid rapid switching away from cards the schemes would have to ensure that cards remain a very convenient and attractive way for consumers to pay. While this may require investment and innovation by card schemes, it would not necessarily constrain the level of scheme and processing fees charged to acquirers. Further discussion on the risk of market tipping and its implications for our analysis is included in Chapter 3, paragraphs 3.19 and 3.21.

124 In this section, we are not considering Direct Debit or cheques among the alternative payment methods we analyse. As seen in paragraph 4.31, above, Direct Debit is a commonly used alternative for regular payments, but not for spontaneous payments. As we have argued above, given that spontaneous payments constitute the bulk of card payments, constraints only applying to regular payments would not result in an effective constraint on scheme or processing fees. We do not consider cheques as their use has declined to very low levels, representing, in 2023, only 0.1% of the total number of spontaneous payments made by consumers in the UK (see UK Finance, *UK Payment Markets 2024*, page 61).

4.49 As noted in paragraph 4.22, Mastercard submitted that only the ability to steer is relevant for such analysis, as the incentive to steer is an outcome of the competitive process rather than a feature of it. As Mastercard has submitted (see paragraph 4.21), some alternative payment methods are more expensive for merchants than its cards, which Mastercard argued shows that the lack of incentives to steer customers away is a consequence of its scheme fees being sufficiently low due to that competitive process. We agree that, in principle, merchants' ability to steer their customers to actual or potential effective alternatives could lead to a competitive constraint on schemes resulting in lower fee levels that remove the incentive for merchants to actually steer their customers away from cards. However, we consider that there are reasons other than the competitive process for the fee differential between cards and some other payment methods. In our analysis below, when considering the price differences between cards and other payment methods, we explain why we do not consider them an outcome of acquiring-side competition between different payment methods.[125] In those cases, both merchants' ability and their incentive to steer their customers matter to the analysis of competitive constraints.

4.50 In the context of this analysis, we consider alternative payment methods only from the point of view of their impact on competitive constraints that Mastercard and Visa may face on the acquiring side (see paragraph 4.8). As set out in Chapter 3, competition between cards and other payment methods also takes place on the issuing/cardholder side, as card schemes try to convince consumers to use their cards rather than other payment methods. We also recognise that the level of adoption of a payment method among consumers could affect its suitability as an alternative for merchants. In this sense, there is a link between competition on the two sides. However, competition for cardholders constrains the fees that Mastercard and Visa can charge to merchants only if it results in greater interchangeability of different payment methods from a consumer's perspective, and therefore greater ability for merchants to either decline card acceptance or steer customers towards other payment methods. In our analysis, we have therefore considered the attractiveness of alternative payment methods for cardholders, as compared to cards, in the context of our assessment of merchants' ability to steer their customers towards those alternative methods (and in particular towards real-time payments and Open Banking payments). We have also considered the level of adoption of other payment methods among cardholders and how this may be expected to change in the short to medium term.

4.51 Consistent with our argument in paragraphs 4.27 to 4.34, our analysis in this section focuses on merchants operating in industries where the majority of payments are spontaneous consumer payments. Unless otherwise specified, references to merchants in this section should be understood as referring to merchants in these industries.

4.52 The evidence relevant to the assessment of competitive constraints from alternative payment methods is presented more fully in Annex 1 and is referred to where relevant below. In reaching our conclusions, we have considered the evidence in the round.[126]

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125 See paragraphs 4.61 and 4.67.

126 In its response to the interim report, Visa has pointed at specific internal documents that, in its view, demonstrate that alternative payment methods constrain Visa's pricing (see Visa response to MR22/1.9 (21 May 2024), Technical Annex 1, paragraphs 1.2 to 1.4). We recognise that some internal documents do discuss competitive constraints from alternative payment methods. These are included in Annex 1. However, we consider that focusing on specific, individual documents can be misleading and that our assessment appropriately weighs all the evidence at our disposal.

Card schemes

4.53 Mastercard and Visa are both very widely used card schemes in the UK. We therefore first consider the possibility of merchants steering consumers from Mastercard to Visa, or vice versa, in response to an increase in scheme or processing fees by one of the two schemes.

4.54 The 2024 UK Finance report indicates that, in 2023, 58% of debit cardholders had a single debit card, while 56% of credit card holders had a single credit card.[127] Consumer choice of card, especially of debit card, is dependent on their choice of bank and where to hold their current account(s). This choice is unlikely to be based solely on the scheme that covers a bank's debit cards. As a result, even cardholders with multiple cards do not necessarily hold both Visa and Mastercard.

4.55 Moreover, different cards (and the different accounts associated with them) may be used by a cardholder for different purposes. Cardholders may have a preference towards which card to use for a particular transaction[128] and, if so, may resist steering attempts.[129]

4.56 According to a Visa internal document, [✂].[130] Despite this difference, none of the merchants responding to information requests had tried to steer volumes from Mastercard to Visa or vice versa in the previous five years.[131]

4.57 Mastercard and Visa are not the only card schemes used to pay at UK merchants; others are American Express, Discover, JCB and UnionPay. The evidence we collected on these card schemes is summarised in Annex 1, paragraphs 1.306 to 1.325. The evidence includes data on the use of these card schemes in the UK, Mastercard's and Visa's submissions, evidence from their internal documents, and submissions from acquirers.

4.58 We received data from Mastercard, Visa, American Express, Discover and JCB which allowed us to compute the value of their UK card transactions in the years 2018 to 2021.[132] Discover and JCB had minimal transaction volumes, collectively accounting for a share of [✂] of the overall value of transactions involving a UK cardholder or a UK merchant. Such low transaction value was consistent with the very low number of cards on issue to UK cardholders: in 2021, Discover had less than [✂] cards on issue, and JCB had [✂].[133] American Express accounted for [✂] of the overall value in each of the four years.[134]

4.59 The presence of card schemes other than Mastercard, Visa and American Express is very limited in the UK. As such, they cannot be considered alternative payment methods that merchants can feasibly steer many of their customers towards.[135]

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127 UK Finance, [UK Payment Markets 2024](), page 33.

128 See the discussion in paragraph 4.101.

129 Points analogous to those made in paragraphs 4.54 and 4.55 were also made to the PSR by [✂].

130 [✂].

131 See Annex 2, paragraphs 2.89 to 2.90.

132 We have defined UK card transactions as any transactions involving a UK cardholder, a UK merchant, or both. We have been unable to get similar data from UnionPay. However, we expect the associated transaction values to be very small.

133 Stakeholder responses to PSR information request dated 11 January 2023 [✂].

134 The data is described in Annex 1, paragraphs 1.308 to 1.311.

135 Mastercard told us that Capital One's acquisition of Discover in February 2024 has the potential to transform a relatively small alternative card scheme into a major competitor, combining a bank and payment scheme to drive significant changes in the payments landscape (Mastercard response to MR22/1.9 (21 May 2024), page 21). Given the current minimal presence of Discover in the UK, we consider that this acquisition is unlikely to turn Discover into a major competitor in the short to medium term.

4.60 American Express has a more established presence in the UK and acquirers told us that accepting it is particularly important for some merchant categories, such as in travel and hospitality. As with other payment methods, merchants accept American Express because doing so likely leads to an increase in sales, as they face a group of potential customers for which American Express is the preferred payment method. The size of this group of customers, although likely significantly smaller than the groups of customers willing to use Mastercard or Visa cards, is significant enough for merchants to accept the fees associated with American Express.

4.61 We note American Express's fees are typically higher than those merchants pay on Mastercard and Visa consumer card transactions. This is a result of the different business models adopted by American Express. While the attractiveness of Mastercard and Visa to cardholders resides largely in their almost ubiquitous acceptance, American Express offers a differentiated product, which compensates for the more limited acceptance with larger financial incentives to cardholders.[136]

4.62 Given the difference in fees, even merchants accepting American Express would have in most cases no incentive to try to steer customers from Mastercard or Visa towards American Express. On the merchant side, therefore, the availability of American Express does not impose a competitive constraint on Mastercard or Visa.[137]

4.63 We therefore consider that merchants have little ability and, at least in the case of American Express, very little incentive, to steer customers away from either Mastercard or Visa cards and towards other card schemes (including from Mastercard to Visa or vice versa) in response to increases in scheme or processing fees.

Digital wallets and BNPL solutions

4.64 A wallet (or digital wallet) can be defined as a software, app, or online service that allows individuals or businesses to store payments data and make electronic transactions. There are three digital wallets with widespread usage in the UK: Apple Pay, Google Pay and PayPal.[138] The evidence we collected on these and other digital wallets operating in the UK is presented in Annex 1, paragraphs 1.80 to 1.176.

4.65 Currently, Apple Pay and Google Pay do not charge merchants for their service: merchants directly pay the fees associated with the underlying payment method used. Moreover, these two wallets, at the moment, only support cards. Therefore, they cannot be considered real alternatives to Mastercard and Visa.

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136 The larger incentives to cardholders allow American Express to sustain higher fees to merchants, consistent with the principle of 'merchant internalisation' (see Chapter 3, paragraph 3.16).

137 We recognise that [✂]. We recognise that [✂] (see Annex 1, paragraphs 1.315 to 1.321). We consider, however, that the competition with American Express takes place on the cardholder side. This is consistent with submissions from Mastercard, which told us that it has to persuade the payer to choose to use Mastercard and that it seeks to differentiate itself in several ways, including through speed, convenience, security, resilience, customer protection and marketing initiatives (Source: Mastercard response to PSR questions dated 9 November 2022 [✂]. While the level of acceptance of Mastercard and Visa among UK merchants may be one dimension of competition for cardholders, the presence of American Express does not in itself constrain the level of scheme and processing fees compatible with widespread acceptance of Mastercard and Visa cards.

138 More details on how digital wallets operate and on the differences between them are provided in paragraphs 4.119 to 4.120.

4.66 PayPal, on the other hand, charges merchants for the transactions facilitated by its wallet and value-added services, and the charge is not dependent on the underlying payment method used by the buyer. However, many of the transactions taking place through PayPal in the UK are funded through card payments.[139] To the extent that an increase in scheme or processing fees also affects PayPal and the increase is passed on to merchants as part of the fee PayPal charges, PayPal represents a weak alternative to Mastercard and Visa. Merchants, therefore, may have an incentive to accept PayPal as a payment method to increase their sales, but have limited incentive to steer customers from Mastercard or Visa towards PayPal in response to an increase in scheme or processing fees.

4.67 Similarly to wallets like PayPal, providers of BNPL solutions charge merchants a fee irrespective of the underlying payment method used by the buyer. The specificity of a BNPL solution is the provision of credit to buyers, allowing them to pay a purchase in instalments, often with zero interest rate. Evidence on BNPL solutions is presented in Annex 1, paragraphs 1.177 to 1.210.

4.68 The provision of credit by BNPL providers allows buyers to make purchases they may not have been able to make otherwise. This is also the reason why merchants accept BNPL solutions as payment methods, despite their providers typically charging much higher fees than for card transactions, as the merchants are funding the provision of credit to the buyer. However, while merchants may have a strong incentive to accept BNPL solutions, they have limited incentive to respond to an increase in scheme or processing fees by actively steering customers who would like to pay with a card towards using a BNPL solution, as this would result in much higher fees.[140]

4.69 We therefore consider that merchants have very limited ability or incentive to steer customers away from either Mastercard or Visa cards and towards digital wallets or BNPL solutions in response to increases in scheme or processing fees.

4.70 As mentioned in paragraph 4.3 above, in principle wallets and BNPL solutions could impose a competitive constraint on Mastercard and Visa through their operators' choices of which payment methods to support and to steer their customers to. We assess the strength of these constraints in paragraphs 4.119 to 4.147 below.[141]

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139 More data is provided in paragraph 4.137.

140 We recognise that, if a merchant does not know whether a customer would complete a transaction if they had to pay immediately, it may actively steer all customers towards BNPL (e.g., by showing this option prominently on its website). Assuming that this steering technique is effective (which, as discussed in paragraphs 4.101 to 4.102, may not be the case), it would result in higher fees for the merchant if the customer would have completed the transaction anyway, but would increase revenues if the customer would have not completed the transaction (or spent less). The net impact for the merchant could be positive. However, we consider that, even in this case, the competitive constraint on cards would be limited. First, in most cases, the difference in fees between cards and BNPL is so large that changes in scheme or processing fees are unlikely to significantly change the above calculation, and therefore impact merchants' choice of whether or not to promote BNPL. Second, BNPL is a sensible payment method to promote in this way only for merchants with large average payment values. This reduces the segments in which BNPL may impose some constraint on cards.

141 BNPL solutions can also compete with cards, and with credit cards in particular, by providing cardholders with an alternative source of credit. This competitive constraint, however, affects the cardholder side and would not have a direct impact on the fees that Mastercard or Visa charge to merchants.

Real-Time Payments and Open Banking

4.71 The use of Real-Time Payments (RTPs), which in the UK are based on the Faster Payments system, has long been limited to specific payment segments. According to UK Finance data, the use of Faster Payments is concentrated in business payments[142] and, within consumer payments, in the financial, person-to-person (P2P) and person-to-business (P2B) segments.[143] In recent years, the development of Open Banking has created the opportunity for the expansion of RTPs to other payment segments, making them a possible alternative to cards for a wider range of merchants. Our analysis of the competitive constraint RTPs pose to Mastercard's and Visa's cards in the UK is based on the evidence presented in Annex 1, paragraphs 1.211 to 1.293.

4.72 The use of Open Banking payments has increased substantially in recent years, albeit from a very low basis. The Open Banking Impact Report from October 2023 estimated that, as of June 2023, 10-11% of digitally-enabled consumers were active users of at least one Open Banking service[144], and showed a growing trend in the use of Open Banking payments in the UK: 54.5 million payments were made between January and June 2023, compared to 41.2 million in the previous six months.[145] This growth has been accompanied by the entry of a number of Payment Initiation Service Providers (PISPs).[146] No publicly available data exists on the volume and value of transactions initiated by each PISP. Companies mentioned in Visa's internal documents [✂].[147] Companies mentioned in Mastercard's internal documents [✂].[148] In the context of this market review, we have engaged with five PISPs, including most of those indicated as the main third-party PISPs in internal documents.

4.73 One of the benefits for merchants of Open Banking-based payments is their potential to provide a lower cost alternative to cards. Most of the PISPs we talked to explained that Open Banking payments are cheaper than cards for higher-value transactions but become more expensive than cards for low-value ones.[149] According to one PISP, [✂] is roughly the point at which Open Banking starts becoming better value for merchants.[150, 151]

4.74 Both Mastercard and Visa submitted that Open Banking has enabled the entry and expansion of a wide variety of players in the UK.[152, 153] This is reflected in Mastercard's documents, [✂]. This is reflected in Visa's documents, [✂].[154]

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142 See UK Finance, *UK Payment Markets 2024*, pages 17, 87 and 89.

143 The P2B segment is defined in the report as including payments to sole traders, builders, other service businesses and organisations such as schools, local government authorities and central government, as well as one-off donations to charities. Collectively, the financial, P2P and P2B segments represented, in 2022, 10% of all spontaneous consumer payments. See UK Finance, *UK Payment Markets 2024*, pages 62 and 64.

144 This proportion is much lower than the 60% indicated by Visa as a forecast for the end of 2023 (see paragraph 4.25).

145 The Open Banking Impact Report, October 2023.

146 There are now circa 100 PISPS registered with the UK's Financial Conduct Authority.

147 [✂]. In a submission, Visa also mentioned [✂] (Visa response to PSR questions dated 12 January [✂]).

148 [✂].

149 This reflects the fact that PISPs charge a fixed fee, while most card scheme fees are charged as a proportion of the payment value.

150 Call with stakeholder. [✂].

151 More detailed evidence on this point is included in Annex 1, paragraphs 1.260 to 1.264.

152 Visa response to PSR questions dated 9 November 2022 [✂].

153 Mastercard response to PSR working paper dated 23 February 2023 [✂].

154 Evidence from Mastercard's and Visa's submissions and internal documents is reported in greater detail in Annex 1, paragraphs 1.217 to 1.240, and summarised in paragraphs 1.289 and 1.290.

4.75 Open Banking payments, however, are currently constrained in their ability to provide an effective alternative to most card payments. The report for the, now wound down, Joint Regulatory Oversight Committee (JROC)[155] on *The Future Development of Open Banking in the UK*, published in February 2023[156], highlighted several barriers limiting merchants' adoption of open banking payments. These include:[157]

- Functional gaps – There is a need to enhance the level of certainty as to whether the payment was executed, the status of the payment or why it has failed.
- Performance – The levels of payment conversion, reliability and resilience need to be higher to enable more payments use-cases to be viable.
- Asymmetry of costs and incentives within the ecosystem.

4.76 The PISPs we engaged with in this market review indicated that the way Open Banking and card payments compare varies across e-commerce, repeated and in-person payments. Overall, PISPs considered that Open Banking's user experience can be better than cards for e-commerce but is currently worse for repeated and in-person payments. As a result of these functional and performance gaps, Open Banking payments have so far mainly addressed payment types where cards have had a limited presence – for example, HMRC payments resulting from tax self-assessments – and have provided an alternative to cards in limited niches, such as in payments to high-risk merchants, financial services or utility suppliers.[158]

4.77 Responding to our interim report, one merchant submitted that for it to sponsor and promote a new non-card payment option the product must enable payment flows (in store and online) that are at least as user friendly as the current journeys, easy for all customers to adopt and use, and economical for the merchant in pricing structure. The merchant believed that account-to-account payments currently fall short of competition for the following three key reasons:

- Not possible – In some instances account-to-account payments are not possible because the customer is not present in session. For example, for grocery delivery the final amount is not known when the customer checks out.
- Not practical – At POS in store an account-to-account payment is possible, but too cumbersome to use in practice. Average transaction time is six seconds with cards, compared to 10–30 seconds with account-to-account due to the requirement for the bank to authenticate the customer, which slows down the customer journey at the till.
- Not economical – The fixed-cost model makes account-to-account solutions not economical for retailers with low value, high volume transactions.[159]

155 In line with the National Payments Vision, JROC has been wound down, with its final meeting held on 3 December 2024. It has been replaced by the Open Banking Steering Group chaired by the FCA, which will drive forward open banking initiatives.

156 SWG-Report-The-Future-Development-of-Open-Banking-in-the-UK-Feb-2023.pdf (openbanking.org.uk)

157 See page 34 of the report. A more extensive summary of the considerations made in the report is included in Annex 1, paragraphs 1.278 to 1.288.

158 Further details on PISPs' submissions on these points is presented in Annex 1, paragraphs 1.256 to 1.259 and 1.265 to 1.268.

159 [✁] response to MR22/1.9 (21 May 2024), Question 4.

4.78 Similar limitations are acknowledged also in Mastercard's and Visa's internal documents. For example, a 2022 Mastercard document notes that [✂].[160] Consistently, a 2022 Visa document states that [✂].[161]

4.79 However, all the stakeholders we engaged with expect open banking payments to improve in functionality and grow in usage in the coming years. In particular, the development of non-sweeping variable recurring payments (VRPs)[162] is envisaged as a way to make Open Banking payments a viable alternative for a wider range of payments and merchants. In September 2024, Visa announced its plans for a 2025 launch of the Visa A2A account-to-account payment service, which it will use to facilitate VRPs in the UK.[163]

4.80 Mastercard told us that the payment providers using Open Banking are likely to expand their product range as their customer bases grow.[164] This emerges also from Mastercard's internal documents, which note [✂].[165] Visa told us that the impact of Open Banking is expected to intensify[166], and that the development of payment infrastructure will introduce new payment capabilities which will improve quality and increase choice of payments.[167] This emerges also from Visa's internal documents, which note [✂].[168]

4.81 All the PISPs we talked to told us that they plan to grow their business in the next few years. At the same time, some PISPs submitted that a regulatory intervention would be needed to unlock the potential of Open Banking payments.[169] Even if this regulatory intervention were to take place, the need for it implies that service improvements to make Open Banking payments an effective alternative to card payments in a wider range of payment types will take time to be implemented.

4.82 The Government's payment remit letter, issued jointly to the FCA and PSR in November 2024, emphasised that the development of Open Banking is a key priority. The Government has called 'on the FCA and PSR to consider its commitment to developing Open Banking to drive delivery of seamless account-to-account payments. In this regard, the government has asked the FCA to be the UK's regulator for Open Banking, while ensuring effective engagement with other relevant authorities, including cooperating with the PSR on matters related to designated payment systems.'[170] The government recognises that 'unlocking Open Banking enabled account-to-account payments for e-commerce to be a strategic short to medium term priority' and that 'it will take some time to develop'.[171]

160 [✂]. For further detail and examples, see Annex 1, paragraphs 1.220 to 1.225.

161 [✂]. For further detail and examples, see Annex 1, paragraph 1.229.

162 A VRP is a mechanism to make one or may payments over a period of time using Open Banking. Sweeping payments are made between accounts controlled by the same account holder. Non-sweeping VRP refers therefore to recurring payments between accounts with different account holders, and can therefore be used to pay for goods or services.

163 See [Visa boosts consumer protection with smarter bank transfer payments | Visa].

164 Mastercard response to PSR working paper dated 23 February 2023 [✂].

165 See Annex 1, paragraph 1.223.

166 Visa response to PSR questions dated 9 November 2022 [✂].

167 Visa response to PSR questions dated 12 January 2022 [✂].

168 [✂]. For further detail and examples, see Annex 1, paragraphs 1.229 to 1.232.

169 For more detail on PISPs' submissions, see Annex 1, paragraphs 1.273 to 1.277.

170 National Payments Vision (November 2024), paragraph 2.12; HMT remit letter to the FCA and PSR (14 November 2024).

171 National Payments Vision (November 2024), paragraphs 3.16 and 3.31.

4.83 Consistent with this timescale, a PISP told us that it will likely take at least a couple of years to produce an Open Banking product which can provide an alternative to cards. According to the PISP, this is because after pilots are completed, time will then be needed for testing and learnings, and only then can a product be released. After that, there will be work to do to achieve merchant and consumer adoption.[172]

4.84 Visa's submissions about the rollout of A2A in Denmark and Poland (see paragraph 4.26) need to be approached with caution because:

- MobilePay in Denmark is principally used for P2P payments.[173]
- Blik in Poland was launched in 2015, at a time when ecommerce was less widespread and payment cards were less widely used.[174] The Polish market, therefore, did not exhibit the same established presence of payment cards we see in the UK.

4.85 We therefore consider that merchants have for the time being very limited ability to steer customers away from either Mastercard or Visa cards and towards Open Banking payments in response to increases in scheme or processing fees. While Open Banking payments are expected to become a more effective alternative to cards through the technical innovations and regulatory interventions currently progressing, it is likely that these interventions will take time to have a competitive constraint on the schemes. Therefore, we consider that these developments are unlikely to result in a competitive constraint on the schemes in the short to medium term.[175]

Cash

4.86 Mastercard told us that despite a decline in the share of payments made on cash in recent years, it is still an important payment method for certain groups of consumers and merchants.[176] Mastercard submitted that almost 50% of small to medium sized businesses still heavily rely on cash.[177] In particular, merchants in some sectors, such as tradespeople, can choose not to accept cards because they prefer cash.[178] Mastercard told us that, while cash is on average materially more expensive for merchants to accept than cards, some smaller merchants may have a proportionally lower cost of accepting cash than larger merchants; therefore, Mastercard must offer its scheme fees at a good value point to build acceptance with these merchants.[179]

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172 Call with stakeholder [✂]. Further submissions from PISPs on the expected evolution of Open Banking payments is included in Annex 1, paragraphs 1.273 to 1.277.

173 A survey by Danmark Nationalbank shows that, in 2021, despite 92% of the Danish population having access to it, MobilePay accounted for only 5% of payments in physical trade by volume and 6% by value, compared to 66% by volume and 72% by value made with payment cards (the rest was split between card-based mobile wallets and cash).

174 According to a survey by Narodowy Bank Polski, in 2016, one year after Blik was launched, cash accounted for 54% of all payments in physical shops by volume and 41% by value.

175 With the right technical developments, regulatory intervention and rates of consumer adoption, Open Banking transactions for certain use cases have the potential to rise significantly over the next few years. However, this is unlikely to develop comprehensively enough or fast enough to become a competitive constraint on Visa and MasterCard for many years and it is not possible to predict how the growth of Open Banking will impact market dynamics in the long term.

176 Mastercard response to PSR working paper dated 23 February 2023 [✂].

177 Mastercard response to PSR working paper dated 23 February 2023 [✂].

178 Mastercard response to PSR working paper dated 23 February 2023 [✂].

179 Mastercard submission, May 2022 [✂].

4.87 Visa told us that cash is an alternative payment method to cards for merchants and consumers for many transactions[180] and that merchants can nudge customers towards or away from cash.[181] Visa submitted that more merchants decided to stop accepting cash during the COVID-19 pandemic and that many decided not to start accepting cash again afterwards because of the increased efficiency of not accepting cash payments.[182,183]

4.88 We consider that cash is not an effective alternative to cards for online purchases. We note that, in 2023, CNP transactions accounted for [✁]% of the value of Mastercard's and Visa's overall card transactions in the UK.[184] Moreover, Mastercard told us that the distinction between in-store and online transactions is blurring, with the result that some online payment methods are increasingly competing with in-person payment options.[185,186] This indicates that many in-person purchases are transitioning online, further reducing the cases in which cash is a valid alternative.

4.89 Cash is also an increasingly less effective alternative for in-person purchases. Data from UK Finance shows that, between 2013 and 2021, the volume of cash transactions fell by 70%, with cash largely being replaced by cards. While the volume slightly increased in 2022, it fell again in 2023[187], in what UK Finance considers a return to the long-run pre-pandemic trend of steady decline.[188] UK Finance expects that cash use will continue to decline in the future. Its 2024 report also notes the increasing number of people who do not use cash or do so only very rarely. In 2023, 39% of adults (22.1 million people) in the UK used cash once a month or less frequently, while 28.9 million people used cash once a fortnight or less frequently, representing 52% of adults in the UK.[189]

4.90 Finally, compared to cards, cash imposes a stronger constraint on how much a buyer can spend, as this is limited by the amount of cash they have with them.

4.91 We therefore consider that merchants have limited ability to steer customers away from either Mastercard or Visa cards and towards cash in response to increases in scheme or processing fees.

Cryptoassets

4.92 Cryptoassets are a digital representation of value or contractual rights that can be transferred, stored or traded electronically, and which typically use cryptography, distributed ledger technology (DLT) or similar technology. Cryptoassets, fiat-referenced stablecoins and central bank digital currency (CBDC) could have the potential to become alternative payment methods. The evidence we collected on cryptoassets is reported in Annex 1, paragraphs 1.294 to 1.305.

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180 Visa response to PSR questions dated 12 January 2022 [✁].

181 Visa response to PSR questions dated 12 January 2022 [✁].

182 Visa response to PSR questions dated 12 January 2022 [✁].

183 Visa's submissions on this point are presented in greater detail in Annex 1, paragraph 1.329.

184 PSR calculations based on data from Mastercard and from Visa.

185 Mastercard response to PSR working paper dated 23 February 2023 [✁].

186 Mastercard gave the examples of the Uber app and train ticket apps. Mastercard's submissions on this point are presented in greater detail in Annex 1, paragraph 1.328.

187 *UK Payment Statistics 2024*, Tables 27.1.

188 We note that BRC's 2024 Payments Survey has found increased use of cash both in 2022 and in 2023. However, as the survey is limited to BRC's members, it may be less representative of the entire population of UK merchants than the data from the UK Finance report.

189 UK Finance, *UK Payment Markets 2024*, pages 50 and 51.

4.93 Mastercard submitted that technological and regulatory changes have led to the emergence of new providers and to new competitive dynamics. One future development is in fiat-referenced stablecoins and CBDC, which the Bank of England has consulted on.[190] Visa told us that the Treasury and Bank of England initiatives could mean that a 'digital pound' is launched, which would be designed for everyday payments by households and businesses and would sit alongside cash.[191]

4.94 The competitive risks from the emergence of these alternative payment methods are also discussed in Mastercard's internal documents. For example, a 2022 draft Mastercard internal document [✁].[192]

4.95 We consider that most of the existing cryptoassets are not currently credible payment methods yet. As observed by the Bank of England and the Treasury in their consultation paper on the digital pound published in February 2023, the majority of cryptoasset activity is driven by the use of highly volatile unbacked cryptoassets as speculative investment assets. Volatility in their purchasing power has led to their low acceptance as a form of payment so that they are not considered an efficient medium of exchange.[193] Even the Mastercard document mentioned above observes that [✁].[194]

4.96 However, fiat-referenced stablecoins and CBDCs could potentially become alternative payment methods. This, however, is not an immediate prospect and significant uncertainty remains on whether this is going to happen at all:

- In relation to fiat-referenced stablecoins, in their 2023 consultation paper, the Bank of England and the Treasury observe that the emergence and take-up of new forms of private digital money based on new technologies like Distributed Ledger Technology (DLT) is uncertain.[195]
- The consultation response, published in January 2024 by the Bank of England and the Treasury, outlines a roadmap for the introduction of a UK CBDC. While the project is going to enter the 'design' phase, the decision to proceed to the 'build' phase will be taken in the future. A decision to launch a digital pound would have to be taken at an even later time. Before any launch of a digital pound, the Government has committed to introducing primary legislation.[196]

4.97 We therefore consider that merchants have no ability to steer customers away from either Mastercard or Visa cards and towards cryptoassets in response to increases in scheme or processing fees, and that this is unlikely to change in the short to medium term.

190 Mastercard response to PSR working paper dated 23 February 2023 [✁].

191 Visa response to PSR questions dated 9 November 2022 [✁].

192 [✁]. For more detail and examples from Mastercard's documents, see Annex 1, paragraphs 1.295 to 1.299.

193 Bank and HMT, The digital pound: a new form of money for households and businesses? Consultation Paper, February 2023, pages 22 to 23.

194 [✁].

195 Bank and HMT, The digital pound: a new form of money for households and businesses? Consultation Paper, February 2023, page 34.

196 Response to the Bank of England and Treasury Consultation Paper: The digital pound: a new form of money for households and businesses? Consultation Response, January 2024.

The effectiveness and cost of steering customers

4.98 As stated in paragraph 4.45 above, the mere existence of alternative payment methods is not sufficient to constrain Mastercard and Visa's pricing decision for scheme or processing services to acquirers. Only if merchants are able to steer consumers from cards towards other payment methods, and have sufficient incentive to do so, would Mastercard and Visa face an effective constraint.

4.99 We asked merchants about their ability to steer customers. Most merchants that responded to our information requests told us that they do not steer their customers towards certain payment methods.[197]

4.100 One possible method to steer customers away from a payment method is through surcharges. The Payment Services Regulations 2017 prohibit surcharging for domestic consumer payments, which constitute the vast majority of card payments. Although legal, surcharging is typically not used on cross-border consumer card payments. One acquirer explained that while, in principle, merchants can recognise and surcharge cards issued in another jurisdiction[198], doing so creates undesirable frictions in the consumer experience and can lead to abandonment of the transaction.[199] Other acquirers said they are not aware of any such practice.[200] Overall, no acquirer we spoke to said it is easy or common to surcharge based on the location of the issuer.[201] We consider that similar consumer journey frictions are likely to discourage most merchants from introducing surcharges on commercial card payments.[202]

4.101 A merchant representative body, the BRC, stated that, in its view, steering techniques other than surcharging (such as asking the consumer to pay with a different payment method) have limited effectiveness, as consumers typically have a preferred payment method for different reasons (for example, budgeting or rewards) and will use it despite encouragement to do otherwise.[203] A few merchants, however, told us that they did use similar steering techniques, with some level of success. In particular, one merchant told us it had run 'awareness campaigns via short-term checkout banners' to raise awareness of Apple Pay and Google Pay.[204] Another merchant submitted that it promoted the use of more secure and lower cost payment methods with messages throughout the payment process advising customers of these methods. The merchant said that this led an 'appreciable number' of its customers to change payment method.[205] We note, however, that the nature of this merchant implies that consumer journey frictions would not result in abandonment of the transaction. The same is likely for another case of successful steering indicated to us by Visa.[206]

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197 For further detail on merchants' submissions on steering, see Annex 2, paragraphs 2.97 to 2.101.

198 Regulation 6A(1) of the Consumer Rights (Payment Surcharges) Regulations 2012 lays out a ban on surcharging by a payee to a payer for using a particular payment method. Regulation 6B specifies that such a ban only applies when the payment service providers of both the payee and the payer are located in the UK (Consumer Rights (Payment Surcharges) Regulations 2012 (SI 2012/3110), section 6B, paragraphs 1 to 3). It is therefore legal for UK merchants to apply surcharges when the payer uses a card issued outside of the UK.

199 Stakeholder response to PSR information request dated 11 January 2023 [✂].

200 Stakeholder responses to PSR information requests dated 11 January 2023 [✂].

201 Stakeholder responses to PSR information requests dated 11 January 2023 [✂].

202 Among the merchants we engaged with, only one told us that it was applying a surcharge on payments made through commercial debit or credit cards (stakeholder response to PSR information request dated 11 January 2023 [✂]). We note that the nature of this merchant implies that consumer journey frictions would not result in abandonment of the transaction.

203 BRC response to PSR information requests dated 11 January 2023. [✂].

204 Stakeholder response to PSR information request dated 11 January 2023 [✂].

205 Stakeholder response to PSR information request dated 11 January 2023 [✂].

206 See Annex 2, paragraph 2.96.

4.102 Views expressed by acquirers were consistent with steering having generally limited impact, except for some specific types of merchants. In particular, one acquirer told us that merchants are increasingly able to direct payers to a particular payment method, but that this is only effective in certain specialised areas, such as tax and car purchases.[207] Consistently, another acquirer explained that while some merchants can direct consumers to specific payment mechanisms, generally the choice is driven by the consumer.[208] A third acquirer told us that merchants (particularly small merchants) lack the ability to steer even in an online environment. The acquirer further submitted that mechanisms such as ordering payment mechanisms by merchant preference act at most as 'marginal nudges' and that the increased competition in online environments will lead merchants to hesitate to add any friction to the consumer checkout process.[209]

4.103 We consider that, in the absence of clear consumer benefits, convincing consumers to use a payment method different from the one they prefer for a particular transaction could generate friction and, as a result, could risk reducing sales conversion rates. In deciding whether to try steering consumers towards a specific payment method, merchants need to weigh the loss of revenue they would incur if conversion rates were reduced with the benefit in terms of lower fees.

4.104 The significance of scheme and processing fees as a share of merchants' costs is relevant to this assessment. The incentive merchants would have to reduce their reliance on cards in response to an increase in these fees would be proportional to the impact that such increase would have on the overall cost of card transactions for merchants.

4.105 The impact of an increase in scheme and processing fees on a merchant's costs is unlikely to be large enough to incentivise merchants to decline card acceptance. In our *CAMR Final Report*, we reported that in 2018 scheme and processing fees accounted, on average, for approximately 14% of the MSC, having increased by 2 to 3 percentage points in each of the previous three years. Even allowing for a further increase in this percentage since 2018, scheme and processing fees are unlikely to account for more than 25% of the overall MSC.[210] As a result, increases in scheme and processing fees would result in a proportionally smaller increase in the MSC. For example, if we assume that acquirers fully pass any increase in scheme or processing fees on to merchants, a 20% fee increase would result in less than 5% increase in the MSC.

4.106 The fact that a given percentage increase in scheme and processing fees translates into a much smaller increase in the MSC results in a weaker incentive for merchants to respond to the fee increase. Given that the cost of payments typically constitutes a small component of merchants' overall costs, and that scheme and processing fees account for a modest percentage of this cost, any appreciable reduction in conversion rates is likely to be sufficient to remove merchants' incentives to use steering to respond to changes in these fees.

207 Stakeholder response to the working paper on 'Competitive constraints in card payment systems' [✂].

208 Stakeholder response to PSR information request dated 11 January 2023 [✂].

209 Stakeholder response to the working paper on 'Competitive constraints in card payment systems' [✂].

210 Our econometric analysis indicates that average fees for mandatory services (as a proportion of transaction value) increased by [✂] for Mastercard between 2017 and 2021, with no evidence that fees fell between 2021 and 2023, and by [✂] for Visa between 2019 and 2023 (see Chapter 6, paragraph 6.106). Assuming, for example, an overall 50% real increase in scheme and processing since 2018 and no real increase in the other components of the MSC would lead to scheme and processing fees growing to approximately 20% of the MSC.

4.107 We recognise that some categories of merchants may be less concerned about conversion rates. This is the case, for example, for payments that cannot be avoided (such as taxes) or for high value, low frequency purchases, where consumers may be willing to accept higher friction in the payment process (such as car purchases). However, we consider that this is unlikely to be the case for most merchants receiving predominately spontaneous consumer payments, which constitute the bulk of card transactions and, as a result, consumer steering is unlikely to represent an effective competitive constraint on scheme or processing fees.

4.108 In its response to the interim report, Mastercard submitted that a survey commissioned by the PSR during CAMR (the CAMR merchant survey) 'highlights that when merchants were asked what they would do if their cost of accepting the main card schemes increased by 10%, 63% responded that they would stop accepting that payment method or influence consumers to use other payment methods'. Mastercard told us that '[t]his evidence also shows how credible the threat of steering is. Although only a small fraction of merchants had recently tried to influence consumers to use a different payment method, 83% were successful in their attempts'.[211]

4.109 As stated in Annex 1 of the CAMR final report, merchants' reported responses to a hypothetical 10% increase in the cost of accepting Mastercard-branded and Visa-branded cards should be interpreted with caution. 'It is well recognised that care is needed in interpreting hypothetical questions of this type and that they need to be considered in the round with other evidence. […] Hypothetical questions can also be difficult for individual responders to interpret.'[212] In particular, the survey results must be considered together with the evidence on the current use of non-card payment methods and of their limitations, as discussed in the previous section.

4.110 We note that almost half of those respondents who said that, in response to a 10% cost increase, they would stop accepting Mastercard and Visa cards or would influence consumers to use other payment methods mentioned online bank transfers as an alternative.[213] As discussed above (see paragraphs 4.71 to 4.85), real-time payments are unlikely to be a valid alternative for the vast majority of spontaneous consumer payments in the short to medium term. The fact that so many survey respondents saw online bank transfers as a valid alternative suggests that many of those merchants either were operating in sectors outside Mastercard's and Visa's 'core business', or had not appropriately considered the current limitations of online bank transfers as payment methods for spontaneous consumer payments.

4.111 Finally, the ability of survey respondents to steer customers from card payments needs to be considered in the context of the very small minority of merchants having attempted to steer their customers: only 7% of participants had taken steps to influence their customers in this way in the year before the survey was conducted.[214] We consider that the CAMR merchant survey results may therefore not be indicative of what could be achieved by the average merchant accepting card payments.

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211 Mastercard response to MR22/1.9 (21 May 2024), page 24. The survey results were reported in IFF Research (2020), 'PSR Card-Acquiring Market Review: Merchant Survey Results', slides 45 and 47.

212 Market review into the supply of card-acquiring services: Final report, Annex 1, Industry background, paragraph 1.349.

213 Of the 41% of respondents saying they would continue accepting cards but take steps to influence customers into paying with other methods, 46% said they would try to influence customers to use online bank transfers instead. Similarly, of the 22% of respondents saying they would stop accepting cards, 52% said they thought their customers would choose online bank transfers instead. IFF Research (2020), *PSR Card-Acquiring Market Review: Merchant Survey Results*, slide 48.

214 *Market review into the supply of card-acquiring services: Final report,* Annex 1, Industry background, paragraph 1.347.

4.112 In light of the considerations set out above, and contrary to Mastercard's submission, the CAMR merchant survey does not demonstrate that steering is a credible option for sufficiently many merchants to effectively constrain Mastercard and Visa. This is consistent with evidence discussed above (and in Annex 1) that indicates a lack of effective merchant-level competitive constraints on Mastercard and Visa.

Our conclusions

4.113 Some alternative payment methods, such as digital wallets or BNPL, are increasingly accepted by merchants in the UK. However, while many merchants accept payment methods other than Mastercard and Visa cards, and some merchants may even consider it necessary to accept some of these alternatives[215], it is still the case that these impose only a limited competitive constraint on acquiring-side scheme and processing fees. This is specifically because, as we state in paragraph 4.45, for these alternatives to be effective in constraining Mastercard's and Visa's pricing, merchants receiving predominately spontaneous consumer payments need to have the ability and incentive to respond to fee increases by either: (i) limiting card acceptance, or (ii) steering consumers towards alternative payment methods. Based on the evidence discussed above, we consider that these options, either individually or taken together, are unlikely to result in effective constraints on the schemes.

4.114 As set out above, our view is that Mastercard and Visa have must-take status as there is only very limited scope for a merchant to decline the card brand or limit acceptance of either card brand. If consumers find they cannot use their preferred payment card, a material number of customers may respond by purchasing from an alternative merchant that accepts the card.

4.115 The constraint that consumer steering can impose on Mastercard and Visa is limited by the small number of effective alternatives and by the increased friction that steering could generate in the payment process. Despite the existence of several potential alternative payment methods to Mastercard or Visa, merchants have limited ability and incentives to steer customers away towards them in response to increases in scheme or processing fees.

4.116 Moreover, consumer steering often has limited impact. For example, as many of the transactions taking place through digital wallets in the UK are funded through card payments[216], scheme and processing fees are reflected in digital wallets' fees, so that they are not an effective alternative for merchants seeking to lower their fees. Consumer steering can also result in costs to merchants, especially in the form of increased friction in the payment process and consequent reduction in sales conversion. It is therefore unappealing to most merchants.[217]

215 This is suggested by acquirers' submissions reported in Annex 1, paragraph 1.71.

216 More data is provided in paragraph 4.137.

217 Stakeholders who responded to our interim report and expressed a view on consumer steering generally agreed with our conclusion in paragraphs 4.115 and 4.116 (see responses to MR22/1.9 (21 May 2024) by [✁]).

4.117 While some categories of merchants may have alternatives to cards or sufficient bargaining power to negotiate lower scheme and processing fees, we consider this is not sufficient to result in effective constraints on the fees charged to the vast majority of merchants. This is because:

- As discussed in paragraphs 4.27 to 4.34, competitive alternatives that Mastercard and Visa may face outside of their 'core business' of spontaneous consumer payments result in an extremely limited constraint on their scheme and processing fees.
- As discussed in paragraph 4.40, the constraint that large merchants with greater bargaining power can exert on the cards has an effect only on the level of the fees charged to them, not on what other merchants pay.

4.118 Contrary to what Mastercard submitted (see paragraph 4.21), the availability of alternatives more expensive than Mastercard and Visa is not evidence of the existence of effective competitive constraints on the schemes' ability to increase their own fees:

- In general, fee differentials cannot be assessed in isolation, without also considering differences in the quality or the type of service provided by different payment methods.
- As seen in paragraph 4.61, the higher fees of American Express are the result of a different business model, which does not rely on a high level of acceptance.
- The higher cost of BNPL solutions is due to the provision of merchant-funded credit.
- As many of the transactions taking place through PayPal in the UK are funded through card payments[218], scheme and processing fees are reflected in the fee PayPal charges.

Wallet-level constraints

4.119 Wallets can be classified as either pass-through wallets or e-money wallets.[219]

- With pass-through wallets, the customer initiates the transaction using the wallet as an interface, while the wallet forwards the payment information (stored as a token) to the merchant (or their acquirer). The wallet does not store any money and funding is required from a card or bank account.[220] Google Pay and Apple Pay are examples of pass-through wallets.
- E-money wallets can store money and are involved in the flow of funds. Generally, both the customer and merchant should hold an account at the respective wallet provider. The customer chooses to use a funding method or e-money stored on the wallet and the merchant receives the transaction value in its wallet. E-money wallets are also referred to as staged wallets as they separate the funding stage, in which the customer transfers funds into the wallet, from the payment stage, in which those funds are transferred to the merchant. PayPal is an example of e-money wallet.

218 More data is provided in paragraph 4.137.

219 Additional evidence on how Mastercard and Visa classify digital wallets is included in Annex 1, paragraphs 1.81 to 1.86.

220 We are not aware of bank account-based pass-through wallets currently operating in the UK.

4.120 Both pass-through and e-money wallets can in principle support multiple payment infrastructures. The ability to do so, however, differs between pass-through and e-money wallets.

- In e-money wallets, the payment method used at the funding stage is irrelevant to a merchant's ability to accept payments through the wallet. There is therefore no link between the payment methods that an e-money wallet operator can decide to accept at the funding stage and the payment methods that merchants accept.
- As pass-through wallets simply pass the payment information and do not separate the funding and payment stages, they can only support payment methods that a merchant accepts.

4.121 There are two possible forms of competition between wallets and cards:

- front-end competition, which is downstream competition for access to the point of sale or point of interaction between merchant and consumer; and
- back-end competition, which is upstream competition between alternative payment rails[221]

4.122 A wallet engages in front-end competition with payment cards by allowing consumers to pay without using their physical card. The same wallet may engage in back-end competition if it allows consumers to fund their wallet using means alternative to cards, like bank transfers.

4.123 A related distinction is the one between the risk of commoditisation and the risk of substitution.[222]

- Commoditisation refers to the risk that the role of scheme operators in the payments value chain will be diminished, which can lead to obfuscation of the scheme's brand, restrictions on the data scheme operators have access to, obstacles to their ability to tap into new revenue pools, and therefore overall pressure on scheme operators' profits. The risk of commoditisation results from front-end competition from other payment methods, such as wallets.
- Substitution refers to the risk that alternative payment methods make use of alternative payment rails, cutting scheme operators out of payment flows entirely. The risk of substitution emerges from back-end competition.

4.124 We consider that, while front-end competition and commoditisation may lead to a reduction in card schemes' overall profitability, they do not directly result in the replacement of cards with alternative payment methods and, therefore, do not impose a competitive constraint on the supply of core scheme or processing services. For this reason, in this section we consider front-end competition only to the extent that it facilitates or incentivises rail substitution.[223] When considering wallets that have achieved significant usage at the point of interaction, we will be mostly interested in the strength of the substitution risk they impose on card schemes or in how likely and timely the emergence of back-end competition is.

221 Mastercard response to PSR working paper dated 23 February 2023 [✂].

222 More evidence on how these two types of competitive risks are discussed in Mastercard's and Visa's documents is presented in Annex 1, paragraphs 1.26 to 1.33.

223 We consider the impact of front-end competition in the section on optional services.

4.125 In the rest of this section, we analyse the actual and potential back-end competition that Mastercard and Visa face from digital wallets operating in the UK. Given the difference in how pass-through and e-money wallets operate, we develop our analysis separately for these two groups of wallets.

Pass-through wallets

4.126 There are a number of pass-through wallets available in the UK, including Apple Pay, Google Pay and Samsung Pay. According to the 2024 UK Finance report on the UK payment markets, in 2023 42% of UK adult population was registered for mobile payment services, 34% was using them at least once a month and 27% at least once a week.[224] The use of these wallets has increased rapidly in recent years. Visa documents from 2022 state that pass-through wallets had a [✂]% compounded annual growth rate between 2019 and 2021[225], and that [✂].[226]

4.127 In the UK, both Apple Pay and Google Pay currently only support card-based payments. In order to support non-card payments, pass-through wallets would either need those payment methods to be already accepted by merchants or would need to develop their own alternative rails and acceptance credentials, which they currently do not have.

4.128 Responding to our information request, Apple told us that [✂].[227] Apple explained that [✂].[228] As a technology provider, [✂].[229] [✂].[230,231]

4.129 Mastercard submitted that [✂].[232] [✂].[233]

4.130 This is consistent with the assessment developed in a Mastercard [✂] document from June 2022. The internal document observes that [✂]. However, the internal document notes that [✂]. The conclusion the internal document reaches is that [✂].[234]

4.131 In response to our interim report, Mastercard submitted that 'the launch and subsequent shift of Apple Pay Later, originally developed by Mastercard to allow lenders to offer instalment plans on all Mastercard transactions, underscores the competitive pressures faced by Mastercard'. Mastercard told us that 'Apple's decision to directly sign up lenders and disintermediate Mastercard from its platform role demonstrates how quickly market dynamics can change, potentially moving against existing players'.[235] We note, however, that under the instalment loan feature that Apple launched in September 2024 (which is different from Apple Pay Later, a now discontinued service previously launched in the US) [✂].[236] We do not, therefore, consider this a case of rail substitution.

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224 UK Finance, *UK Payment Markets 2024*, page 50.

225 [✂].

226 [✂].

227 Apple response to PSR information request dated 1 September 2023 [✂].

228 Apple response to PSR information request dated 1 September 2023 [✂].

229 Apple response to PSR information request dated 1 September 2023 [✂].

230 Apple response to PSR information request dated 1 September 2023 [✂].

231 Additional detail on Apple's submissions is included in Annex 1, paragraphs 1.156 to 1.160.

232 Mastercard response to PSR working paper dated 23 February 2023 [✂].

233 Mastercard response to PSR working paper dated 23 February 2023 [✂].

234 [✂].

235 Mastercard response to MR22/1.9 (21 May 2024), page 21.

236 See Annex 1, paragraph 1.157.

4.132 Google submitted that [✂].[237]

4.133 Based on the above, we consider that the risk of rail substitution Mastercard and Visa face from Apple Pay and Google Pay is not sufficiently likely or timely to impose an effective competitive constraint on their scheme or processing fees. [✂]. Mastercard's own submissions and internal document are consistent in [✂].

E-money wallets and BNPL

4.134 The most widely used e-money wallet in the UK is PayPal. In this section, we therefore focus on PayPal. Evidence on other staged wallets and other closed-loop payment systems can be found in Annex 1.[238] We also consider back-end competition from BNPL providers. While BNPL solutions are not considered staged wallets in Mastercard's and Visa's scheme rules, we assess them together with e-money wallets as the constraints they can impose on scheme and processing fees are qualitatively similar.

4.135 BNPL has increased in usage in recent years in the UK. According to the 2024 UK Finance report on the UK payment markets, 14% of adults in the UK used BNPL services to purchase something during 2023, with nearly 5% doing so monthly or more than once a month.[239] An external report prepared for Visa stated that, in 2021, BNPL accounted for [✂]% of ecommerce transactions in the UK and for [✂]% of in-store transactions, [✂].[240] There are many providers of BNPL services operating in the UK. However, according to UK Finance, the vast majority of consumers use either Klarna, PayPal Credit, or Clearpay.[241]

4.136 During this market review, we have sent information requests to PayPal and to Klarna, receiving information on their transaction volumes and values, and on the payment methods used by their customers to fund their wallets, or to repay their purchases in instalments. We have also analysed how PayPal and BNPL providers are discussed in Mastercard's and Visa's internal documents.

4.137 Both PayPal and Klarna currently accept a range of payment methods in the funding stage, including both cards and non-card methods:

- In addition to debit, credit and prepaid cards, PayPal allows its customers to make payments using bank transfers, their existing PayPal balance or PayPal Credit (that is, PayPal's BNPL solution). In 2022, non-card-based transactions accounted for approximately [✂]% of the value and [✂]% of the volume of PayPal transactions between UK consumers and UK merchants ([✂]% if we also consider transactions between EEA consumers and UK merchants).[242]

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237 Google response to PSR information request dated 28 September 2023 [✂].

238 Paragraphs 1.165 to 1.172.

239 UK Finance, *UK Payment Markets 2024*, page 38.

240 [✂].

241 UK Finance, *UK Payment Markets 2024*, page 39.

242 Stakeholder response to PSR information request dated 21 July 2023 [✂]. The proportion was significantly higher for transactions involving EEA consumers, reflecting the greater popularity of bank transfers in some European countries, such as Germany ([✂]).

- Klarna allows its users to fund their purchases using either a debit card, a credit card, Direct Debit or credit transfers.[243] In 2022, non-card payments accounted for [✁]% of the overall transaction value of payments from UK or EEA consumers to UK merchants.[244]

4.138 Visa told us that the growth of digital wallets means that consumers have access to multiple underlying payment methods and can easily switch between them without changing the front-end service they use.[245] Mastercard submitted that PayPal is an example of back-end competition to cards. The fact that PayPal has implemented Open Banking and developed fraud prevention systems to be able to offer buyer protection means that [✁]. This, Mastercard submitted, [✁].[246]

4.139 We note that, unlike pass-through wallets, e-money wallet operators pay, through their acquirers, scheme and processing fees on the card transactions their customers make to fund their wallet. They could therefore have an incentive to steer their customers towards payment methods alternative to cards if this results in lower fees. There can, however, be other considerations that make steering customers a less attractive or less feasible option.

4.140 Klarna told us that it does not encourage the use of a specific payment method in the funding stage for consumers. Instead, it presents the available payment methods to the consumer, and then the consumer can select one of them as their preferred payment method. Klarna told us that it prioritises the choice of consumers and building long-term relationships with consumers, rather than trying to drive them towards a specific payment method.[247] However, Klarna told us that, when Pay by Bank was introduced through the Klarna App, it visually presented the benefits for consumers of using Pay by Bank via a specific banner or screen in the app to raise awareness to consumers.[248] [✁].[249]

4.141 PayPal told us that [✁].[250] PayPal told us that [✁].[251] As discussed in Annex 1[252], PayPal has entered into agreements with Mastercard and Visa not to steer customers away from those schemes' cards.

4.142 We consider that e-money wallets could impose some constraint on Mastercard and Visa even without actively steering customers, by simply making more payment options available to them. We note that PayPal and Klarna already make several payment methods available to their customers. Klarna told us that [✁].[253] Klarna explained that [✁].[254] PayPal told us that [✁].[255]

243 [✁].
244 Stakeholder response to PSR information notice dated 20 July 2023 [✁].
245 Visa response to PSR questions dated 12 January 2022 [✁].
246 Mastercard response to PSR working paper dated 23 February 2023 [✁].
247 Stakeholder response to PSR information notice dated 20 July [✁].
248 Stakeholder response to PSR information notice dated 20 July 2024 [✁].
249 Stakeholder response to PSR information notice dated 20 July 2023 [✁]. See also Annex 1, paragraph 1.206.
250 PayPal's response PSR information request dated 30 August 2023 [✁]. Further details on PayPal's submission on this point is included in Annex 1, paragraph 1.147.
251 PayPal's response PSR information request dated 30 August 2023 [✁].
252 See paragraph 1.135.
253 Klarna's response to PSR information notice dated 20 July 2023 [✁].
254 Klarna's response to PSR information notice dated 20 July 2023 [✁].
255 PayPal's response PSR information request dated 30 August 2023 [✁].

4.143 The competitive constraints that e-money wallets may impose on Mastercard and Visa are qualitatively similar to those imposed by large merchants. Like large merchants, e-money wallet operators may have a sufficiently strong bargaining position to negotiate discounts on their fees from Mastercard or Visa, given their large consumer base. These negotiations, however, do not impose a competitive constraint on fees for transactions where the e-money wallets are not involved.[256] We also note that, despite their recent growth, e-money wallet transactions account for a small percentage of card transactions in the UK.

- In 2022, PayPal was used for over [✂] e-commerce transactions between a UK consumer and a UK merchant, plus over [✂] further transactions between an EEA consumer and a UK merchant; their combined transaction value was above [✂].[257] This corresponds to [✂]% of the value for CNP transactions, or less than [✂]% for all card transactions, processed by Mastercard and Visa in 2021.
- In 2021, Klarna payments involving a UK consumer and a UK merchant amounted to a total value of [✂], with an additional [✂].[258] This corresponds to approximately [✂]% of the value of the transactions processed by Mastercard and Visa in 2021.

4.144 Evidence from Mastercard's and Visa's internal documents is consistent with the existence of limited competitive threat from e-money wallets and BNPL providers. In Mastercard's internal documents, [✂][259] [✂].[260] However, a document from 2022 also states that [✂].[261,262] Some of Visa's documents [✂].[263] Mastercard's internal documents also discuss [✂], but an internal document from 2022 observes that [✂].[264,265]

Our conclusions

4.145 Based on the evidence set out in this section, we consider that decisions by operators of wallets are unlikely to result in an effective competitive constraint on Mastercard's and Visa's fees.[266]

4.146 Pass-through wallets are currently only supporting cards. Based on the evidence we received, and consistent with Mastercard's submissions and internal documents, we consider that the risk of them materially moving away from cards such that the schemes' setting of scheme and processing fees is effectively constrained is, in the short to medium term, very low.

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256 We recognise that, in principle, by negotiating lower scheme or processing fees, e-money wallets may be able to charge lower fees to merchants, making them more willing to accept them as payment methods or to steer consumers towards them. This effect, however, is likely very small, given the small incidence of scheme and processing fees on the overall fee that e-money wallets charge to merchants. As seen in paragraph 4.66, transactions through e-money wallets are more expensive for merchants than most card transactions.

257 Stakeholder response to the PSR information request dated 21 July 2023 [✂].

258 Stakeholder response to PSR information notice dated 20 July 2023 [✂].

259 [✂]; see Annex 1, paragraph 1.138.

260 [✂]; see Annex 1, paragraph 1.139.

261 [✂]; see Annex 1, paragraph 1.142.

262 More detail on how PayPal is discussed in Mastercard's internal documents is included in Annex 1, paragraphs 1.137 to 1.143.

263 See Annex 1, paragraphs 1.188 to 1.189.

264 [✂].

265 More detail on how BNPL is discussed in Mastercard's internal documents is included in Annex 1, paragraphs 1.186 to 1.187.

266 Stakeholders who responded to our interim report and expressed a view on wallet-level constraints generally agreed with our conclusion in this paragraph (see responses to MR22/1.9 (21 May 2024) by [✂].

4.147 E-money wallets and BNPL solutions do support payment methods other than cards and have, at least in principle, a direct incentive to promote the use of payment methods associated with lower fees. However, any constraint they impose on Mastercard's and Visa's scheme and processing fees is limited to the transactions processed through the wallets (which are a small proportion of Mastercard's and Visa's card transactions) and is constrained by their operators' unwillingness to steer consumers, or by contractual limitations on their ability to do so.

Competitive constraints specific to the supply of core scheme services

4.148 As we explained in paragraph 4.5, in order to offer their merchants access to a card scheme, acquirers are required to purchase core scheme services from the same scheme operator. There are therefore no alternatives to purchasing core scheme services from Mastercard and Visa respectively, and paying the associated fees, to acquirers who want to provide access to either scheme. Similarly, merchants or wallet operators cannot avoid purchasing core scheme services through their acquirers when they use Mastercard or Visa cards for their transactions.

4.149 It follows that the only alternatives for acquirers, merchants and wallet operators that could potentially lead to competitive constraints on Mastercard's and Visa's core scheme services are those discussed in the previous section, i.e., those potentially resulting from the ability to replace Mastercard or Visa cards with other payment methods. We have already concluded above that such constraints are non-existent at acquirer level (see paragraph 4.11), and insufficient at merchant and wallet level (see paragraphs 4.113 to 4.118, and 4.145 to 4.147).

4.150 We also consider that the very high pass-through of fees from acquirers to merchants is likely to dampen acquirers' incentives to resist increases in core scheme fees, when these apply equally to all acquirers. For the merchants on IC++ pricing contracts, which account for the largest proportion of transactions by value[267], fee increases are automatically passed on to merchants. Even under other contract types, acquirers told us they would still pass most fee increases on to merchants at some point[268], although possibly with a lag.[269] In our market review into card-acquiring services, we found that scheme and processing fees were passed through by acquirers in full to merchants of any size, irrespective of the contract type.[270] This means that increases in core scheme fees that apply uniformly to all acquirers leave them on a level playing field and have had a very limited effect on their margins. To the extent that the increases do not lead to merchants substituting away from card transactions (for which we have seen no evidence), acquirers would therefore have limited incentive to resist such increases. This was confirmed to us by [✂], who submitted that it did not adopt mitigating measures to address price increases as (where possible and applicable) it passes them on in full to its merchants.[271,272]

267 See Chapter 3, paragraph 3.11.

268 Stakeholder responses to PSR information request dated 11 January 2023 [✂]. Some acquirers pointed to limited instances in which fee increases may not be passed on to merchants, such as when fee changes do not have a big enough impact on their cost base to justify the significant effort expended on portfolio re-pricing (stakeholder responses to PSR information request dated 11 January 2023 [✂].

269 Stakeholder responses to PSR information request dated 11 January 2023 [✂].

270 MR18/1.8, [Market review into the supply of card-acquiring services: final report](), paragraph 5.66.

271 Stakeholder response to PSR information request dated 11 January 2023 [✂].

272 This argument may not apply to fee changes that affect different acquirers differently, as could be the case for tiered fees, or when moving from a tiered fee structure to a flat one.

4.151 Acquirers could have a greater incentive to try to obtain individually negotiated discounts or rebates on their fees from Mastercard and Visa, as this might give them a competitive advantage over rivals in the acquiring market. However, in the UK, we find that individually negotiated discounts or rebates are very uncommon. The vast majority of the acquirers we engaged with told us that they have been unable to negotiate reduced fees in the past five years.[273] Just under two thirds of acquirers, including some of the largest operating in the UK, said they had not been able to obtain funding or payments from the scheme operators to offset fee increases.[274] Conversely, one acquirer told us that acquirers which also have an issuing business, or which give the schemes access to a market segment that the schemes did not previously reach, can leverage this in negotiations with the card schemes.[275,276]

4.152 These views are consistent with other evidence we have received[277]:

- As mentioned in Annex 7, paragraph 7.38, we have found that acquirer incentives and rebates amounted to only [✁]% of Mastercard's acquirer gross fee revenue in 2023. A 2022 Mastercard document on acquiring in the UK and Ireland states that [✁][278], [✁].[279]
- As mentioned in Annex 7, paragraph 7.38, we have found that acquirer incentives and rebates amounted to [✁]% of Visa's acquirer gross fee revenue in 2023. A 2017 Visa document notes that [✁].[280]

Our conclusions

4.153 In view of the evidence outlined above, our view is that Visa and Mastercard do not face effective competitive constraints on the supply of core scheme services to acquirers.

Competitive constraints specific to the supply of core processing services

4.154 Unlike for core scheme services, acquirers are not required to purchase core processing services from Mastercard and Visa in order to offer acceptance of their respective schemes. As discussed in Chapter 3[281], Article 7 of the IFR introduced a separation between scheme and processing activities. Scheme operators and processing entities belonging to the same firm cannot present prices for scheme and processing services in a bundled manner, make the provision of scheme services conditional on the acceptance of that firm's processing services (or vice versa), or cross-subsidise between the two groups of services.[282] Acquirers should, in theory, be able to source processing services from a provider different from the scheme operator.

273 Stakeholder responses to PSR information request dated 11 January 2023 [✁].

274 Stakeholder responses to PSR information request dated 11 January 2023 [✁].

275 Stakeholder response to the working paper on competitive constraints in card payment systems [✁]; call with stakeholder [✁].

276 More detailed evidence on this point is provided in Annex 2, paragraphs 2.39 to 2.55.

277 More evidence from Mastercard's and Visa's internal documents on the bargaining position of acquirers is provided in Annex 2, paragraphs 2.10 to 2.22.

278 This is consistent with the data discussed in Annex 6.

279 [✁].

280 [✁].

281 Paragraphs 3.28 to 3.29.

282 Further details on the separation between scheme and processing activities and on how this has been implemented by Mastercard and Visa is provided in Annex 3, paragraphs 3.10 to 3.17.

4.155 In turn, competition for acquiring services should incentivise acquirers to look for a processor providing the best combination of price and service quality, as this would allow them to offer a more appealing service to merchants. However, except with respect to 'on us' transactions – where the acquirer and the issuer are the same entity – an acquirer cannot unilaterally decide to change who processes a transaction between them and one or more issuers. Instead, the acquirer(s) will need to ensure that any proposed processing solution is available to the issuers. The acquirer must also establish the required bilateral or multi-lateral agreement setting out how transactions between the relevant parties will be processed with the provider at issue.[283]

4.156 In this section, we consider the extent to which Visa and Mastercard are constrained in the supply of core processing services to acquirers as a result of rivalry between each other, or of existing or potential competition from alternative processors in the UK market. The evidence we have relied on in this assessment is presented in greater detail in Annex 3.

Existing competition in core processing services between Mastercard and Visa and with alternative processors

4.157 In the UK, Mastercard processes [✂]; Visa, at present, processes [✂]. In other words, [✂].[284]

4.158 We asked Mastercard and Visa why, in the UK, they do not process any transactions involving the other scheme's cards. Mastercard told us that [✂].[285] Visa told us that [✂].[286]

4.159 We found several Mastercard internal documents discussing its processing business. In particular, a 2022 internal document states that, globally, [✂].[287] [✂][288], [✂].[289] [✂][290] [✂]. The Visa documents we reviewed did not discuss [✂]. However, a 2020 internal document states that [✂].[291,292]

Barriers to entry of third-party processors

4.160 Even in the absence of alternative providers currently operating in the UK, Mastercard and Visa could still face competitive pressure if alternative processors could easily enter the UK market and offer a better or cheaper service.

4.161 Mastercard told us that an important constraining factor on its processing business is the [✂]. Mastercard indicated [✂].[293]

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283 [✂].

284 Further evidence on this is provided in Annex 3, paragraphs 3.23 to 3.24 and 3.32 to 3.33.

285 Mastercard response to PSR questions dated 19 September 2023 [✂].

286 Visa response to PSR questions dated 19 September 2023 [✂].

287 [✂].

288 [✂].

289 [✂].

290 [✂].

291 [✂].

292 More detail on how Mastercard's and Visa's documents discuss competition in the supply of core processing services Annex 3, paragraphs 3.23 to 3.33.

293 Mastercard response to PSR questions dated 9 November 2022 [✂].

4.162 Mastercard internal documents indicate that, [✂]. One of the reasons [✂].[294] However, [✂].[295]

4.163 As mentioned in paragraph 4.155, acquirers and issuers need to agree on the processors to be used for transactions between them. We consider that the two-sided nature of processing services can impose significant barriers to entry for third-party processors and substantially limit the choices available to acquirers. [✂].[296]

4.164 Our review of Mastercard's and Visa's internal documents indicates that the largest issuers receive core processing services free of charge from both schemes. Moreover, processing fees charged to issuers are often linked to volume performance targets: they are set at zero if issuers meet an agreed target volume of transactions processed, but increase up to the list price if those targets are not met.[297] This implies that moving to an alternative processor for part of the transactions would result in large fee increases on the remaining part for issuers. This was explicitly mentioned to us by one issuer as a reason for not looking for an alternative processor.[298]

4.165 Consistently, none of the issuers that responded to our information request considered that there was a benefit in procuring core processing services in the UK from a supplier other than the operator of the corresponding scheme. They submitted that doing so would result in higher costs[299], technical challenges[300], increased complexity[301], and potentially operational risks[302] – without providing any customer benefits.[303]

4.166 With issuers lacking any strong incentive to use alternative processors, it is difficult for acquirers to do so. Of the 17 acquirers that responded to our information request, 13 told us that they were not aware of any credible alternatives to Mastercard and Visa for processing transactions originating from their respective cards.[304] Others told us that the available alternatives were not technically or commercially feasible. One acquirer submitted that going 'directly to the issuers', which would remove the need to pay processing fees to Mastercard or Visa, would be technically far more complex and expensive to support, as the acquirer would need to connect to each issuer separately.[305] Other acquirers mentioned the possibility of using only Mastercard or only Visa to process all of their transactions, which would reduce the number of technical connections required to operate as an acquirer. However, in the absence of an agreement with issuers, the processor would still need to route the transactions back to the original card scheme associated with the card being processed. As a result, this option would result in higher costs and additional possible points of failure.[306]

294 [✂]. More detail is provided in Annex 8, Box 1.

295 [✂].

296 [✂].

297 Evidence from Mastercard and Visa documents on issuing-side processing fees is analysed in Annex 3, paragraphs 3.59 to 3.65.

298 Stakeholder response to PSR information request dated 11 January 2023 [✂]. Another issuer more generally told us that the nature of its contractual arrangements is such that it can see no merit in splitting the scheme and processing services from the card scheme brands (stakeholder responses to PSR information request dated 11 January 2023 [✂]).

299 Stakeholder responses to PSR information request dated 11 January 2023 [✂].

300 Stakeholder responses to PSR information request dated 11 January 2023 [✂].

301 Stakeholder responses to PSR information request dated 11 January 2023 [✂].

302 Stakeholder response to PSR information request dated 11 January 2023 [✂].

303 Stakeholder response to PSR information request dated 11 January 2023 [✂].

304 Stakeholder responses to PSR information request dated 11 January 2023 [✂].

305 Stakeholder response to PSR information request dated 11 January 2023 [✂].

306 Additional detail on acquirer's submissions on this point is provided in Annex 3, paragraphs 3.34 to 3.42.

4.167 Consistent with the existence of barriers to entry, none of the providers we have engaged with told us that it planned to start providing processing services in the UK. We gathered evidence from [✁].

4.168 [✁] is an issuer processor that is part of a group of companies that includes an acquirer; [✁] operates both as issuer processor and as acquirer.[307] Mastercard had explicitly mentioned [✁] as providers that could potentially start processing transactions in the UK.[308] All [✁] companies told us they have no plans to start processing card transactions in the UK. In particular, [✁] told us that since the cost of processing a transaction is subject to economies of scale, achieving a large enough scale is important in order to offer competitive fee levels to issuers and acquirers. However, according to [✁], it is very difficult to achieve the scale required to make entry into a new country profitable.[309] [✁] is not currently planning to enter as a processor in any further country.[310] In response to our interim report, Mastercard told us that, regardless of current intentions, alternative processors could enter the UK market if it presented a future business opportunity, as a result of changed market dynamics.[311] However, the presence of significant barriers to entry, as shown in our analysis above (see also Annex 3, paragraphs 3.56 to 3.68), indicates that this prospect is unlikely.

4.169 We recognise, however, that our evidence base is incomplete. We have noted that [✁].[312] There is therefore the possibility that the lack of entry of alternative processors may be due to processing fees on the acquiring side being already at or close to competitive levels. Without evidence on the costs of core processing services for Mastercard and Visa, this possibility cannot be fully excluded, although the evidence of [✁] and of [✁] (see paragraphs 4.170 and 4.171 below) suggests that fees in the UK may be above competitive levels.[313] Even without clarity on costs, other factors – including the structure of contracts limiting incentives for issuers to switch, and the fact that acquirers cannot unilaterally choose an alternative processor without an agreement with the issuers – lead us to conclude that there are barriers to entry for third-party processors.

Acquirers' bargaining position

4.170 We also considered whether the lack of alternatives is reflected in acquirers' bargaining position with respect to core processing fees. The evidence shows that it is very unusual for acquirers to be able to negotiate discounts or rebates on processing fees. In 2018, [✁].[314] However, [✁].[315] We note that this acquirer is also one of the largest issuers in the UK. Acquirers that also operate as issuers have the ability to process 'on-us' transactions in

307 'Issuer processing' services include activities that provide the technology platform utilised by an issuer to manage their card portfolio and provide the ledger for transactions. These services are discrete from the transfer of transactions related data between merchant acquirers and issuers. For more details, see Annex 3.

308 Mastercard response to PSR questions dated 9 November 2022 [✁].

309 Call with stakeholder [✁].

310 Greater detail on submissions by these companies is provided in Annex 3, paragraphs 3.51 to 3.55.

311 Mastercard response to MR22/1.9 (21 May 2024), page 27.

312 [✁].

313 The fact that Mastercard was [✁] is also quite clear evidence that these prices are not being set as part of a competitive process.

314 Visa response to PSR questions dated 9 November 2022 [✁].

315 Visa response to PSR questions dated 19 September 2023 [✁]. For further detail, see Annex 3, paragraphs 3.48 to 3.49.

house, which places them in a stronger position to negotiate with Mastercard or Visa.[316] They can also obtain better deals by jointly negotiating core processing fees on the issuer and acquirer side.[317]

4.171 We note that [✁]. For example, in 2022 Mastercard [✁].[318]

Our conclusions

4.172 Acquirers have, in principle, the possibility of sourcing core processing services from providers other than Mastercard or Visa to process transactions involving their cards. The evidence discussed above, however, indicates that, in the UK, their ability to do so is very limited, for the following reasons:

- There is no evidence of rivalry between Mastercard and Visa for the provision of processing services to each other's transactions.
- There are currently no alternative providers of processing services operating in the UK.
- There are barriers to entry for new providers, as they would need to convince both acquirers and issuers to migrate. Acquirers cannot unilaterally choose an alternative processor without an agreement with the issuers. However, the evidence indicates that issuers have very little incentive to do so (see paragraphs 4.164 to 4.166). The structure of the contracts that many issuers have signed with Mastercard and Visa for the supply of core processing services limits their incentive to use alternative processors for part of their transactions. No issuer told us there would be any benefit for them in doing so, and several mentioned that it would lead to increased complexity and costs (see paragraphs 4.163 to 4.166).
- We have seen no evidence of potential competitors seeking to enter the provision of core processing services in the UK.

4.173 All of this is consistent with evidence that shows that most acquirers have a weak bargaining position, with a few exceptions where acquirers are also issuers.

4.174 We therefore consider that alternatives available to acquirers in the UK do not provide an effective competitive constraint on decisions made by Mastercard and Visa in the supply of core processing services.[319]

316 See Annex 2, paragraph 2.17.

317 See Annex 2, paragraph 2.18.

318 [✁].

319 Stakeholders who responded to our interim report and expressed a view on competitive constraints specific to the supply of core processing services generally agreed with our conclusion in this paragraph (see responses to MR22/1.9 (21 May 2024) by [✁].

Competitive constraints specific to the supply of optional services

4.175 We have seen evidence that optional services account for an increasing proportion of Mastercard's and Visa's net revenue generated in the UK. On the acquiring side, we found that revenue from optional services (or services that Mastercard and Visa had identified as being, in their view, optional) has been [✂] in recent years, with Mastercard data showing a large and growing share of its gross revenue coming from these services, from [✂]% of gross revenue in 2017 to [✂]% in 2023. For Visa, [✂] – although [✂] over time – from [✂]% in 2018 to [✂]% in 2023.[320]

4.176 In addition to using alternatives to Mastercard or Visa cards, which we have discussed in paragraphs 4.7 to 4.147, acquirers and merchants may, at least in principle, be able to respond to increases in fees for optional services by sourcing those services from alternative providers, self-supplying them, or simply stopping using them. In this section, we assess the extent to which these further options can result, in practice, in competitive constraints on Mastercard's and Visa's supply of optional services to acquirers and merchants. As the availability of alternatives or the bargaining power of acquirers and merchants may differ between optional services, Mastercard and Visa may face different competitive constraints for different optional services. In our analysis, therefore, we do not consider optional services as a homogeneous category, but we try to assess the strength of the competitive constraints separately for different services.

Types of optional service

4.177 Mastercard and Visa offer a large number of optional services; therefore, we focused on those optional services that are particularly important to merchants and acquirers. In order to create a list of the main optional services supplied by Mastercard and Visa, we requested data from the schemes and used our own prioritisation criteria (based primarily on the revenue generated by Mastercard and Visa from the services, and on consistency with our definition of optional services) to narrow the list to those which are likely to be of most importance to acquirers, merchants, and the schemes.

4.178 Mastercard provided us with revenue data. We analysed this data which contained the annual revenue it receives for each of its optional services, broken down by a number of categories, including whether the service is a scheme or processing service and whether the service is optional or mandatory.[321] We applied prioritisation criteria to the list which narrowed the number of Mastercard services we analysed to ten.[322]

4.179 Similarly, we asked Visa to provide a list of optional services it supplies and/or the optional fees it charges.[323] Visa's list of optional services was based upon those services which appear as 'Optional Service Components/Elements' within its Fee Schedules. It only included services which were available to acquirers in FY2021 and/or FY2022, and excluded fees that are behavioural in nature and services that are not directly related to

320 See Chapter 6, paragraph 6.47(d).

321 Mastercard response to PSR questions dated 23 November 2022 [✂]. We asked Mastercard to include only the largest acquirers that provided services to UK merchants and together account for 95% of total value across all Mastercard transactions in 2021. Mastercard provided us with [✂].

322 More detail on the prioritisation criteria we used can be found in Annex 4, paragraph 4.22.

323 Visa response to PSR questions dated 27 September 2023 [✂].

individual card transactions.[324,325] We also applied prioritisation criteria to the list which narrowed the number of Visa services we analysed to eight.[326]

4.180 Upon reviewing the lists, we found that optional services can be broadly split into two groups depending on whether the acquirer or the merchant chooses whether to use the service or not:

a. Where the choice of whether to use the service is made by the acquirer, these services are typically used to support the functioning of the acquirer's business. For example, reporting services or services to support foreign exchange transactions fall within this group.

b. Where the choice of whether to use the service is made by merchants, acquirers simply make these services available to merchants and the individual merchant will decide whether to use it based on its needs. These services are typically specific to individual transactions, such as Account Status Inquiry or Address Verification Service. Not all merchants will require these services, but merchants in some sectors may.

4.181 The full list of services we analysed is presented below in Table 1. The table also indicates whether the decision of whether to use the service is ultimately made by acquirers or merchants.

Table 1: Mastercard and Visa optional services analysed

Service name	Scheme	Choice of whether to use service is ultimately made by
Account Status Inquiry	Mastercard	Merchant
Acquirer Authentication Exemption Indicator	Mastercard	Merchant
Address Verification Service and CVC2	Mastercard	Merchant
Automatic Billing Updater	Mastercard	Merchant
Dynamic Currency Matching	Mastercard	Acquirer
Identity Solutions	Mastercard	Merchant[327]
Mastercom	Mastercard	Acquirer

324 Visa response to PSR questions dated 27 September 2023 [✂].

325 As a result of the methodology Visa used to select the services (which was at the time agreed to by the PSR), [✂].

326 More detail on the prioritisation criteria we used can be found in Annex 4, paragraphs 4.30 to 4.31.

327 Mastercard submitted that the choice of whether to use the various Identity Solutions services or not is made by acquirers. For Identity Check, which is the main service within Identity Solutions, the choice of whether to use the service is ultimately made by merchants. In our analysis, we have considered the competitive constraint that Mastercard faces for Identity Check.

Service name	Scheme	Choice of whether to use service is ultimately made by
Multi-Currency Settlement	Mastercard	Merchant[328]
Pre-Authorisation	Mastercard	Merchant
Reports	Mastercard	Acquirer
Account Verification	Visa	Merchant
Acquirer 3DS Authentication	Visa	Merchant
Address Verification Service	Visa	Merchant
TC33 Clearing and Settlement Advice	Visa	Acquirer
SMS Raw Data and Reports	Visa	Acquirer
TC33 POS Advice	Visa	Acquirer
Visa Settlement Service Reports	Visa	Acquirer
VTS Acquirer Authentication	Visa	Merchant

4.182 Given the way in which the lists of Mastercard's and Visa's optional services have been obtained, it is not straightforward to compare the services offered by the two schemes:

- In some cases, the lists include equivalent services offered by Mastercard and Visa: Mastercard's Account Status Inquiry is equivalent to Visa's Account Verification; Mastercard's Identity Solutions include its Identity Check service, which is equivalent to Visa's Acquirer 3DS Authentication; both schemes also offer an Address Verification Service.
- In other cases, the difference in the way services are classified in the two lists makes it difficult to assess the extent to which the services are similar for Mastercard and Visa. For example, Visa's list includes a number of reports; Mastercard's 'Reports' category may or may not include similar types of reports.
- In other cases, the list for one scheme includes services that do not appear in the other scheme's list. In some instances, we are aware of the existence of equivalent services, but these were not included in the lists. For example, Visa Resolve Online (VROL) is broadly equivalent to Mastercard's Mastercom.

328 Mastercard submitted that the choice of whether to use this service is ultimately made by merchants. However, we have received mixed evidence on this point from acquirers. Three of the eight acquirers which responded to our second Section 81 Notice and which had purchased this service in the previous 12 months told us they do not make this service available to merchants. A further two out of these eight acquirers told us that this is a service for acquirers rather than merchants. See Annex 4, paragraph 4.232.

Analytical framework

4.183 When assessing the extent to which Mastercard and Visa face competitive constraints on the supply of optional services, we considered:

- The presence of services from alternative suppliers that could address the same needs of acquirers or merchants. These could be services that operate similarly to those provided by Mastercard or Visa, or that adopt different approaches to respond to the same needs. We include in this category the possibility that Mastercard competes with Visa (or vice versa) by offering a scheme-agnostic service.
- The extent to which acquirers or merchants can self-supply the service.
- The extent to which acquirers or merchants may not purchase the service at all. In assessing this evidence, we have also considered that:
  - The fact that some, or even most, acquirers or merchants do not purchase a given service is not in itself evidence of effective competitive constraints. It may be the case that some of these optional services are important only for merchants in specific sectors due to the business models they operate. It is also possible that some acquirers or merchants are not buying a service as a result of prices that may be set at supra-competitive levels.
  - The fact that most or all acquirers buy a service is not necessarily an indication of a lack of effective competitive constraint. In particular, for services that acquirers can make available to merchants, we would expect most acquirers to do so.
- The degree of countervailing buyer power available to acquirers and merchants. Even in the absence of alternatives to specific optional services, it may be the case that some acquirers or merchants can negotiate discounts, rebates, or delays to proposed fee increases. If there is evidence that many merchants or acquirers are able to do this, the lower prices may mitigate any potential harm in the market.

4.184 When the choice whether to use a service is made by the merchant, the alternatives relevant for the assessment of competitive constraints are those available to merchants. For services where the choice is made by the acquirer, alternatives available to acquirers can impose a direct competitive constraint. However, for some of these services, Mastercard and Visa may be facing competitive constraints not only from alternatives available to acquirers, but also from third parties which offer alternatives to merchants downstream.[329]

Evidence collected and limitations of analysis

4.185 We collected and analysed evidence from several sources in our analysis of optional services. Once we had established which Mastercard and Visa optional services we wanted to analyse, we sent Section 81 Notices to the schemes and asked what alternatives there are to the optional services for acquirers and merchants.

329 We consider that Mastercard's Dynamic Currency Matching and Mastercom fall into this category. We do not believe that any of Visa's services from Table 1 fall into this category.

4.186 We also issued two Section 81 Notices to acquirers. The first considered competition across all of Mastercard and Visa's services.[330] It did not include any specific questions on optional services, but sought to understand: (i) acquirers' relationships with Mastercard and Visa; (ii) what alternatives to Mastercard and Visa are available to acquirers in the UK; and (iii) what impact the changes to scheme and processing fees implemented by Mastercard and Visa since 2017 have had on acquirers in the UK.

4.187 The second Section 81 Notice to acquirers asked more specific questions about the optional services listed in Table 1.[331] Specifically, the notice asked questions to understand:

a. What alternatives exist in the UK for acquirers and merchants for each of the optional services we are analysing?

b. What are the implications for acquirers and merchants which choose not to use each of the optional services?

c. Have acquirers been able to secure discounts, rebates, or delays to proposed fee increases?

d. Where acquirers have chosen not to use an optional service, why did they make this decision and what service(s) (if any) did they use instead?

4.188 In addition to the optional services listed in Table 1, we asked acquirers whether Mastercard or Visa provides any optional services which the scheme considers optional from the perspective of the acquirer and for which either (i) the acquirer had spent more than £10,000 in the previous year; or (ii) the acquirer's merchant customers had collectively spent more than £100,000 in the previous year. Acquirers mentioned an additional 42 Mastercard services and 49 Visa services. Having reviewed these submissions, we considered that not all of the services were necessarily optional, because either: (i) the service was a behavioural fee; (ii) we have previously been told the service is mandatory; (iii) the service is outside the scope of our analysis, e.g. because it is not a card-based payment service or it does not apply to UK acquirers and merchants. Following this review, we consider that there are 5 unique additional Mastercard optional services and 14 unique additional Visa optional services. These have been listed in Annex A to Annex 4.

4.189 We also reviewed the internal documents we received from Mastercard and Visa. The aim of the internal document review was to uncover any evidence on alternatives to the individual optional services and on whether acquirers or merchants have any countervailing buyer power to the schemes.

4.190 In the interim report, we noted two limitations to our evidence base:[332]

a. We had not collected evidence from merchants, despite them making the ultimate decision about whether to use some of the optional services or not.

b. We did not ask acquirers (or merchants) about the specific alternatives to the optional services proposed by the schemes in their submissions.

330 We received responses from [✁].

331 We received responses from [✁].

332 Market review of card scheme and processing fees interim report (MR22/1.9), May 2024, paragraphs 4.166 to 4.167.

4.191 We therefore sought views from acquirers and merchants as part of our consultation on competitive constraints specific to the supply of optional services. Within that context, to ensure we collected that feedback from acquirers and merchants, following the publication of our interim report, we held phone calls with ten acquirers and received written responses from a further two acquirers. These phone calls primarily sought to understand how acquirers decide which optional services to use within their businesses and how they decide which provider to use for these optional services. The calls also sought to address some of the specific submissions made by the schemes in response to our interim report.

4.192 We also sent an information request on the topic of optional services to 70 merchants and received ten responses[333], as well as holding a follow-up phone call with one merchant.[334] The information request focused on those optional services where the decision about whether to use the service is made by the merchant (see Table 1). The questions were aimed at understanding:

a. which of the schemes' optional services are used by merchants within their businesses

b. where merchants do not purchase optional services, why this is the case (for example, because their needs are addressed through other means or because they have no need for the service)

c. whether the potential alternatives submitted by the schemes are capable of meeting merchants' needs

d. the implications for merchants' businesses of not using the optional services and what action merchants would take if the services were no longer available

4.193 We acknowledge that the evidence we have gathered from merchants may not be a representative first-hand account of the choices available to all merchants since we have only managed to speak with ten merchants. We have therefore approached the evidence gathered from acquirers and merchants qualitatively. Taken together with responses to our interim report, and evidence gathered from the schemes, it provides us with an overall understanding of the issues relevant to the supply of the most important optional services, and a broader understanding of the issues relevant to the supply of optional services more generally.

Our assessment

4.194 Optional services are ancillary to core scheme and processing services. Nearly all acquirers told us that the decision of which optional services to use within their business is broadly based upon merchant demand. Acquirers said that this decision is based upon their merchants' own requirements and whether the service is needed for the acquirer to remain competitive. We were told that merchants in some sectors expect specific services to be provided – for example, airline merchants would expect Dynamic Currency Matching and Multi-Currency Settlement due to their international presence. Without these services, acquirers would struggle to compete for merchants in sectors with specific demands.[335]

333 The PSR received responses from [✁].

334 [✁].

335 See Annex 4, paragraphs 4.37 to 4.40.

4.195 Acquirers also told us that the decision about which supplier to use for an optional service depends on the costs and benefits of each option. In particular, acquirers consider whether the costs of an alternative supplier match the benefits. Some acquirers noted that there may be alternatives to certain optional services provided by the schemes, but there are challenges in terms of complexity associated with using them. For example, using a third-party provider requires the management of another supplier and there may be challenges integrating a third party into an acquirer's technology set-up.[336]

4.196 In conclusion, when balancing these considerations, the schemes are typically in a strong position as suppliers of optional services. First, merchants in some sectors expect acquirers to provide certain optional services by default and the evidence suggests there are few alternatives to these. Second, Mastercard and Visa have a competitive advantage compared to other suppliers, as using the schemes' optional services removes any complexity associated with using another provider (whether a third-party supplier or self-supply).[337]

4.197 We have not found that the competitive constraints that Mastercard and Visa face are necessarily ineffective for all the optional services they offer to acquirers and merchants. In fact, we have seen evidence of the two schemes being subject to various degrees of competitive constraints for some optional services. Examples are discussed in Annexes 4[338] and 8.[339]

4.198 The evidence we received on each of the services in Table 1 is presented in Annex 4, which contains a specific assessment of the competitive constraints that Mastercard and Visa face for each service. In view of the evidence on available alternatives and on acquirers' countervailing buyer power set out in Annex 4, we have concluded that the optional services listed in Table 1 can be grouped in two categories – those for which the schemes face limited competitive constraint and those for which there is mixed evidence about the strength of competitive constraints.

4.199 We have identified ten optional services for which the evidence suggests the schemes face limited competitive constraints. These are: Mastercard Account Status Inquiry, Visa Account Verification, Mastercard Acquirer Authentication Exemption Indicator, Mastercard Address Verification Service, Visa Address Verification Service, Mastercard Dynamic Currency Matching, Mastercard Identity Check, Visa Acquirer 3DS Authentication, Mastercard Multi-Currency Settlement, Mastercard Pre-Authorisation.[340] In these cases, acquirers typically submitted that there are no alternatives to those services and that some groups of merchants would face significant implications if they did not use the services. The evidence also indicates that acquirers have limited countervailing buyer power.[341] Merchants' responses to our merchant information request also corroborated the evidence

336 See Annex 4, paragraphs 4.41 to 4.45.

337 See Annex 4, paragraphs 4.48 to 4.50.

338 Annex 4, paragraph 4.21.

339 Annex 8, paragraphs 8.76 and 8.122.

340 See: Mastercard Account Status Inquiry (Annex 4, paragraphs 4.51 to 4.87), Visa Account Verification (Annex 4, paragraphs 4.51 to 4.87), Mastercard Acquirer Authentication Exemption Indicator (Annex 4, paragraphs 4.88 to 4.100), Mastercard Address Verification Service (Annex 4, paragraphs 4.101 to 4.136), Visa Address Verification Service (Annex 4, paragraphs 4.101 to 4.136), Mastercard Dynamic Currency Matching (Annex 4, paragraphs 4.152 to 4.172, Mastercard Identity Check (Annex 4, paragraphs 4.173 to 4.212), Visa Acquirer 3DS Authentication (Annex 4, paragraphs 4.173 to 4.212), Mastercard Multi-Currency Settlement (Annex 4, paragraphs 4.228 to 4.243), Mastercard Pre-Authorisation (Annex 4, paragraphs 4.244 to 4.280).

341 In Annex 4, we present the evidence collected from acquirers on whether they have been able to obtain discounts, rebates, or delays to increases in fees on optional services. Very few of the acquirers told us they have been able to achieve this.

provided to us by acquirers for some of these services. This is because many of these potential alternatives fall short of providing the same service as those provided by the schemes[342], require a change of behaviour by merchants[343], or achieve some of the same outcomes as the schemes' optional services but also impose high costs on acquirers or merchants. Furthermore, we note that many of the potential alternatives proposed by the schemes are workarounds which rely on other Mastercard or Visa (core or optional) services. This is because we do not consider a scheme's own alternative services to provide competitive constraints on its optional services.

4.200 For the remaining optional services, the evidence is mixed as to whether the schemes face effective competitive constraint. For several reports services, we have heard that some acquirers can use internal data and analysis as an alternative.[344] However, the way some acquirers' businesses are set up means they cannot use internal data and instead must rely on these reports. In the case of Mastercard's Mastercom, while some internal documents indicated there may be competitive alternatives, responses from the majority of acquirers indicated that there are no alternatives. For Mastercard's Automatic Billing Updater, we did not engage with merchants regarding the alternatives available to them, despite the fact that merchants ultimately decide whether to use the service or not. Finally, for Visa's VTS Acquirer Authentication, while most acquirers told us there are no alternatives to this service, most of the merchants which responded to our RFI submitted that they do not purchase this service and their needs are met through other means. The mixed evidence in these cases makes it difficult to reach a firm conclusion on the degree of competitive constraints Mastercard and Visa face in the supply of these optional services.

4.201 In summary, the evidence we have received is consistent with and supports the conclusions we made in our interim report, that Mastercard and Visa are subject to varying degrees of competitive constraints for the optional services they supply to acquirers and merchants. Mastercard and Visa are in a strong position compared to possible alternative providers: acquirers have told us that there are often challenges in terms of complexity associated with using alternative providers – for example, because using a third-party provider requires management of another supplier and there may be challenges integrating the third party into an acquirer's technology set-up. While there are optional services for which the evidence points to the presence of competitive constraints[345], for ten of the optional services listed in Table 1 there are stronger indications that lack of effective alternatives results in Mastercard and Visa not facing effective competitive constraints.[346]

342 For example, Mastercard submitted that credit reference agencies could be used as an alternative to its Address Verification Service. However, merchants told us that these services would be unable to confirm whether the address provided by these agencies matches the billing address associated with the card. Further, acquirers also said using credit reference agencies would add delay and latency to the payment process compared to using the Address Verification Service.

343 For example, Mastercard submitted that merchants could provide a checkout after purchase instead of using Pre-Authorisation. We were told by acquirers that this may require a change in business model among some merchants, in particular merchants in the hotel sector, which they may be reluctant to implement as it would worsen the customer experience.

344 In particular, this relates to Mastercard's Reports service (Annex 4, paragraphs 4.281 to 4.294), and Visa's SMS Raw Data and Reports (Annex 4, paragraphs 4.295 to 4.304), TC33 Clearing and Settlement Advice (Annex 4, paragraphs 4.305 to 4.318), TC33 POS Advice (Annex 4, paragraphs 4.319 to 4.331), and Visa Settlement Service reports (Annex 4, paragraphs 4.332 to 4.339).

345 For example, Mastercard's Brighterion service; see Annex 4, paragraph 4.22.

346 The evidence for the remaining eight optional services in Table 1 is mixed.

Conclusions

4.202 In this chapter we have set out our assessment of the relative competitive constraints that Mastercard and Visa face on the acquiring side, separately for the provision of core scheme services, core processing services, and optional services.

4.203 In relation to core scheme services, we have found that:

- Given the importance to acquirers of offering merchants a comprehensive card acceptance service, including both Mastercard and Visa, and the fact that, by definition, core scheme services cannot be sourced from alternative suppliers, our view is that UK acquirers' responses do not provide an effective competitive constraint on the supply of core scheme services.
- Most merchants cannot decline to accept either Mastercard or Visa as this would have a significant impact on their businesses. While merchants can, in principle, steer their customers towards other payment methods, their ability to do so is severely constrained by the small number of alternatives that are suitable to spontaneous consumer payments and by the cost that most merchants would incur in steering, especially in the form of increased friction in the payment process and consequent reduction in sales conversion (in addition to the potentially higher fees charged by some of the available alternatives). As a result, merchants can impose very limited competitive constraint on Mastercard's and Visa's core scheme fees.
- The risk of operators of pass-through wallets materially moving away from cards such that the schemes' setting of core scheme fees is effectively constrained is, in the short to medium term, very low. Any constraint that operators of e-money wallets impose on Mastercard's or Visa's core scheme fees is limited to the still small volume of transactions processed through the wallets and is constrained by their operators' unwillingness to steer consumers, or by contractual limitations to their ability to do so.

4.204 Therefore, our conclusion is that, on the acquiring side, Mastercard and Visa do not face effective competitive constraints in the provision of core scheme services.

4.205 In relation to core processing services, we have found that:

- While acquirers have, in principle, the possibility of sourcing core processing services from providers other than Mastercard and Visa, in the UK, their ability to do so is very limited. Acquirers cannot unilaterally choose an alternative processor without an agreement with the issuers. Issuers have no incentive to migrate to alternative processors given how processing fees are structured in their current agreements with Mastercard and Visa. As a result, no alternative processors currently operate in the UK and we have seen no evidence of alternative processors planning to enter the UK.
- The same considerations made in paragraph 4.203 imply that merchants can impose very limited competitive constraint on Mastercard's and Visa's core processing fees.
- The constraint that operators of digital wallets can impose on Mastercard's and Visa's core processing fees are limited by the same factors discussed in paragraph 4.203.

4.206 Therefore, our conclusion is that, on the acquiring side, Mastercard and Visa do not face effective competitive constraints in the provision of core processing services.

4.207 In relation to optional services, we have found that:

- The availability of effective alternatives is likely to vary across the many optional services that Mastercard and Visa supply to acquirers and merchants. In particular, available alternatives appear to be limited for some of these services.
- Mastercard and Visa are in a stronger position than alternative providers of optional services owing to the costs, challenges, and complexity acquirers face when implementing these alternatives.
- Acquirers' and merchant's ability to respond to fee increases for optional changes by declining to accept either Mastercard or Visa, or by steering consumers towards alternative payment methods is limited by the same reasons discussed in paragraph 4.203.

4.208 Therefore, our conclusion is that, on the acquiring side, Mastercard and Visa are subject to varying degrees of constraint across their optional services, with stronger indications that lack of effective alternatives results in Mastercard and Visa not facing effective competitive constraints in the supply of some of these services.[347]

347 Stakeholders who responded to our interim report and expressed a view on our overall conclusions on the competitive constraints on the acquiring side generally agreed with our assessment. See responses to MR22/1.9 (21 May 2024) by [✂].

5 Competitive constraints on the issuing side

Four-party card schemes like Mastercard and Visa are two-sided networks, serving users on both sides of the payment system they operate: issuers and cardholders on one side (the issuing side), and acquirers and merchants on the other side (the acquiring side).

For the reasons considered in Chapter 3, paragraphs 3.13 to 3.22, we assess the extent to which Mastercard and Visa are subject to competitive constraints on the supply of scheme and processing services separately for the acquiring and for the issuing side. This chapter develops the analysis for the issuing side.

This chapter explains why we currently consider that Mastercard and Visa face some competitive constraints on the issuing side, based on our assessment of the choices available to issuers, and of the financial and non-financial dimensions of competition between card schemes.

Introduction

5.1 At present in the UK, there are no co-badged payment cards[348], which enable transactions across two or more card payment systems. This means that issuers select one card scheme for each card they issue, although they can use different schemes for different cards. Issuers can therefore choose between the schemes, unlike acquirers, who in practice are nearly always obliged to have contracts with both schemes (see Chapter 4). The issuers' bargaining position therefore differs from that of acquirers.

5.2 Mastercard told us that it is constrained on the issuing side by close competition with other card schemes[349], but that it also competes with payment methods other than cards[350], such as credit-transfer based payment methods, direct debit, cash, digital wallets and BNPL, among others. Visa told us that alternative payment methods are developing, as consumers are moving towards increasingly digitised payments while expecting higher security, resilience, and convenience. Visa submitted that issuers aim to meet this demand with payment-related services that offer innovative features such as mobile banking applications.[351]

5.3 Mastercard told us that cardholders can pick whichever payment method best suits them. This, Mastercard submitted, means that Mastercard is competing at every transaction to convince the cardholder that Mastercard is better than the wide range of card and non-card payment methods. To do this, Mastercard differentiates in ways such as speed,

348 A co-badged card refers to a debit or credit card that supports multiple card schemes. In some circumstances this allows a merchant to choose which scheme will process the transaction.

349 Mastercard response to PSR working paper dated 23 February 2023 [✁].

350 Mastercard response to PSR questions dated 9 November 2022 [✁] and Mastercard response to PSR working paper dated 23 February 2023 [✁].

351 Visa response to PSR questions dated 9 November 2022 [✁].

convenience, security, resilience, consumer protection, and marketing.[352] Visa told us that alternative payment systems are evolving and consumers have access to multiple payment options. Visa submitted that consumers would pick the method that best meets their needs in any given situation. This, Visa told us, meant that Visa must compete with multiple different payment methods to be the chosen payment.[353]

5.4 We acknowledge that there is a degree of competition between card schemes and other payment methods in relation to their adoption and use by cardholders. We recognise that this type of competition may be important for card schemes and may require them to invest to make it convenient for cardholders to use their cards instead of other payment methods. We have considered this form of competition in Chapter 4, to the extent that it has implications on merchants' ability to steer their customers towards alternative payment methods.[354] We do not discuss it further in this chapter.

5.5 In relation to competition for adoption by issuers, we consider that, in the UK, payment cards are a core part of a bank's offering to its account holders. We are not aware of any UK bank which offers customers an alternative retail payment method without also offering cards. Given that most issuers are banks, we limit our analysis to competition between card schemes.

5.6 This chapter presents our analysis of the constraints that Mastercard and Visa face as a result of competition for issuers. In the next three sections we look at:

- how issuers choose between card schemes
- the impact of competition between Mastercard and Visa on the fees issuers pay
- the non-financial dimensions of competition for issuers

Choices available to issuers

5.7 To offer cardholders access to a card scheme, issuers must enter a contractual agreement with it. In this section we consider the choices available to card issuers when selecting a card scheme for their payment cards. We consider which card schemes compete for issuing contracts, the structure of partnerships between issuing banks and schemes, and the market outcomes. Additional details are provided in Annex 5.

The process of choosing a card scheme

5.8 Issuers typically make a 'request for proposals' when deciding which scheme to choose for issuing cards. They announce tenders for specific card types and schemes respond with offers. The contract length between issuers and card schemes can vary, but tends to be around five years. Most of the negotiation between schemes and issuers happens at the tender stage before contracts are agreed. There is usually little negotiation during the term of the contract, although negotiations may also take place during contracting between issuers and card schemes.[355]

352 Mastercard response to PSR questions dated 9 November 2022 [✂].

353 Visa response to PSR questions dated 9 November 2022 [✂].

354 See paragraph 4.50.

355 For further detail on how issuing contract are negotiated, see Annex 5, paragraphs 5.7 to 5.15.

5.9 Competition in tenders for card issuing contracts in the UK typically takes place between Mastercard and Visa. Other card schemes such as American Express do not compete for issuing contracts, because they do not operate as four-party card schemes.[356]

5.10 Issuers can announce tender processes for any selection of card categories. This means that issuers could request contract proposals for all cards, or a selection of their card portfolio. Negotiations could therefore cover one or multiple card types. They could focus only on newly issued cards, or include the reissue of existing cards.

5.11 Since issuers can use different schemes for different cards, they may choose to issue cards on one card scheme or several: options known as 'single-homing' and 'multi-homing' respectively.

5.12 An issuer may multi-home in two distinct ways:

- The issuer may use different card schemes for different card categories, but the same scheme for all cards in the same category. For example, it could use Scheme A for consumer debit cards and Scheme B for consumer credit cards.
- The issuer may use multiple card schemes for the same card category. For example, an issuer may use both Scheme A and Scheme B for the same category of consumer debit cards, issuing part of those cards with one scheme and the rest with the other.

5.13 Multi-homing potentially allows issuers to pick the best innovations and give cardholders the option to choose their preferred scheme. However, it has costs, including internal resource costs and operational impact costs, which issuers must weigh against these benefits. Some issuers told us that they single-home because it reduces costs or makes it simpler to allocate incentive payments from schemes to relevant advertising promotions. Others said that they multi-home to leverage competition between schemes and provide better customer service.[357]

Barriers to migration

5.14 While issuers can choose which scheme to use for the cards they issue, there are some barriers to migrating between card schemes. These barriers can be both financial and operational, as there are costs to transferring to new schemes, and technical risks which may affect cardholders.

5.15 Financial and operational barriers to migrating between schemes can create an incumbency advantage for the current scheme on an issuing portfolio, potentially softening competition between schemes:

- Mastercard documents indicates that [✂] for schemes when negotiating with issuers because of [✂].
- A Visa document from 2019 mentions a [✂].[358] Another document describes this [✂].[359,360]

356 For evidence on this point, see Annex 5, paragraph 5.8. See paragraph 5.34 for a discussion of how other card schemes impact competition for co-brand card issuing.

357 For further detail on single- and multi-homing among issuers, see Annex 5, paragraphs 5.16 to 5.22.

358 [✂].

359 [✂].

360 More detail on Mastercard's and Visa's documents and on issuers' submissions on barriers to migrating between schemes is provided in Annex 5, paragraphs 5.83 to 5.89.

5.16 Schemes, however, can overcome these barriers to switching, as evidenced by several cases of switching in recent years (see paragraph 5.18):

- Mastercard documents indicate that [✂].[361]
- Visa documents indicate that [✂].[362]

Trends in shares of supply

5.17 Barriers to migration are often overcome, as the evidence of issuers switching between schemes in recent years shows. Most of the issuers that responded to our information request told us that they had moved at least a portion of their issuing portfolios between card schemes since 2018.[363] Recent trends in Mastercard's and Visa's shares of UK card transactions reflect issuers' recent choices to switch between schemes and are consistent with the existence, and potentially with an intensification, of competition between Mastercard and Visa.

5.18 Visa has historically had a much higher volume of debit card payments than Mastercard in the UK.[364] Mastercard, on the other hand, has historically had a much higher share in credit cards. Since 2018, there has been an increase in the number of issuers switching their issuing portfolios between Mastercard and Visa. In particular, several large issuers switched some portfolios from Visa to Mastercard. Most notably, Santander and NatWest have both transferred their debit card book from Visa to Mastercard since 2018.[365] This has resulted in a marked increase in Mastercard's share of debit card spending value, from [✂]% in 2017 to [✂]% at the end of 2023, as shown in Annex 6.[366]

5.19 In the following sections, we consider the extent to which issuers' ability to choose between Mastercard and Visa, and whether to single-home or multi-home, results in competitive constraints on both schemes over both price and non-price elements of their service.

Impact of competition on net issuer fees

5.20 The level of scheme and processing fees paid by issuers is an important element of negotiations between issuers and the schemes. In this section, we examine how the net fees issuers pay and the discounts, rebates and other financial incentives they receive reveal the impact of competition between schemes for issuers.

Structure and levels of incentives

5.21 Issuing contracts between issuers and Mastercard or Visa usually set the fee levels charged to the issuer for scheme or processing services, together with rebates and incentives payments.[367] As set out in Annex 5, we define the net issuing revenue as the gross fees the issuer pays minus the incentives it receives. When expressed in percentage

361 For details, see Annex 5, paragraphs 5.48 and 5.49.

362 For details, see Annex 5, paragraph 5.89.

363 See Annex 5, paragraph 5.83.

364 See The PSR Strategy, January 2022, page 51.

365 See https://www.mastercard.com/news/europe/en-uk/newsroom/press-releases/en-gb/2018/may/santander-to-issue-mastercard-debit-in-the-uk/ and https://www.mastercard.com/news/europe/en-uk/newsroom/press-releases/en-gb/2021/february/natwest-group-and-mastercard-expand-payments-partnership/

366 Paragraphs 6.11 to 6.14.

367 See Annex 5, paragraphs 5.42 to 5.56.

to transaction values, it is referred to as net issuing yield. Another useful measure is the issuer incentive ratio, defined as the financial support paid to the issuer divided by the gross core fees charged to the issuer.[368]

5.22 As noted in paragraph 5.18, Mastercard's share of debit card transactions has increased in recent years. The growth in market share has been driven by Mastercard's strategy [✂]. This is a strategy Mastercard [✂].[369] Visa's documents indicate that it considers that [✂].[370] Mastercard documents indicate that it considers [✂].[371]

5.23 Mastercard's internal documents indicate that [✂]. Visa's internal documents indicate that [✂]:

- A Mastercard document from 2020 indicate that the value of [✂], depending on the [✂]. The same document shows that it had [✂] in the UK and Ireland division in the two years to 2019. [✂].[372]
- Two Visa documents describe [✂].[373]

5.24 Evidence from Mastercard's internal documents included in Annex 9 also indicate that [✂].[374] [✂].

5.25 Data in Annex 6 (Figures 28 and 30) shows that issuer fees are heavily offset by incentives and rebates. Incentives and rebates amount to [✂]% and [✂]% of total issuer fee revenues over the period from 2017 to 2023 and from 1 October 2018 to 31 September 2023 paid in aggregate to Mastercard and Visa respectively.[375]

5.26 We consider that Mastercard [✂]. We consider that Visa [✂].

5.27 Mastercard documents indicate that it expected [✂]. On average in the UK and Ireland, issuer incentive ratios [✂].[376]

5.28 We consider that the rising rebates to issuers suggest that competitive pressure on schemes has grown since at least 2018.

Variation in incentives to issuers

5.29 The evidence we have received indicates that issuer incentive ratios vary significantly between different issuers, depending on:

- the size of their issuing portfolio
- features affecting the returns that card schemes can expect from their issuing portfolio – for example, the average expected transaction value, or the percentage of cross-border transactions

368 Other measures of schemes' profitability are discussed in Annex 5, paragraphs 5.26 to 5.41.
369 For more detail on Mastercard's strategy, see Annex 5, paragraphs 5.90 to 5.97.
370 See Annex 5, paragraph 5.98.
371 See Annex 5, paragraph 5.93.
372 See Annex 5, paragraphs 5.45 to 5.47.
373 See Annex 5, paragraph 5.44.
374 As shown in Annex 9, paragraph 9.43, [✂].
375 Part of these incentives were payments in kind (that is, services provided by the schemes to the issuers).
376 [✂]. See Annex 5, paragraph 5.47.

5.30 Issuers' size can affect the incentives that they receive from the schemes, suggesting that larger issuers have greater bargaining power. Issuers with greater growing potential can also have greater bargaining power than other similarly sized issuers:

- An internal Mastercard document dated 2020 shows that larger issuers [✁].[377] [✁].
- Visa documents show that [✁].[378] [✁].
- Further Visa documents indicate that [✁].[379] Mastercard documents indicate that [✁] have [✁]. [✁] ask for [✁].[380]

5.31 However, even large issuers do not have total bargaining power over Mastercard. For example, a 2022 Mastercard document shows that [✁]. The same document shows that [✁].[381]

5.32 Issuing portfolios which are expected to generate higher revenue on the acquiring side also allow issuers to achieve higher incentives. These include portfolios that can generate higher scheme fees, such as those with higher average transaction values or with higher proportions of cross-border transactions.

5.33 Portfolios with higher average payment values per person lead to higher revenue for the schemes. For example, issuing portfolios targeting affluent cardholders [✁].[382] Moreover, [✁]. For example, a document [✁]. These include [✁]. The document indicates [✁].[383]

5.34 Co-branded card portfolios[384], for example, tend to be particularly profitable for schemes. Mastercard documents describe co-brands [✁].[385] This allows issuers of these portfolios – and the merchants that co-brand those cards – to negotiate higher incentives. Moreover, in contrast to standard issuing deals, co-branding contracts do attract competition from American Express, which may also increase the co-branded card merchants' bargaining power.[386] Visa's analysis of co-brand deals shows [✁].[387]

5.35 In conclusion, the evidence indicates that issuers typically benefit from some level of competition between Mastercard and Visa. Their bargaining power, however, varies, resulting in significant differences in the incentives that issuers receive from card schemes.

Non-financial dimensions of competition

5.36 While price factors are an important dimension of competition for issuers between Mastercard and Visa, issuers also consider non-price factors when choosing between card schemes. Mastercard and Visa compete on the quality of the services they provide and by differentiating their products.

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377 [✁]. See Annex 5, paragraph 5.45.

378 See Annex 5, paragraph 5.75.

379 [✁]. See Annex 5, paragraph 5.75.

380 See Annex 5, paragraph 5.81.

381 [✁]. See Annex 5, paragraph 5.52.

382 [✁]. See Annex 5, paragraph 5.76.

383 [✁]. For further examples, see Annex 5, paragraph 5.75.

384 A co-branded credit card is sponsored by two parties – typically, a retailer and a card issuer or card network – and usually bears the logos of both. Co-branded cards can be used anywhere that type of credit card is accepted.

385 See Annex 5, paragraph 5.76.

386 See Annex 5, paragraphs 5.77 to 5.79.

387 Annex 5, paragraph 5.75.

5.37 Mastercard told us that, as the issuers' business model depends on the use of their cards, they are interested in card schemes that innovate to give payers the best payment experience. It said that if a card scheme fails to enhance its overall quality, it would be less favoured by payers and, therefore, also by issuers.[388] Mastercard said it continually innovates to increase its value to issuers, pointing to enhancements to the chargeback and dispute resolution platform, tokenisation, and new authentication solutions to adapt to the rise in e-commerce. Without this innovation, Mastercard told us that 'issuers and cardholders would shift to other schemes or payment methods for their purchases, undermining Mastercard's transaction volumes and revenues'.[389]

5.38 As discussed in Annex 5, non-financial factors discussed in Mastercard's proposal to issuers can include [✂]. Mastercard's documents also show that internally it views [✂] as attractive non-price factors. The documents we received did note that Mastercard [✂].[390]

5.39 Visa's proposals to issuers [✂]. Visa's documents also discuss [✂].[391]

Conclusions

5.40 We find that Mastercard and Visa face stronger competitive constraints on the issuing side than on the acquiring side. These constraints are mainly a result of competition between Mastercard and Visa, rather than with providers of other payment methods, as each scheme competes to win issuing portfolios. Although there are some barriers to issuers' ability to migrate between schemes, many issuers have been willing and are able to do so and have leveraged this ability to negotiate deals with Mastercard and Visa. An increasing number of issuers switched between Mastercard and Visa between 2018 and 2022.

5.41 Competition between Mastercard and Visa has resulted in high incentives to issuers, in some cases more than totally offsetting the core fees charged to issuers. The evidence also indicates that incentives have become larger in recent years, reflecting increased competition between the schemes. On the other hand, we note that issuers have differing degrees of bargaining power – larger issuers typically receive larger incentives. Moreover, issuers' choice of card scheme can also be influenced by non-financial elements of their offerings. Product differentiation may therefore mitigate price competition.

5.42 Stakeholders responding to our interim report generally agreed with our assessment of issuing-side competitive constraints.[392]

5.43 Given our conclusion that Mastercard and Visa face stronger competitive constraints on the issuing side than on the acquiring side, in our analysis of market outcomes, developed in Chapter 6, we have focused on the acquiring side. We note, however, that there are other considerations emerging from the evidence base which we may wish to revisit or explore in due course, such as around the impact of incentives used to secure issuing portfolios on competition between cards and other payment methods.

388 Mastercard response to MR22/1.9 (21 May 2024), page 15.

389 Mastercard response to PSR working paper dated 23 February 2023 [✂].

390 For more detail on non-financial factors discussed in Mastercard's documents, see Annex 5, paragraphs 5.61 to 5.65.

391 For more detail on non-financial factors discussed in Visa's documents, see Annex 5, paragraphs 5.66 to 5.70.

392 See responses by [✂].

6 Market outcomes: pricing, profitability, innovation and quality

This chapter presents our assessment of the outcomes for customers of Mastercard and Visa scheme and processing services in the UK.

- We assess the card schemes' pricing of scheme and processing services to the acquiring side.
- We set out our profitability analysis, comparing Mastercard's and Visa's profit (EBIT) margins to those of comparable companies that operate in competitive markets.
- We consider the non-pricing dimensions of market outcomes for customers of Mastercard and Visa scheme and processing services, related to the quality of the schemes' services and to their product innovation.

Introduction

6.1 Evaluating outcomes of the competitive process in their different forms in a market – e.g., prices and profitability, levels of innovation, product range and quality – helps the PSR determine whether there are competition problems and, if so, the extent to which customers may be harmed by them. Prices and profits are among the more observable and measurable outcomes and an analysis of these may be useful in understanding the extent and nature of competition and can be helpful in measuring customer detriment.

6.2 In particular, persistent strategies of increasing prices, combined with stable and relatively high profits, may be indicative of weak competitive constraints. Profits and prices can also give an indication of the level of harm that customers have been suffering over time as a result. Finally, considering quality outcomes can give a sense of whether customers are receiving a good quality service and, together with the analysis of profits, whether differences in quality explain differences in price across providers.

6.3 We recognise that in the supply of scheme and processing services there is a lack of effective competitive constraints on Mastercard and Visa in the supply of core scheme and core processing services to acquirers and merchants in the UK.[393] In relation to optional services on the acquiring side, Mastercard and Visa are subject to varying degrees of constraint across their optional services, with stronger indications that lack of effective alternatives results in Mastercard and Visa not facing effective competitive constraints in the supply of some of these services.[394] On the issuing side, we have found that

393 See Chapter 4, paragraphs 4.203 to 4.206.

394 See Chapter 4, paragraphs 4.207 and 4.208.

Mastercard and Visa face stronger competitive constraints, with the schemes competing against each other to win issuing portfolios.[395]

6.4 In this chapter, we consider a range of indicators of outcomes, specifically by reference to the PSR's statutory objectives set out in sections 50 to 52 of FSBRA. In reaching conclusions on the outcomes of the competitive process in the supply of scheme and processing services, we take into account the totality of the evidence across the four indicators (pricing, profitability, innovation and quality).

6.5 An indication that the card schemes' profits were at levels in excess of those that we might expect in a competitive market would point towards there being a likelihood of material harm to merchants and, ultimately, to consumers. In other words, given our provisional assessment of a lack of effective competitive constraints in relation to core scheme and processing services, it could be that fees have been set above competitive levels for a number of years already, so we might not necessarily expect to see a clear upward trend in fee levels for these services in recent years.

6.6 Consistent with our service user objective, we consider that in a well-functioning market the level and structure of scheme and processing fees should take account and promote the interests of users of the schemes' network on both sides of the market, including acquirers, merchants and their customers. As explained in Chapter 3, the economic literature tells us that, in the context of card schemes, harm to service users does not only occur when schemes generate higher profits than would be expected in a competitive market. The structure of the fees between the two sides of the market also matters and schemes have an incentive to set higher acquiring-side fees than would be socially optimal.[396] Rebates and incentives on the issuing side do not necessarily compensate for high fees on the acquiring side. We therefore do not consider that an assessment of negative impact on service users should be purely based on an estimate of the total net fees paid and incentives received by service users on the two sides of the market. A fee structure that is skewed towards the acquiring side can be a source of harm in itself and may indicate that aspects of the market are not working well by reference to our payment systems objectives.

6.7 In the following paragraphs, we make a few preliminary observations on pricing, profitability and quality indicators, before turning to our analysis of the evidence in the remainder of this chapter.

Introduction to pricing and profitability analysis

6.8 Prices are an important measure of customer outcomes. In a well-functioning market we would expect prices to broadly align to and move together with efficiently incurred costs across the industry (although there can be variations between individual firms). While prices may increase in the short term to reflect changes in demand or supply conditions, competition would be expected to bring prices back into line with long run efficient costs.

6.9 We have looked at recent trends in card scheme revenue, analysed a set of the most material specific fee changes, and used econometric analysis to estimate recent changes in average fee levels, while controlling for any changes in transaction value, volume and mix.

395 See Chapter 5, paragraph 5.40.

396 See Chapter 3, paragraphs 3.16 and 3.20.

6.10 In assessing fee levels and changes in fees over time, we have not looked in detail at relevant cost levels and whether these have changed over time, but we have assessed the card schemes' profitability. Looking at profitability should also allow us to control for any material changes in the quality of services provided to customers. If profitability were high and above levels that would prevail in a competitive market, this would indicate that prices are being set significantly in excess of the costs of providing the relevant services, including the costs of any investment in innovation or of any service quality improvements.

6.11 Another important indicator of the extent of competition in a market is the level of profit of the firms involved. A competitive market is likely to generate significant variations in profit levels between firms as supply and demand conditions change, but with an overall tendency towards levels commensurate with the cost of capital of those firms (regardless of the level of quality they provide). At particular points in time, the profits of some firms may exceed what might be termed the 'normal' level. Reasons for this could include, for instance, cyclical factors, transitory price or other initiatives, the fact that some firms may be more efficient than others and the fact that some firms may be earning profits gained as a result of past innovation.

6.12 We have assessed the profitability of Mastercard and Visa using a margin-based approach. There are key elements to our approach to profitability analysis:

- Mastercard and Visa are global businesses that do not report externally or internally the performance of their respective UK businesses. However, they publish global consolidated accounts and non-consolidated European accounts. We have therefore reviewed UK accounts that the schemes prepared for the purposes of this market review, and also considered whether their global or European accounts are a suitable proxy for the financial performance of their UK businesses.
- We are concerned with economic rather than accounting measures of profit and, therefore, we have reflected this in our analysis of the information.[397,398]
- We then analyse their profitability by reference to selected comparators.

Introduction to the analysis relating to quality and innovation

6.13 We have sought to understand various measures of quality and innovation relevant to the provision of scheme and processing services.[399] A competitive market is likely to generate different price/quality combinations across providers in accordance with the preferences of different customers, who can observe, understand and choose between the available combinations. Competition in the different price/quality segments would ensure customers get good value for money and profits are not excessive.

397 Economic measures of profits refer to financial costs and benefits that accrue to Mastercard and Visa as a result of their relevant UK operations. This is to distinguish them from accounting costs and benefits in that economic costs and benefits take wider considerations into account, such as indirect (e.g., financial benefits in other parts of Mastercard's or Visa's business) or future benefits.

398 Economic profits are levels of profits that are higher than those that would be available in competitive markets (supernormal profits).

399 Since our interim report, we have updated this chapter to reflect arguments made by Mastercard and Visa on quality and innovation. See paragraphs 6.141 to 6.144, 6.155 to 6.161, and 6.178 to 6.180.

6.14 As stated in Chapters 4 and 5, Mastercard and Visa do compete for issuers and for cardholders; these forms of competition give the schemes an incentive to improve their services and innovate.[400] Competition on the issuing side can also indirectly benefit the acquiring side, for example when innovations are beneficial to both cardholders and merchants. However, it will not protect acquirers on all dimensions, in particular it will not protect acquirers on those pricing and non-pricing dimensions which are specific to the acquiring side.

6.15 In this chapter, we consider whether the high fees charged by the schemes on the acquiring side are commensurate to the schemes' investments (and therefore take account and promote the interests of service users and encourage innovation) and the extent to which recent fee increases can be shown to have been associated with increasing investments to the benefit of acquirers and merchants.

Structure of the chapter

6.16 The rest of this chapter sets out:

- Mastercard's and Visa's high-level views (and our assessment of these) on market outcomes
- our evidence and assessment of pricing outcomes on the acquiring side
- our evidence and assessment of Mastercard and Visa's profitability
- our evidence and assessment of the relation between pricing outcomes on the acquiring side and Visa and Mastercard's service quality and innovation
- our conclusions on outcomes overall

Card schemes' high-level views on outcomes and our assessment of these

6.17 Mastercard and Visa made a number of arguments that are relevant to our assessment of outcomes in the supply of scheme and processing services to acquirers. Both schemes made submissions that covered both the process and outcomes of competition that they faced, as well as outcomes across the wider payments landscape. These submissions are reported in detail in Annex 11.[401] In this section, we summarise the schemes' high-level views and provide our assessment (more specific arguments in relation to pricing outcomes, profitability, and quality and innovation are set out and addressed in the relevant subsections of this chapter).

What the card schemes told us

6.18 Mastercard submitted that it generates value by boosting the economy, working for consumers and helping businesses; its scheme activities improve payment efficiency, facilitate new entry, maintain security and stability in the payments ecosystem, drive innovation and promote wider societal benefits.[402]

400 See Chapter 4, paragraph 4.50, and Chapter 5, paragraphs 5.35 to 5.36.

401 Paragraphs 11.3 to 11.9.

402 Mastercard response to PSR working paper dated 23 February 2023 [✁]. See also Mastercard response to MR22/1.9 (21 May 2024), pages 52-56.

6.19 Visa told us that it offers a trusted and high-quality service focusing on outcomes that matter most to end-users, including reliable and resilient payments infrastructure, rapid and seamless transactions, robust payment protections and security, and innovative and dynamic functionality.[403]

6.20 Both Mastercard and Visa stated that, looking at outcomes across the UK payments landscape, there is evidence of strong competition, a high level of innovation, new entry, and improved service quality – with the card schemes playing an important role in delivering those outcomes.

- Mastercard submitted that the market outcomes that can be observed in the UK payment landscape are consistent with a well-functioning market, with volumes continuing to shift from traditional payment methods (e.g., cash and cheque) towards more efficient methods. It said that this, in part, has been made possible through continued innovation, which has improved the services provided to end-users through the whole UK payments ecosystem, leading to both greater choice of payment methods and an increased quality of payment methods.[404] Mastercard told us that, in this context, it must compete for both issuer and acquirer customers to be successful, including by improving the quality of its services to the benefit of issuers and cardholders. It submitted that, in certain customer segments, there is a greater focus on quality and innovation competition rather than pure price competition.[405]
- Visa submitted that competition in the UK payments sector is thriving[406], that it is not limited to competition between card schemes[407] and that it cannot be assessed with reference only to the fees charged by Visa (and Mastercard). It told us that it invests significantly and continuously to develop and innovate its payment ecosystem to deliver value and ensure good outcomes for end-users.[408]

Our assessment

6.21 The context of the UK payments sector is an important part of our assessment. As set out in our Terms of Reference[409], card payments are critical to the smooth running of the UK economy as they enable people to pay for their purchases and merchants to accept payments for goods and services. They are a well-established method for consumers to make payments, and their use is growing. We note Mastercard's and Visa's submissions on outcomes in the wider payments space, as well as their part in ensuring reliable and secure transactions and supporting innovation. The focus of this market review is the scheme and processing services that Mastercard and Visa provide to their customers, driven by concerns

403 Visa response to MR22/1.6 (30 June 2023) [✁]. See also Visa response to MR22/1.9 (21 May 2024), Technical Annex 3, paragraph 3.8.

404 Mastercard response to PSR working paper dated 23 February 2023 [✁].

405 Mastercard response to PSR questions dated 23 June 2023 [✁].

406 Visa response to PSR draft Terms of Reference for the market review of card scheme and processing fees dated 21 June 2022 [✁].

407 Visa response to PSR working paper dated 23 February 2023 [✁]. See also Visa response to MR22/1.9 (21 May 2024), page 6 (first paragraph).

408 Visa response to MR22/1.6 (30 June 2023) [✁]. See also Visa response to MR22/1.9 (21 May 2024), page 4 and Technical Annex 2, paragraph 2.11.

409 MR22/1.2, *Market review of card scheme and processing fees*, Final terms of reference, October 2022, paragraph 1.3.

from stakeholders, including about rising fee levels in recent years.[410] The focus is on a narrower issue by design, but these services are an important part of the supply chain for payments in the UK – and the issue of their competitive pricing is important too.

6.22 In our competitive assessment, we have, of course, paid close attention to the extent to which wider trends, including innovation, entry by new providers and the provision of new services, have affected Mastercard's and Visa's provision of scheme and processing services. Our assessments of competition – on the acquiring and issuing sides, and core scheme, core processing and optional services – have all taken account of this wider context, and the firms involved, in coming to a view on the competitive constraints facing Mastercard and Visa – now and in the foreseeable future.

Pricing on the acquiring side

6.23 This section sets out our assessment of the card schemes' pricing of scheme and processing services to the acquiring side.

6.24 We have assessed evidence on competition in core scheme and processing services supplied to acquirers (Chapter 4)[411] and to issuers (Chapter 5)[412], as well as competition in the supply of optional services to acquirers (Chapter 4).[413] As our competitive assessment on the supply of core scheme and processing services to acquirers has identified a lack of effective competitive constraints, our assessment of pricing outcomes is also focused on the acquiring side, with evidence from the issuing side being taken into account where relevant.

6.25 Our assessment draws on six main sources of evidence that we have examined in coming to a view on pricing outcomes. In brief, these are:

- Our analysis of the scheme and processing fees paid as a proportion of transaction value by acquirers and issuers, without controlling for changes in transaction value, volume or transaction mix.[414]
- Our econometric analysis of the scheme and processing fees paid by acquirers to the schemes over the most recently available seven- and six-year periods, estimating the change in average fee levels, while controlling for changes in transaction value and volume, transaction mix and for acquirer-specific effects.[415]
- Our analysis of the 20 most material fee changes to scheme and processing fees (in terms of impact on the card schemes' UK revenues) in the period 2017 to 2022, based mainly on evidence from Mastercard and Visa internal documents.[416]

410 MR22/1.2, *Market review of card scheme and processing fees*, Final terms of reference, October 2022, paragraphs 1.10 and 1.11.

411 See paragraphs 4.203 to 4.206.

412 See paragraphs 5.40 and 5.41.

413 See paragraphs 4.207 and 4.208.

414 See Annex 6.

415 See Annex 7.

416 See Annex 8.

- Evidence from the schemes' internal documents on the revenue generated by their UK scheme and processing services, with a focus on: past and projected changes to the schemes' (net) revenue; and any differences in the extent of revenue generated based on customer, transaction or product type.[417]
- Evidence and arguments submitted by Mastercard and Visa in the course of our review.[418]
- Evidence from merchants on the fee changes that they have experienced in recent years.[419]

6.26 Our evidence and findings on pricing outcomes are set out in the following subsections. These cover:

- card schemes' views on pricing and our assessment (paragraphs 6.28 to 6.43)
- trends in scheme and processing revenues (paragraphs 6.44 to 6.60)
- changes in average fee levels (paragraphs 6.61 to 6.82)
- drivers of fee changes (paragraphs 6.83 to 6.102)

6.27 These subsections are followed by our findings on pricing outcomes (paragraphs 6.103 to 6.110).

Card schemes' views on pricing and our assessment

6.28 In this subsection, we summarise and briefly respond to two of the submissions that Mastercard and Visa have made in relation to our assessment of pricing outcomes; these submissions are reported in greater detail in Annex 11.[420] These are:[421]

a. Price levels are competitive and card acceptance costs are low.
b. Visa has been transitioning from a membership model to a commercial model, resulting in changes to Visa's fees.

Card schemes' submissions that price levels are competitive and card acceptance costs are low

6.29 Both Mastercard and Visa stated that their pricing of scheme and processing services in the UK is determined by competitive pressure from a range of competing payment methods and that the cost of making transactions using their services is low, considering the cost of alternatives and the nature of the services that they provide.

6.30 The schemes' submissions are shown in Annex 11, paragraphs 11.11 to 11.15. In summary, the schemes made the following main points:[422]

a. Scheme and processing fees are determined by competitive pressure, and merchants have alternative payment methods available.

417 See Annex 9.
418 These are set out at paragraphs 6.28 to 6.42, below.
419 See Annex 2.
420 Paragraphs 11.11 to 11.16.
421 Card scheme views on quality of service, innovation and investments, and on the relationship between fees and value are presented in a later section on quality and innovation; see paragraphs 6.141 to 6.144, 6.155 to 6.158, and 6.178 to 6.180.
422 Visa's submissions in relation to the 2016 acquisition of Visa Europe by Visa Inc are considered separately in the following sub-section.

b. Card fees are generally comparable with or lower than the cost of alternative payment methods, once differences in product offering are accounted for (in particular, if the MSCs of payment methods without buyer protection are adjusted to account for this difference in functionality).

c. Scheme and processing fees constitute a small component of the overall merchant service charge. In particular, Visa told us that it has taken specific action to maintain low fee levels for certain transaction categories.

d. Mastercard submitted that its average fees have not increased significantly in recent years (3.1% p.a., on average).

e. Fee adjustments have reflected service improvements and have made it possible to invest and innovate.

6.31 We consider the schemes' submissions in turn below.

6.32 First, our assessment of the competitive constraints on Mastercard and Visa in their setting of fees for scheme and processing services are set out in Chapters 4 and 5. We conclude that, on the acquiring side, Mastercard and Visa do not face effective competitive constraints in the provision of scheme or processing services. In particular, while other payment methods are available, merchants have limited ability or incentive to steer transactions towards them and away from cards. As such, our assessment is that scheme and processing fees on the acquiring side are unlikely to be set as part of an effective competitive process.

6.33 Second, the relatively lower level of card fees compared to other payment methods is not in itself evidence of competitive constraints on Visa and Mastercard, as we discuss in Chapter 4, paragraphs 4.49 and 4.118.

6.34 Third, whilst scheme and processing fees constitute a relatively small component of the overall merchant service charge, this does not preclude the possibility of problems in their supply and/or pricing, especially given our finding that fees are unlikely to be set as part of a competitive process. We note that actions have already been taken in relation to the other major components of the merchant service charge (interchange fees and acquirers' net revenue):

- Domestic interchange fees are largely regulated, and the PSR has recently consulted on the introduction of caps on interchange fees for transactions between the UK and the European Economic Area.[423]
- The PSR's market review into the supply of card-acquiring services has aimed at improving competition between acquirers, increasing the pressure on acquirers' net revenue.[424]

6.35 Fourth, as set out later in this chapter, our assessment concludes that, among other things, average fees (as a proportion of transaction value) have been rising substantially in real terms in recent years and that the evidence for Mastercard and Visa's margins would be consistent with a finding that they are higher than would be expected in competitive markets.

6.36 Fifth, we also do not consider that the observed fee increases were necessary to support the schemes' investments for the reasons discussed in paragraphs 6.178 to 6.185.

423 See CP24/14 Market review of UK-EEA consumer cross-border interchange fees: Stage 1 remedy consultation.

424 See PS22/2 Card-acquiring market remedies, Final decision, October 2022.

Visa's submission that pricing decisions reflected its transition from a membership model to a commercial model

6.37 Visa stated that the acquisition of Visa Europe by Visa Inc. in 2016 was an important driver of its pricing decisions in the period that followed the acquisition. Visa's submission is included in Annex 11, paragraph 11.16. In summary, Visa told us that the new commercial environment created a set of enhanced demands on Visa:[425]

- Visa's clients' (and their clients') expectations increased with regards to the resilience, security and functionality of its network. Visa therefore has had to invest heavily in resilience and to provide a safe and secure payment infrastructure.
- Moving to an open ecosystem means that different participants demand different services. Visa therefore needs to invest more than ever to support innovation to facilitate the development of new products and services.
- Visa has had to invest heavily to enhance its channels of communication with clients.

6.38 Looking both at our analysis of scheme and processing fees from our card-acquiring market review (covering 2014 to 2018) and our econometric analysis (covering 2018 to 2023), we do see a substantial increase in the level of fees that Visa charged to acquirers over this period. For the latter period, the increase is greater than the comparable change for Mastercard fees.

6.39 However, we are not persuaded that Visa's arguments above would justify the fee increases implemented after the acquisition of Visa Europe by Visa Inc.

6.40 First, it is unclear why Visa Europe would not have had a similar incentive to invest in resilience and fraud prevention even before the acquisition, as it was in the interest of the banks owning Visa to make such investments.

6.41 Second, investor materials from 2018 suggest that a purpose of the post-acquisition fee increases was to 'close the gap' with Mastercard. This aim was at the time publicly mentioned by Visa's executives. For example, during a presentation at Deutsche Bank 2018 Technology Brokers Conference, Visa CFO Vasant Prabhu stated: 'we've acknowledged that there is still a pricing gap [between Visa and Mastercard]. And it's a pricing gap that needs to be addressed. It is something we have to deal with over time. And we have to be prudent about it'.[426] Similarly, in the same year, in a presentation at the Autonomous Research Future of Commerce Symposium Conference, Visa's Head of Investor Relations Mike Milotich responded as follows to a question on how Visa's pricing compared to the competition: 'there is a pricing gap [between Visa and Mastercard] that is - it's not an insignificant one. And so we're aware of that, and we have every intention of closing it, but we're going to do it overtime and we're going to be prudent about it'.[427]

425 Visa response to PSR questions dated 9 November 2022 [✂].

426 Visa Inc. (V) Management Presents at Deutsche Bank 2018 Technology Brokers Conference (Transcript); see also Zephyre/BRC response to MR22/1.9 (21 May 2024), page 53.

427 Visa Inc. (V) Management Presents at Autonomous Research Future of Commerce Symposium Conference (Transcript); see also Zephyre/BRC response to MR22/1.9 (21 May 2024), page 54.

6.42 Third, Mastercard charging higher levels than Visa until 2018 does not demonstrate that Visa's fees were at an appropriate level, or that the price of those fees did not, itself, reflect Visa's market power. Indeed, the fact that Visa could materially increase its fees – in absolute terms and relative to Mastercard without a discernible demand response – is itself evidence that there is a lack of effective competitive constraints on its pricing on the acquiring side.

6.43 In the remaining part of this section, we set out further below our assessment of whether the current levels of these scheme and processing fees reflect competitive levels, serve the interests of service users and encourage innovation.

Trends in scheme and processing revenues

6.44 In assessing the evidence on overall trends in the revenue that Mastercard and Visa generate from scheme and processing fees, we have looked at the following evidence:

- our analysis of the schemes' data on gross fee revenues
- our analysis of the schemes' rebates and incentive payments
- Mastercard and Visa internal documents and data on recent fee changes
- Mastercard and Visa internal documents that relate to the revenue generated from scheme and processing by their UK businesses

PSR analysis of schemes' fee data on gross fee revenues

6.45 As set out in Annex 6, we have analysed information that Visa and Mastercard submitted on their provision of scheme and processing services in recent years, including data on fees, incentives and rebate payments that they charged to or received from acquirers and issuers.

6.46 Since our interim report publication, we have extended our analysis of fee data so that it covers, respectively, the most recently available seven- and six-year periods for which we could obtain data from Mastercard (2017–2023) and Visa (2018–2023).

6.47 As context to our pricing assessment, we set out four main points that emerge from this analysis of overall revenues:

a. First, the total amount of gross revenue from both issuers and acquirers for scheme and processing services has increased substantially over the six- to seven-year periods that we looked at. For Mastercard, overall gross revenue from scheme and processing fees increased from [✂] in 2017 to [✂] in 2023.[428] For Visa, gross fee revenue rose from [✂] in 2018 to [✂] in 2023.[429] Transaction value increased from [✂] in 2018 to [✂] in 2023 for Mastercard and [✂] increased from just under [✂] in 2018 to [✂] in 2023 for Visa. Transaction volume increased [✂] in 2018 to [✂] in 2023 for Mastercard and from [✂] in 2018 to [✂] in 2023 for Visa.

b. Second, looking at the split between scheme and processing fees for UK transactions, we found that Mastercard's [✂], as a proportion of transaction value, with both [✂] between [✂].[430] For Visa, the levels of gross scheme and processing fees were [✂], but Visa's [✂].[431]

428 Annex 6, paragraph 6.20 and Figure 10.

429 Annex 6, paragraph 6.20 and Figure 11.

430 PSR analysis of Mastercard data.

431 PSR analysis of Visa data.

c. Third, focusing on the acquirer side, the total amount of gross fees paid by acquirers for scheme and processing services has increased substantially, with Mastercard's gross fees increasing from [✂] in 2017 to [✂] in 2023[432], while for Visa gross fees rose from almost [✂] in 2018 to over [✂] in 2023.[433] Transaction volumes and values also increased substantially in this period, as set out above.

d. Finally, again on the acquiring side, we found that revenue from optional services (or services that Mastercard and Visa had identified as being, in their view, optional) has been [✂] in recent years, with Mastercard data showing a large and growing share of its gross revenue coming from these services, from [✂]% of gross revenue in 2017 to [✂]% in 2023. For Visa, [✂], although [✂] over time – from [✂]% in 2018 to [✂]% in 2023.[434]

6.48 In view of the above, Visa and Mastercard revenues from scheme and processing fees on the acquiring side in the UK have risen substantially in recent years, with gross fee revenue from acquirers increasing substantially – by [✂]% for Mastercard between 2017 and 2023, and by [✂]% for Visa between 2018 and 2023.

PSR analysis of schemes' fee data on rebates and incentive payments

6.49 Looking at incentive and rebate payments made to issuers, acquirers and merchants, we found that, [✂][435], the vast majority of such payments had been made to issuers. For Mastercard, issuers accounted for [✂] of the value of such payments in the period 2017 to 2023[436], while for Visa the equivalent share was [✂] in the period 2018 to 2023.[437] As set out below, this means that the acquiring side of the schemes account for the large majority of net scheme and processing fee revenue going to both Mastercard and Visa.

6.50 As set out in Annex 6, we looked at issuer and acquirer fees as a proportion of transaction values and found that:[438]

- As shown in Figure 4 and Figure 6 below, Mastercard and Visa provide high incentives and rebates to issuers. The evidence also indicates that incentives have become larger in recent years, reflecting increased competition between the schemes. Most [✂] issuer fees paid to the schemes were offset by incentive and rebate payments for both Mastercard (over the period 2017 to 2023) and Visa (between 2018 and 2023). Incentives and rebates amounted to [✂]% and [✂]% of total issuer fee revenues paid in aggregate to Mastercard and Visa respectively over the same periods. The proportion of issuer revenues which incentives have amounted to has [✂] increased for Mastercard ([✂]% to [✂]%) and [✂] increased for Visa (from [✂]% to [✂]%) over the period.
- Revenue from the acquiring side accounts for most of net scheme and processing fee revenue, as can be seen by comparing Figure 5 with Figure 4 and Figure 7 with Figure 6. Mastercard and Visa attributed an average proportion of [✂]% and [✂]% of total annual net fees to acquirer fees across all years respectively.

432 Annex 6, Figure 21.
433 Annex 6, Figure 24.
434 Annex 6, paragraph 6.69 and Figure 21; paragraph 6.77 and Figure 24.
435 As set out in Annex 6, [✂].
436 Annex 6, Figure 17.
437 Annex 6, Figure 18.
438 Annex 6, paragraph 6.89, Figures 28 and 29.

- The relative amounts that acquirers pay compared with issuers has increased. The proportion of net fee revenues attributed to acquirers grew from [✁]% in the 2018 financial year to [✁]% in the 2023 financial year for Visa. The same proportion for Mastercard grew from [✁]% in 2017 to [✁]% in 2023.
- As shown in Figure 5 and Figure 7, acquirer gross fee revenues (expressed as a share of transaction value) marginally increased by [✁]% between 2017 and 2023 for Mastercard, and significantly increased by [✁]% between the 2018 and 2023 financial years for Visa. However, these increases are likely to be impacted by changes in transaction mix (as set out in paragraph 6.89(d) in Annex 6).

6.51 Taken together, this evidence shows that the acquiring side accounts for a large and increasing proportion of Mastercard's and Visa's revenues and that incentives and rebates largely offset the issuer-side revenues of the two schemes. We also consider it is likely that acquirer revenues (expressed as share of transaction value) have significantly increased in recent years for both schemes, although we note the increase for Mastercard is not visible before controlling for changes in its transaction mix.

Figure 4: Mastercard's issuer gross fee revenues, incentives and rebates, and net fee revenues as a proportion of transaction value

[✁]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022, 22 July 2024 and 1 October 2024. [✁].

Note: Percentage of UK transaction value equals total gross, total incentives and rebates, and net fee revenues divided by total value of UK transactions involving a UK cardholder.

Figure 5: Mastercard's acquirer gross fee revenues, incentives and rebates, and net fee revenues as a proportion of transaction value

[✁]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022, 22 July 2024 and 1 October 2024. [✁].

Note: Percentage of UK transaction value equals total gross, total incentives and rebates, and net fee revenues divided by total value of UK transactions involving a UK merchant.

Figure 6: Visa's issuer gross fee revenues, incentives and rebates, and net fee revenues as a proportion of transaction value

[✁]

Source: PSR analysis of data submitted by Visa in responses to PSR questions dated 23 November 2022 and 19 July 2024 [✁].

Notes: Percentage of UK transaction value equals total gross fee revenues, total incentives and rebates, and net fee revenues divided by total value of UK transactions involving a UK cardholder. Other revenues, incentives and rebates (as defined by Visa's internal management classification) recorded under issuers are included in our calculations of gross and net fee revenues.

Figure 7: Visa's acquirer gross fee revenues, incentives and rebates, and net fee revenues as a proportion of transaction value

[✂]

Source: PSR analysis of data submitted by Visa in responses to PSR questions dated 23 November 2022 and 19 July 2024 [✂].

Notes: Percentage of UK transaction value equals total gross fee revenues, total incentives and rebates, and net fee revenues divided by total value of UK transactions involving a UK merchant. Other revenues, incentives and rebates (as defined by Visa's internal management classification) recorded under acquirers are included in our calculations of gross and net fee revenues.

Mastercard and Visa internal documents and data on recent fee changes

6.52 As set out in Annex 8[439], we analysed a set of Mastercard's and Visa's internal documents that related to the approval of their most material fee changes over the period 2017 to 2022.[440]

6.53 For Mastercard, we found that a similar number of changes in our selection affect acquirer-side and issuer-side fees, with many changes affecting both sides. The fact that a fee change affects both sides of the market, however, does not necessarily mean that the two sides are affected equally. The data provided by Mastercard does not always allow the separation of the revenue impact of fee changes on acquirers and issuers. However, Mastercard data on the selection of fee changes that we have analysed shows that most of the revenue increase [✂]. This is particularly the case when [✂].[441]

6.54 For Visa, most of the fee changes in our assessment only affected acquirer-side fees. The difference between acquirers and issuers was particularly striking in terms of the revenue impact from the changes in mandatory fees. The data provided by Visa allowed us to separate the impact on acquirers and on issuers for most of the fee changes we selected. If we consider only those changes for which the impact can be split, changes on the issuer side led to an aggregate reduction of fee revenue for Visa, while the [✂].[442]

Mastercard and Visa internal documents on revenue generation

6.55 Our review of Mastercard internal documents also found that net revenue generated from the acquirer side was [✂]. Our review of Visa internal documents also found that net revenue generated from the acquirer side was [✂].

6.56 For Mastercard, we found that, in the UK, its core issuing business generated [✂].[443] One document dated 2022 forecast that in the UK in 2022 [✂], leading Mastercard's core business [✂].[444] Mastercard has been competing for issuer portfolios in the UK in recent years, and the (upfront) incentives it provides as part of this competitive process have had, and are forecast to continue having, [✂].[445,446]

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439 See also paragraphs 6.84 to 6.94 below.

440 Annex 8, paragraphs 8.8 to 8.41.

441 See Annex 8, paragraphs 8.62, 8.63 and Figure 3.

442 See Annex 8, paragraphs 8.105 to 8.107, and Figure 7.

443 Annex 9, paragraph 9.75.

444 Annex 9, paragraph 9.75.

445 Annex 9, paragraph 9.76.

446 We understand these documents relate to Mastercard's core scheme and processing services only, and do not cover the supply of optional services, which are often dealt with separately in its internal documents.

6.57 For Visa, we found that its net revenue in the UK (and Ireland) was also [✂].[447]

Our assessment

6.58 We found that Visa and Mastercard revenues from scheme and processing fees on the acquiring side in the UK have risen substantially in recent years, with gross fee revenue from acquirers increasing substantially – [✂]% for Mastercard between 2017 and 2023, and [✂]% for Visa between 2018 and 2023. While both Mastercard and Visa have seen substantial growth in their transaction volumes and values in this period, this finding is important context for our analysis of the balance between revenue coming from the acquiring versus the issuing side, as well as for our econometric analysis of average fee changes.

6.59 The balance of scheme and processing fees that Mastercard and Visa charge falls heavily on the acquiring side of the schemes rather than on the issuing side, with net fee revenue from acquirers' accounting for most net scheme and processing fee revenue for Mastercard and Visa in the periods from 2017 to 2023 and 2018 to 2023 respectively.

6.60 We consider that this pattern is consistent across the data that we have analysed for the period 2017 to 2023, as well as in our assessment of both schemes' internal documents on revenue generation and on the impact on acquirers and issuers from recent material fee changes. This is consistent with our assessments of the competitive constraints on each side, where we found a lack of effective competitive constraints on Mastercard and Visa on the acquiring side (see Chapter 4) while they face competition from each other on the issuing side (see Chapter 5).

Changes in average fee levels

6.61 In assessing the evidence on changes in average fees, we have looked at evidence from:

- our analysis of the schemes' data on fee revenues, rebates and incentive payments
- our econometric analysis of average fee revenue paid by acquirers, controlling for changes in transaction volume, value and transaction mix
- Mastercard's and Visa's internal documents on revenue generation
- Merchant submissions

PSR analysis of fee data

6.62 We looked at data on changes in revenue generated from individual fee categories on the acquiring side over recent five-year periods, which were the most recently available at the time of our interim report. In order to understand the most important drivers of revenue changes, we looked at a set of the most important fees charged to acquirers, the percentage change in the fee in a five-year period[448] and the proportion of card scheme acquirer fee revenue accounted for by these fee categories.

447 Annex 9, paragraph 9.101 and Figure 17.

448 Again, this was 2017 to 2021 for Mastercard and 2018 to 2022 for Visa.

6.63 For Mastercard, fees charged to acquirers increased in some categories (in a number of cases by [✂]%), decreased in other categories, and remained the same in a few categories.[449] This suggests that Mastercard has changed its fee structure over time, but it is not clear from this analysis alone that overall average fees have increased.

6.64 For Visa, there were fewer individual fees in our analysis and a clearer trend, with many fee categories [✂], including a number that accounted for [✂] its acquirer fee revenue. For example, [✂].[450]

PSR econometric analysis

6.65 Since our interim report publication, we have extended our econometric analysis so that it covers the most recently available periods for which we could obtain data from Mastercard (2017-2023) and Visa (2018-2023), and also looks at the increase in Mastercard's acquirer fees separately for mandatory fees only. We have also updated our choice of main models in response to submissions from Mastercard, to address specific refinements it has proposed, and from Visa, who proposed exclusion of variables which are not relevant to our modelling.

6.66 As set out above, our descriptive data analysis on the evolution of scheme and processing fees suggests that the average acquirer fees increased significantly for Mastercard (between 2017 and 2023) and for Visa (between 2018 and 2023). We then sought to quantify any increase in average fees (as a proportion of transaction values) after controlling for transaction mix for the population of all acquirers. As set out in Annex 7[451], we used econometric techniques to control for the effect of observed transaction volume, value and mix (for example, share of credit card transactions, share of card-not-present transactions and so on) in order to isolate acquirer fees that may represent a price change. We also looked separately at whether acquirer fees have increased for mandatory (that is, non-optional) services, as overall acquirer fee increases may be attributed to an increase in the take-up and use of optional services purchased by acquirers (this is most relevant to Mastercard, which earns [✂]% to [✂]% of acquirer revenues from optional services).

6.67 We also examined changes in scheme and processing fees charged on the acquiring side as part of the Card Acquiring Market Review.[452] In that analysis, we found evidence of an increase in the average scheme and processing fee after controlling for changes in transaction mix, between 2014 and 2018, for Mastercard and Visa.

6.68 Using regression analysis to control for the main transaction characteristics affecting Mastercard's and Visa's acquirer fees, we found that average fees for mandatory services increased by at least 25% for both schemes:

- Average fees increased by [✂]% in real terms for Mastercard between 2017 and 2023. We found that overall fees increased by [✂]% between 2017 and 2023. We estimated a slightly lower increase in mandatory acquirer gross fee revenues (expressed as a share of transaction value) of [✂]% between 2017 and 2021 and found no evidence that fees fell between 2021 and 2023.

449 Annex 6, paragraph 6.89 and Figure 30.

450 Annex 6, paragraphs 6.89 and Figure 31.

451 Annex 7.

452 See final report on the Card Acquiring Market Review, Annex 4, 3 November 2021.

- Average fees increased by [✂]% in real terms for Visa between 2019 and 2023. We looked at data from 2018 to 2023, and estimated an increase of [✂]% between 2019 and 2023 [✂].[453] When estimating the regression analysis for mandatory fees only, we found a similar, if slightly higher, increase in fees, of around [✂]% between 2019 and 2023.

6.69 Based on these econometric estimates, the total scheme and processing fees for mandatory services that acquirers and merchants pay annually is at least £170 million [✂] higher due to these increases compared to the levels in 2017 (for Mastercard) and 2018 (for Visa).[454]

6.70 In response to Annex 7 of our interim report, both Mastercard and Visa submitted views on our approach and findings. These are summarised below and dealt with in the relevant sections of Annex 7.

6.71 Mastercard stated that:

a. Our estimates of the increase in overall fees did not control for the take-up of optional services and are likely to be biased upwards as a result.

b. We had not included refinements Mastercard had previously suggested would improve our modelling.

c. We may have omitted relevant control variables in our modelling. As such, Mastercard argued we cannot determine whether the apparent increase in fees is due to changes [✂] within a given fee structure or due to fee changes.

6.72 We consider that our analysis addressed Mastercard's concerns:

a. We have now looked at acquirer fee increases both for overall fees and mandatory fees only and found that fees have increased by [✂]% in both cases, as set out in Annex 7, paragraphs 7.60 to 7.83 and 7.84 to 7.96.

b. We have now included model estimates based on Mastercard's proposals within our main results. We found that it is unclear whether including Mastercard's refinements in our modelling results in lower fee increases, as set out in Annex 7, paragraphs 7.70 to 7.72.

c. We consider that, even though our analysis does not control for all fee drivers, it is sufficiently robust to account for the main transaction characteristics and behaviour of acquirers, as set out in Annex 7, paragraphs 7.73 and 7.74.

6.73 Visa stated that:

a. We may have included irrelevant, or marginally relevant, variables in our modelling, which leads to the problem of 'overfitting' (the risk that our estimated results correspond too closely to the data they are estimated on).

b. The inclusion of optional fees is not appropriate since they are charged for new and innovative services. Our estimates do not control for the value of new optional services, which creates an upward bias in our results.

c. Our results overstate the extent of fee increases, as they do not account for increases in service level quality over time.

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453 As set out in Annex 7, at paragraph 7.59(b), the data that we received from Visa [✂].

454 This calculation is based on: applying a [✂]% and a [✂]% increase to Mastercard's 2017 mandatory scheme and processing revenues of [✂]; a [✂]% and [✂]% increase to Visa's 2018 mandatory scheme and processing revenues of [✂].

6.74 In response to the points raised by Visa:

a. We have now included simpler models in our estimates and found that the estimated range of our main results is not lowered by these models, as set out in Annex 7, paragraphs 7.108 to 7.111.

b. We have now also looked at acquirer fee increases in mandatory fees only, which are not impacted by the take-up or value of optional services, and we still found significant increases in fees, as set out in Annex 7, paragraphs 7.127 to 7.141.

c. We do not consider it appropriate to include service quality in our econometric analysis, as we have not received data from Visa that report service quality improvement for each acquirer to use in our econometric analysis. As such, we judge it is more appropriate to consider service quality improvements separately as we have done in paragraphs 6.155 to 6.177.

Mastercard and Visa internal documents on revenue generation

6.75 As detailed in Annex 9, our review of the card schemes' internal documents that covered revenue generation included, for Visa, [✁]. Regarding Mastercard, we did not identify any documents that analysed the effect of price increases in the UK (or the UK and Ireland) specifically. However, the documents we reviewed showed [✁].

6.76 For Mastercard, we found that [✁], even in the context of its [✁] – for example, a presentation from July 2020 set out the impact of pricing on Mastercard's business in Europe from 2019 to 2020, stating that [✁].[455]

6.77 Price increases were also included in a number of forecasts for future revenue growth, for example, accounting for almost a quarter of projected growth in revenue from cards between 2021 and 2026[456], although there was also evidence of Mastercard identifying risks to its future ability to increase prices due to 'increasing challenge[s from] customers and regulators'.[457]

6.78 In its response to the interim report, Mastercard disagreed with our interpretation of these documents, submitting that they represent aspirations rather than an accurate forecast of the future and should therefore be treated with caution.[458] We note, however, that the forecasts in the documents are cogently articulated and we therefore consider them informative as to the possible future trajectory of Mastercard's business.[459]

6.79 Visa's internal documents show that [✁], with documents referring to [✁], made after the acquisition of Visa Europe by Visa Inc. in 2016.[460] These documents also include statements indicating that Visa [✁], with documents referring to Visa being [✁] and that it may [✁].[461] However, more recent documents indicate that [✁]. For example, [✁].[462]

455 Annex 9, paragraph 9.52.
456 Annex 9, paragraph 9.54.
457 Annex 9, paragraph 9.59.
458 Mastercard response to MR22/1.9 (21 May 2024), Annex 2, pages 30 and 32.
459 Mastercard's representations and our response are presented in greater detail in Annex 9, paragraphs 9.55 to 9.58.
460 Annex 9, paragraph 9.91.
461 Annex 9, paragraph 9.91.
462 Annex 9, paragraph 9.92.

Merchant submissions

6.80 As set out in Annex 2, we sent a questionnaire to merchants with a range of questions, including on merchants' awareness of the levels of scheme and processing fees they are charged, how these have changed in recent years, and their views on the reasons for any fee changes.[463] Nine merchants responded to our questionnaire, as well as the British Retail Consortium (BRC).[464] Six merchants told us that they do have visibility of the levels of scheme and processing fees levied by Mastercard and Visa, with three of these explicitly telling us that they were on IC++ contracts, although we note that, given the size of the respondents, they are all likely to be on such contracts. Two merchants said that they did receive a breakdown of fees but considered information provided about the fee levels for services as ambiguous and not sufficiently granular.[465]

6.81 Eight merchants told us that scheme and processing fees levied by Mastercard and Visa had increased in recent years:[466]

- Three merchants told us that overall scheme and processing fees had increased as a percentage of sales revenue:
  - One told us that scheme and processing fees had increased by 12% since 2017.
  - Another stated that scheme fees had increased by 162% between 2015 and 2022.
  - The third responded that the scheme fee rate increased by 2 basis points between 2021 and 2022 (to [✂] basis points for Visa and [✂] basis points for Mastercard).
- Three other merchants told us that both Mastercard's and Visa's scheme and processing fees had increased as a percentage of sales revenue:[467]
  - One told us that Mastercard fees increased by 40% and Visa fees increased by 33% since 2017.
  - [✂].[468]
  - The third stated that Mastercard fees increased by 78% (to 0.073% of sales revenue) and Visa fees increased by over 50% (to 0.041% of sales revenue) between 2019 and 2022 [✂]. In response to the interim report, the merchant told us that, since 2016, it has seen a 200% increase in scheme and processing fees as a proportion of transaction value.[469]
- One merchant told us that its nominal scheme and processing fees increased by 23% between 2020 and 2021; however, this is not as a percentage of sales revenue. One merchant told us that scheme and processing fee costs are increasing every year.[470]

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463 See Annex 2, paragraphs 2.104 to 2.112.

464 See Annex 2, paragraph 2.104.

465 See Annex 2, paragraph 2.105.

466 See Annex 2, paragraph 2.106.

467 See Annex 2, paragraph 2.106.

468 This merchant provided some breakdown of different trends in fees between its different retail operations and between online and in-store transactions, with some very different trends in scheme fees across those segments.

469 [✂] response to MR22/1.9 (21 May 2024), Question 12.

470 See Annex 2, paragraph 2.106.

Our assessment

6.82 Using econometric analysis to look at the aggregate change over time across all scheme and processing fees, while controlling for transaction mix, value and volume, we have found that average acquirer fees for mandatory services increased substantially in recent years in real terms, with average fees (as a proportion of transaction value) rising by [✁] for Mastercard between 2017 and 2021, with no evidence that fees fell between 2021 and 2023, and by [✁] for Visa between 2019 and 2023. We also consider our analysis of overall fees is consistent with a similar increase in overall fees, although we acknowledge our analysis does not fully control for the take-up of optional services. Rising scheme and processing fee levels are also consistent with our analysis of the schemes' internal documents, which point to pricing as an important driver of recent and forecast revenue growth. Merchant submissions, while not providing estimates on a comparable basis to our analysis, also point towards rising fee levels being paid to Mastercard and Visa for scheme and processing services in recent years.

Drivers of fee changes

6.83 In assessing the evidence on the possible drivers of recent fee changes, we have looked at evidence from:

- our assessment of a number of recent changes in specific fees, based on Mastercard and Visa internal documents
- Mastercard and Visa internal documents on revenue generation
- merchant submissions

Recent fee changes

6.84 As set out in Annex 8, we analysed a set of Mastercard's and Visa's internal documents that related to the approval of their most material fee changes over the period 2017 to 2022.[471] This analysis helped us understand how issues such as value, costs or competition informed the card schemes' pricing decisions, and so has informed our assessment of pricing outcomes.

6.85 Visa and Mastercard introduced a large number of fee changes between 2017 and 2021.[472] We aimed to focus on the 20 fee changes that each of Visa and Mastercard expected to have the largest impact their revenues in the UK.

6.86 Our selection of Mastercard fee changes comprises three changes to processing fees and 17 scheme fee 'change events' (in some cases including simultaneous changes to more than one fee).[473] Our selection of Visa fee changes included two changes to processing fees and 15 changes to scheme fees.[474]

6.87 As set out in Annex 8, there are, however, some limitations to our analysis. We focused on documents prepared for final decision-makers. However, the process leading to the implementation of a fee change is typically more complex, involving several teams within Mastercard or Visa. Visa told us that its documents present a partial record because some

471 Annex 8, paragraphs 8.8 to 8.41.

472 Annex 8, paragraph 8.11.

473 Annex 8, paragraph 8.14.

474 Annex 8, paragraph 8.22.

of its internal processes take the form of discussions [✁]. Visa also told us that [✁]. Mastercard told us that these documents present a partial record because they do not capture all significant parts of the discussions during the pricing process;[475] the discussions include account managers, whose 'knowledge of Mastercard's customers' views enables them to speak on behalf of their customers in relation to proposed price changes and the competitive environment in which they operate'.[476] Mastercard told us that this means that the absence of references to a particular issue in the documents does not necessarily imply that it was ignored in the decision to implement a fee change. We therefore consider that our analysis of Visa's and Mastercard's internal documents may not capture some of the factors considered by decision-makers.[477]

6.88 We recognise that, by selecting the fee changes with the largest revenue impact in the UK, we have implicitly highlighted those cases where competitive constraints may have been less pressing. It is plausible that, if competitive constraints were present, Mastercard and Visa may have decided against large increases of certain fees. Our selection would tend to exclude those cases, as those fee changes would tend to have a smaller revenue impact. For this reason, the analysis should not be interpreted as a characterisation of Mastercard's or Visa's decision-making process for all fee changes, but simply as an assessment of the features and underlying rationales of the largest fee changes implemented in the period 2017-21. Despite this limitation, the results are still relevant to our assessment of market outcomes, as the analysis covers the largest fee changes in the period, which are the most relevant for such an assessment.[478]

6.89 With those caveats in mind, our analysis still pointed to a number of relevant points on the determinants of changes in scheme and processing fees charged by Mastercard and Visa.

6.90 First, the rationale most commonly mentioned in the documents is 'reflecting the value of the service'. We discuss this in greater detail in paragraphs 6.146 to 6.148 below.

6.91 Second, the documents reviewed often mention competition for issuers, acquirers or merchants, or simply the need for a fee to be 'competitive'. However, competition does not appear to have been an impediment to implementing material increases to mandatory fees – which comprised the majority of the fee changes we considered. Fee changes where competition was a more immediate factor can broadly be grouped into three categories:

- Those involving the introduction of, or changes to, value added services (for example, instalment solutions, dispute resolution services, loyalty schemes), where competition is typically with third-party providers of similar services.
- One case which related to Mastercard's introduction of an optional service to issuers, which contributes to the scheme's overall competitiveness in attracting issuers.[479]

475 Mastercard provided some examples of cases (not among those included in our selection) in which competitive constraints were considered in the informal discussions leading to the elaboration of the final pricing proposal but were not explicitly mentioned in the proposals themselves [✁].

476 [✁].

477 See Annex 8, paragraph 8.132.

478 However, we agree with Mastercard that, because of the way the sample was selected, we should not rely on the results of the analysis of recent fee changes for the purpose of our analysis of competitive constraints analysis (Mastercard response to MR22/1.9 (21 May 2024), page 63). Accordingly, the competitive assessment that we develop in Chapter 4 does not rely on the results of this analysis.

479 See Annex 8, paragraph 8.146.

- Mastercard's 2017 rebalancing of processing fees in preparation for the separation between the scheme and processing sides of the businesses in 2017. [✂].[480] We note, however, that competition has not materialised in the UK.

6.92 Documents from Mastercard also provide evidence that [✂]. The clearest example among the fee changes we analysed is the [✂]. This was a change with a significant revenue impact and, while the fee change affected all European countries, the fee level was set [✂]. In the UK and Ireland, [✂]. In the rest of Europe, however, the fee [✂].[481] The relevant internal document states that [✂],[482] [✂].

6.93 Third, the documents typically do not include data on the costs associated with the scheme and processing services affected by fee changes, except for the introduction of new optional services. Businesses mainly characterised by fixed costs, often common to multiple services, may choose not to analyse costs explicitly when approving individual, incremental fee changes where they do not feel competitive constraints.

6.94 The documents suggest a high profitability target for new optional services, with some Mastercard documents showing expected gross margins between [✂] and [✂]%, [✂][483], while one Visa document [✂].[484] These figures, however, represent ex-ante expected profits and should be interpreted with caution. First, ex-ante revenue must account for the possibility of failure. As one example among the fee changes in our selection shows, failure is a real possibility.[485] Second, it is not uncommon in commercial organisations for management to be over-optimistic when estimating the expected profitability of new projects.[486]

6.95 While, as discussed above, a degree of caution needs to be applied when interpreting these documents, our analysis broadly indicates that:

- Fee increases are often justified in internal documents as 'reflecting the value of the service', although such value is rarely quantified.
- Competition is mentioned as a constraint in limited cases and does not appear to have been an impediment to implementing material increases to mandatory fees.
- The documents typically do not include data on the costs associated with the scheme and processing services affected by fee changes.

Mastercard and Visa internal documents on revenue generation

6.96 Our review of Mastercard and Visa internal documents that related to revenue generation included a number of statements relating to the relative level of prices, or the proportion of net revenue generated, in the UK as compared to other countries or regions – often in the context of the schemes' European businesses. Our review also included one document containing analysis [✂] comparing the UK to other countries.

480 [✂].

481 See Annex 8, paragraph 8.79. The relevant internal document identifies two reasons justifying the CNP fees charged in Europe, with one being that [✂].

482 [✂].

483 See Annex 8, paragraph 8.149.

484 See Annex 8, paragraph 8.123.

485 See Annex 8, paragraph 8.149.

486 These two factors are typically reflected in hurdle rates – that is, the minimum rate of return required for a company to move forward on a project – being set significantly higher than a company's cost of capital.

6.97 Mastercard's internal documents pointed to its UK business [✂] in more recent years, which was driven [✂]. The same documents indicate that the [✂].[487] We note that the UK [✂].[488]

6.98 In contrast, Visa's internal documents which we have reviewed pointed to the UK being [✂][489], with the UK representing [✂].[490] An internal document from 2021 [✂].[491]

Merchant submissions

6.99 As set out in Annex 2[492], we received evidence from nine merchants in response to our questionnaire, as well as from the BRC.[493] Of these, four respondents told us that their fees have increased either because of increases to the value of payments received or partly due to changes to the type of transaction made, with two pointing to an increase in the share of payments from Mastercard cards and one pointing to an increase in online sales.[494] Four merchants told us that increases to fees could not be explained by changes to the type of transaction made.[495]

6.100 Some merchants commented on whether behavioural fees could explain the fee increases:[496]

- Two said that they did not consider that behavioural fees could explain fee increases.
- Some mentioned specific fees – for example, one merchant said a small increase in fees could be attributed to the introduction of new fees such as the Mastercard Transaction Processing Excellence (TPE) Programme and the Visa Enhanced Authorisation Fees (introduced in 2022/2023).
- One merchant told us that there have been new fees charged over the last few years following updated Strong Customer Authentication rules which could explain some of the increase in scheme and processing fees.

Our assessment

6.101 Looking at determinants of fee changes, our analysis of a set of specific fee changes finds only very limited evidence that new fees are set on the basis of detailed cost analysis or that pricing changes are driven by relevant cost changes. Consistent with our assessment of competitive constraints, we find little evidence in the schemes' internal documents relating to the approval of their most material fee changes, or revenue generation, of competition being considered with respect to the largest fee changes implemented on the acquiring side. Submissions from merchants also point to rising fee levels.

6.102 However, our understanding of the drivers of fee changes was limited as Mastercard and Visa do not consistently record in writing all of the factors considered by decision-makers when approving fee changes.

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487 See Annex 9, paragraphs 9.25 to 9.39, [✂].
488 See Annex 9, paragraph 9.28.
489 See Annex 9, paragraphs 9.80 and 9.81.
490 See Annex 9, paragraph 9.80.
491 See Annex 9, paragraph 9.82 and Figure 14.
492 See Annex 2, paragraphs 2.104 to 2.112.
493 See Annex 2, paragraph 2.104.
494 See Annex 2, paragraphs 2.108 and 2.109.
495 See Annex 2, paragraph 2.110.
496 See Annex 2, paragraph 2.112.

Conclusion on pricing outcomes

6.103 In relation to the card schemes' scheme and processing services, we have assessed evidence on pricing outcomes, in the context of our finding of a lack of effective competition for core scheme and processing services on the acquiring side.[497] Our conclusion on pricing outcomes is made up of the following four elements.

6.104 First, Visa and Mastercard revenues from scheme and processing fees on the acquiring side in the UK have risen substantially in recent years, with gross fee revenue from acquirers increasing very substantially – by [✂]% for Mastercard between 2017 and 2023, and by [✂]% for Visa between 2018 and 2023 – although both schemes' value and volume of transactions have risen substantially in this period.[498]

6.105 Second, the balance of scheme and processing fees that the Mastercard and Visa charge fall heavily on the acquiring side of the schemes rather than on the issuing side, with net fee revenue from acquirers accounting for [✂] most net scheme and processing fee revenue for Mastercard (in the period between 2017 and 2023) and for Visa (between 2018 to 2023).[499] This pattern is consistent with our assessment of both schemes' internal documents on revenue generation and on the impact on acquirers and issuers from recent material fee changes.

6.106 Third, using econometric analysis to look at the aggregate change over time across all scheme and processing fees, while controlling for transaction mix, value and volume, we found that average acquirer fees for mandatory services increased substantially in recent years in real terms, with average fees (as a proportion of transaction value) rising by [✂]% for Mastercard between 2017 and 2021, with no evidence that fees fell between 2021 and 2023, and by [✂]% for Visa between 2019 and 2023. We also consider our analysis of overall fees is consistent with a similar increase in overall fees, although we acknowledge our analysis does not fully control for the take-up of optional services. Rising scheme and processing fee levels are also consistent with our analysis of the schemes' internal documents, which showed that pricing changes were an important driver of revenue growth. Merchant submissions, while not providing estimates on a comparable basis to our analysis, also point towards rising fee levels being paid to Mastercard and Visa for scheme and processing services in recent years.

6.107 Fourth, looking at determinants of fee changes, our analysis of a set of specific fee changes finds very limited evidence that new fees are set on the basis of detailed cost analysis or that pricing changes are driven by relevant cost changes. Consistent with our assessment of competitive constraints, we find little evidence in the schemes' internal documents relating to the approval of their most material fee changes, or revenue generation, of competition being considered with respect to these fee changes implemented on the acquiring side. Submissions from merchants also point to rising fee levels. However, our understanding of the drivers of fee changes was limited as Mastercard and Visa do not consistently record in writing all the factors considered by decision-makers when approving fee changes.

497 See Chapter 4, paragraphs 4.203 to 4.206.

498 See Annex 6, Figures 21 and 24.

499 See Annex 6, paragraph 6.89(b).

6.108 As set out in Chapter 5, competition between Mastercard and Visa in the supply of scheme and processing services on the issuing side has resulted in high incentives to issuers, in some cases more than totally offsetting the core fees charged to issuers.[500] As such, we would expect to find that net scheme and processing fees fall more heavily on the acquiring side of both schemes, which is what we have found. Our competitive assessment has taken account of the relevant linkages between the issuing and acquiring sides of the market, but, in this context, the two-sided nature of the market does not mean that effective competition on one side constrains the setting of these fees on the other. Our finding of a lack of competition and potential harm to customers on the acquiring side is consistent with the focus of regulatory and competition interventions by the PSR and other regulators over many years – for example, the PSR's work to reduce costs to merchants in scheme and processing services in our card-acquiring market review[501], our review of cross-border interchange fees charged to merchants on UK-EEA consumer transactions[502], as well as decades of regulatory intervention, and competition enforcement and litigation, in relation to interchange fees paid by merchants in the UK and across Europe.

6.109 As set out in Chapter 4[503], for the merchants on IC++ pricing contracts, which account for the largest proportion of transactions by value, fee increases to acquirers are automatically passed on to merchants. Even under other contract types, acquirers told us they would still pass most fee increases on to merchants at some point, although possibly with a lag. In our market review into card-acquiring services, we found that scheme and processing fees were passed through by acquirers in full to merchants of any size, irrespective of the contract type.[504]

6.110 Economic theory and empirical evidence from several studies suggest that, over time, merchant cost changes will be passed through, at least to some extent, to consumer prices.[505] The extent to which such additional costs can be passed through to consumers depends on a range of factors that characterise the affected industries and firms. These include intensity of competition, responsiveness of merchant demand, relevant marginal costs and whether the cost changes are industry-wide or affect only some firms. Given the differences in cost pass-through rates between industries and even between firms within the same industry, we have not sought to estimate the proportion of any pricing above competitive levels that has been passed through to consumers. We expect that the adverse effect will be to some material extent shared between UK merchants (in the form of reduced margins) and part of it may be passed on to their consumers in the form of higher retail prices.

500 See Chapter 5, paragraph 5.41.

501 PS22/2: *Card-acquiring market remedies: Final decision* (October 2022).

502 MR22/2.7: *Market review of UK-EEA consumer cross-border interchange fees final report*, December 2024.

503 See paragraph 4.150.

504 See MR18/1.8, *Card-Acquiring Market Review: Final report* (November 2021), paragraph 5.66.

505 See *Market review of UK-EEA consumer cross-border interchange fees final report*, December 2024, paragraphs 6.54 and 6.55.

Profitability

6.111 In this sub-section, we set out our profitability analysis, comparing Mastercard's and Visa's profit (EBIT) margins to those of comparable companies that operate in competitive markets (benchmark comparators).[506] This is to assess whether profits (or fees) are higher than would be the case in competitive markets.

6.112 We note however, that the absence of such evidence would not necessarily mean that Mastercard and/or Visa face ineffective competitive constraints. We have set out above, for example, that the acquiring side accounts for [✂] most net revenues for both card schemes, due to rebates largely cancelling out scheme and processing fees paid by issuers (see paragraphs 6.49 to 6.51).

6.113 We have engaged intensively with both schemes to develop our understanding of their EBIT margins and in the identification of an appropriate benchmark EBIT margin.

6.114 We explain our approach in more detail in Annex 10.

Card scheme EBIT margins

6.115 Mastercard and Visa are both large US-listed companies. They each report on their EBIT margins publicly in their global accounts. They also publicly report their EBIT margins in European accounts, although these are not consolidated.

6.116 Neither publishes UK accounts, nor report UK EBIT margins covering all the services subject to our market review (the relevant UK operations), even internally. Mastercard and Visa provided us, on our request, with UK P&L accounts that were prepared for the purpose of our market review (fully loaded UK P&L accounts).

6.117 There is a significant difference in the EBIT margins for Europe[507] and at a global level in the published accounts and the margins for Mastercard's and Visa's UK business as set out in fully loaded UK P&L accounts. Table 2 includes both the public and the confidential EBIT margins contained in the fully loaded UK P&L accounts. Table 2 shows that, based on these data sources, there is wide range of possible margins for the UK operations of between:

a. [✂] (based on the fully loaded UK P&L accounts) and 54% (the global accounts) for Mastercard on average over the period of 2018-2023[508]

b. [✂] (based on the fully loaded UK P&L accounts) and 64% (based on the global accounts) for Visa on average over the period of 2018-2023[509]

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506 We have also considered whether to undertake a ROCE analysis, but have decided to prioritise our evidence gathering and analysis on the margin-based approach. This was because, taking into account the purpose of and weight we are placing on the profitability analysis in this market review, we have not considered it necessary to extend our analysis (and likely the timelines for this review) in order to supplement the benchmark margin analysis with a ROCE analysis.

507 For Mastercard we have looked at reported European EBIT margins as shown in Mastercard Europe SA MES, adjusted for intercompany transactions between MES and Mastercard Europe Services Limited (MESL). See also our February 2023 profitability working paper, MR22/1.5, paragraphs 4.3 to 4.9.

508 The fully loaded UK P&L accounts from Mastercard covered the period of 2019-2023, i.e. the lower end of the range is based on a five-year average.

509 Visa has submitted [✂]. Visa said that there are reasons why this might be the case, including the fact that [✂].

Table 2: Public and confidential information about the schemes' EBIT margins

EBIT Margins	2018	2019	2020	2021	2022	2023	Average
Mastercard fully loaded UK P&L accounts	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
MES – adjusted for intercompany transfers to MESL[510]	29.2	50.9	46.8	49.4	54.9	54.0	47.5
Mastercard Global	48.7	57.2	52.8	53.4	55.2	55.8	53.9
Visa fully loaded UK P&L accounts	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Visa Europe	57.5	60.7	53.6	60.2	67.0	65.1	60.7
Visa Global	62.9	65.3	64.5	65.6	64.2	64.3	64.4

6.118 The table indicates that:

a. Mastercard and Visa's global and European[511] operations are highly profitable, and the EBIT margins are relatively stable over the period of 2018-2023.

b. According to Mastercard and Visa's fully loaded UK P&Ls:

   1. Mastercard's business in the UK is less profitable than the average for its global and European businesses, [✂].

   2. Visa's business in the UK is less profitable than the average for its global and European businesses, [✂].

510 Mastercard submitted that: (i) the vast majority of revenues relevant to the UK operations are contained in the Mastercard Europe SA audited accounts, and (ii) UK costs are captured in a number of UK entities including Mastercard UK Managements Services Ltd (MEPUK) and Mastercard European Services Limited Ltd (MESL).

511 For Mastercard we have looked at reported European EBIT margins, partially adjusted for intercompany profits for which information was publicly available.

6.119 We consider that the fully loaded UK P&L accounts are likely to understate each card schemes' UK profitability:

a. For Mastercard this is because the fully loaded UK P&L accounts do not include all relevant income (for example, they do not include FX conversion income). Furthermore, different cost allocation choices can result in significantly different margins in the fully loaded UK P&L accounts, and we do not consider that the cost allocation choices by Mastercard best reflect the economic benefits that Mastercard receives from its UK operations.[512] Mastercard's internal documents indicate that the margins in the fully loaded UK P&L accounts may [✂].[513] We consider that an associated [✂] could be a temporary effect (for example, margins may recover over time as Mastercard increasingly reaps the economic benefits from its expansion into debit cards). We note, for example, that Mastercard's internal documents show that [✂] and that Mastercard's margins in the fully loaded UK P&L accounts have increased slightly in 2023. In addition, the way [✂] is reflected in the fully loaded UK P&L accounts may overstate the related economic costs associated with them. This is because some of the rebates and incentives may be more appropriately allocated to later time periods or to products that are out of scope of our market review. This is also because it is likely that the incremental revenues generated from [✂] may attract less costs than implied in the fully loaded UK P&L accounts, given additional [✂].[514]

b. For Visa, this is primarily because the fully loaded UK P&L accounts include [✂]. Furthermore, different cost allocation choices can result in significantly different margins in the fully loaded UK P&L accounts and we are currently not persuaded that the cost allocation choices by Visa best reflect the economic benefits that Visa receives from its UK operations.[515]

6.120 Mastercard said foreign exchange conversion revenues are out of scope of our market review.[516] However, we do not agree that FX conversion revenues are outside the scope of our review. Our assessment of the economic benefits that Mastercard derives from its UK operations would be incomplete if it did not take into account ancillary revenue that arise as a result of operating scheme and processing services, such as FX conversion revenues.[517]

512 Mastercard said that it provided the rationale for the cost allocation choices it made in the UK fully loaded UK P&L accounts, that these were consistent with activity-based costing and with the principles set out by the PSR and with well-established methodologies such as the OFT 2003 paper on analysing profitability. Mastercard said that it had made prudent cost allocation choices, and that there was a risk that it has overestimated the profitability of its UK operations.

513 Mastercard said that most issuer support contracts were signed in 2020, with accounting effects from 2022 onwards.

514 Mastercard told us that incremental costs of additional transactions are low, which suggests that incremental debit card revenues could be highly profitable despite the higher rebates and incentives being paid to issuers.

515 The margins in Visa's fully loaded UK P&L accounts also [✂]. Visa has provided fully loaded UK P&L accounts [✂] for 2021-2023, which [✂] margins by on average [✂] in the fully loaded UK P&L accounts in that period.

516 Annex 10, paragraph 3.39.

517 Annex 10, paragraph 3.41.

6.121 We consider that the economic benefits Mastercard and Visa derive from their relevant UK operations could also plausibly be estimated by reference to the margins in the global accounts.[518] In particular:

a. For Mastercard this is because a large proportion of Mastercard's costs are global common costs and because internal documents indicate that Mastercard's UK contribution margins are unlikely to be below the global average given that they are higher than in other European markets.[519] For example, in [✁].[520,521] We note that this is based on the assumption (which is strongly contested by Mastercard) that the [✁] associated with the expansion into debit cards is either a temporary effect or that the related economic benefits are not fully reflected in the fully loaded UK P&L accounts.[522]

b. For Visa this is because we consider that a large proportion of Visa's costs are global common costs and because internal documents show that [✁]. For example, [✁].[523]

6.122 Mastercard and Visa both said that global margins are not a good proxy for the relevant UK operations. Visa said that [✁]. Mastercard said that the UK payment services sector is one of the world's most sophisticated and developed.

6.123 We are not drawing a firm conclusion on whether the global margins are the most appropriate proxy for Mastercard's and Visa's UK operations, save to note that they form one of the plausible sources for such an estimate and that margins in the UK are likely higher than shown in the fully loaded P&L accounts, for the reasons summarised in paragraph 6.119 and set out in more detail in Annex 10. We also note that EBIT margins at the upper end of the range appear to be very high.

6.124 Visa also said that our approach was not sufficiently forward looking, for example it did not take into account that significant market entry could drive greater competition and lower margins in the future. We have looked at Mastercard's and Visa's published financial statements since 2023 and at broker forecasts for them. These do not suggest that margins in the UK are expected to decline significantly in the near future. We have also reviewed Mastercard's and Visa's internal documents, which [✁].[524] We set out in Chapter 4 that significant new market entry is unlikely in the short to medium term that would effectively constrain Mastercard and Visa on the acquiring side.

6.125 Overall, we found there is a wide range in the possible margins for both schemes when derived from the fully loaded UK P&L accounts (at the lower end of the range) and the global accounts (at the upper end of the range). We have concluded that the fully loaded UK P&L accounts are likely to understate Mastercard and Visa's UK profits, and that consequently margins are likely higher than indicated by the lower end of the range. However, the conclusions we reach in this report did not require us to reach a firm conclusion on the **extent** to which this is the case.

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518 Annex 10, paragraphs 3.175 and 4.88.

519 Furthermore, Mastercard provided information about global contribution margins as part of the fully loaded UK P&L accounts, [✁].

520 [✁].

521 Given we only had UK&I contribution margins available to us, we have estimated a minimum contribution margin for the UK of ca [✁]%, by assuming that contribution margins in Ireland are 100%.

522 [✁]. Over the same period, Mastercard's global profitability has remained largely unchanged from 57.2% in 2019 to 55.8% in 2023 and its European profitability (adjusted for intercompany transfers to MESL) has increased from 50.9% in 2019 to 54.0% in 2023.

523 [✁].

524 For example, [✁].

Benchmark comparators

6.126 We have reviewed a number of possible comparators to identify those that share as many features with Mastercard and Visa's relevant UK operations as possible, recognising that there will not be any comparators that have an exact mirroring of operations in the UK.[525] This is mainly because of the large combined market share of the schemes in the UK.

6.127 We identified three benchmark comparators. The main factors in selecting them were that they should be operating as for-profit payment system operators or payment service providers, with a similar business model to Mastercard and Visa, in a country with a comparable business environment to the UK and that sufficient information is available to estimate their EBIT margins.

6.128 Table 3 shows that their EBIT margins are in a range of 12-18% on average over the period of 2018-2023.

Table 3: Benchmark comparator EBIT margins

Company	EBIT margin (min)	EBIT margin (simple average)	EBIT margin (max)
eftpos (2018-2021)	5%	12%	21%
PayPal	14%	16%	18%
OFX	13%	18%	21%

Notes: eftpos margins are based on data from 2018 to 2021 as data for 2022 and 2023 is not available. OFX margins are based on a financial year end in March (e.g., 2022 data is based on March 2023 accounts).

Source: eftpos, OFX, PayPal financial statements.

6.129 Mastercard and Visa both said that our chosen comparators are not suitable for the profitability assessment:

- Visa stated that this was mainly because our chosen comparators are not sufficiently similar to Visa's operations. For example, eftpos and OFX offered a narrower set of services and the services of OFX were different. PayPal's margins were not comparable due to different accounting treatments for certain revenues and costs, in their view.
- Mastercard said that two of our chosen comparators (OFX and eftpos) are not suitable for the profitability assessment and PayPal was only suitable if we make adjustments to the EBIT margin estimate. In addition, Mastercard considered that one comparator (Discover) was excluded by the PSR for reasons that, in its view, are not justified, as Discover's margin for one relevant segment (payment services) can be calculated.
- Both Mastercard and Visa suggested a number of other possible comparators.[526]

525 See section 6 in Annex 10 for details of our comparator benchmark margin analysis.

526 Visa also suggested that its margins would be more comparable to our selected benchmark comparator companies if we made a number of adjustments to Visa's global margins (to reflect Visa's 'full chain margins'). We do not consider this to be a practical approach. For example, it would require a very significant number of assumptions to derive a full chain margin for Visa and the analysis is not based on an actual entity, but rather a hypothetical operator.

6.130 Having carefully reviewed the responses we have received from stakeholders on the selection of the comparators, we consider that the comparators we have identified are the best available comparators – that is, they have the closest similarities with Mastercard's and Visa's relevant UK operations in that they most reflect the features set out in paragraph 6.127.[527] We have not identified any other suitable comparators that have more similar operations to Mastercard and Visa's relevant UK operations and that operate in competitive markets.[528] In our view a comparator should not be deemed inappropriate just because it does not offer the same services as Mastercard and Visa.[529,530]

6.131 However, we recognise that the comparators differ from Mastercard and Visa in a number of respects. We therefore treat the benchmark margin estimates with caution and have used them to provide an indication of where the range of a competitive margin is likely to lie.

Conclusions on profitability

6.132 We have compared our range of estimates of the schemes' EBIT margins to those of the benchmark comparators. We find that:

a. There is a sizeable gap between the EBIT margins for the benchmark comparators of 12%-18% and the upper end of the range ([✁]% to 54%) we identified for Mastercard's relevant UK operations. The gap is [✁] at the low end of the range. This would indicate that Mastercard could be earning margins that are higher than would be expected in competitive markets.

b. There is a sizeable gap between the EBIT margins for the benchmark comparators of 12% to 18% and the [✁] range we identified for the margins of Visa's relevant UK operations, which is [✁]% to 64%. This would indicate that Visa's margins are higher than would be expected in competitive markets.

6.133 We consider this evidence to be consistent with a finding that Mastercard and Visa's margins are higher than would be expected in competitive markets, and in line with our finding of a lack of effective competitive constraints[531], in particular considering that the fully loaded UK P&L accounts are likely to understate the economic benefits the schemes derive from the UK operations.

6.134 However, because Mastercard and Visa do not report financial performance for their respective UK businesses, and because of the large discrepancies in the datasets we have looked at, the estimates for the schemes' profitability in the UK we have calculated cover a large range. This reflects our concerns that about the quality of the data provided by the schemes.

527 In MR22/1.5 *Approach to profitability analysis working paper* (February 2023) we asked consultees for suggestions for suitable comparators. None of the respondents provided us with specific suggestions for suitable comparators, although a number of respondents commented on the criteria we should apply when selecting comparators.

528 For example, comparators suggested by Mastercard and Visa that were in addition to those that we reviewed were either not operating as payment system operators or payment service providers or were serving smaller sub-segments (e.g. payment for transport fuel).

529 We do not consider that Discover's payment services division is a sufficient close comparator. This is because it is likely that not all relevant costs are allocated to the payment services division in the published financial statements and because we cannot exclude the possibility that Discover may benefit from a lack of effective competitive constraints in the payment services division, at least in some use cases and/or geographies.

530 We have not considered it necessary to undertake a fuller assessment whether adjustments to PayPal's margins would be appropriate. This is because our analysis shows that even when making some of the proposed adjustments PayPal's margins are unlikely to change to such an extent that it would significantly change our conclusions in our profitability assessment.

531 See Chapter 4, paragraphs 4.203 to 4.206.

6.135 In view of the limitations of the data, we do not consider that we can reach a firm conclusion on the schemes' UK profitability.

6.136 This in turn means that, on the basis of the data currently available, we are not in a position to effectively assess the schemes' financial performance in the UK.

6.137 Our view is that such an assessment of the level of the schemes' economic profits would require the collection of more robust data that would also provide an enduring basis on which to monitor the schemes' UK profitability (and, if appropriate, to assess the effectiveness and proportionality of any regulatory intervention).

Quality and innovation

6.138 This section considers the non-pricing dimensions of market outcomes for customers of Mastercard and Visa's scheme and processing services. These relate to the quality of the schemes' services and to their product innovation.

6.139 Our assessment is developed around three arguments that Mastercard and Visa have made over the course of the market review. These are:

a. Fees are determined by the value of the product to customers (paragraphs 6.141 to 6.154).

b. Customers have benefited from increasing quality of service and innovation (paragraphs 6.155 to 6.177).

c. Scheme and processing fees are necessary to support the schemes' investments (paragraphs 6.178 to 6.185).

6.140 These subsections are followed by our overall findings on non-pricing outcomes (paragraphs 6.186 to 6.188).

Fees are determined by the value of the product to customers

What the card schemes told us

6.141 The card schemes stated that the value created by their services is an important consideration in their pricing decisions. The schemes' submissions are reported in Annex 11[532] and summarised below.

6.142 Mastercard submitted that 'the setting and changing of scheme fees reflect the need to support and encourage value-generating activities, and to retain a fair share of this value for Mastercard'.[533] Mastercard told us that at times, a recalibration of fees is undertaken to reflect the investment in and the benefits arising from, the improving nature of Mastercard's offering. It submitted that individual fees may not always be introduced and/or increased at the point at which individual improvements are made to particular services.[534] Mastercard stated that setting prices which are a 'reflection of value' is 'not distinct from competition or addressing customer needs … Rather, the underlying impetus of value creation is a response to competitive pressure and customer needs'.[535]

532 Paragraphs 11.18 to 11.25.

533 Mastercard response to PSR questions dated 12 January 2022 [✁].

534 Mastercard response to MR22/1.9 (21 May 2024), page 49 (second paragraph).

535 Mastercard response to PSR questions dated 23 June 2023 [✁].

6.143 Visa submitted that 'due to the competitive environment … we consider it important to understand client challenges and overall sentiment towards fee changes, particularly with regard to our clients' perception of our value proposition, or any risks that fee changes may pose to our clients'.[536] It stated that 'pricing based in part on the value of a service … is the essence of competition', adding that regulators commonly refer to value when assessing the appropriateness of prices and that the FCA's Consumer Duty requires firms to perform value assessments in relation to relevant products in order to demonstrate that the amount paid by a retail customer for the product is reasonable compared to the benefits.[537]

6.144 The same point was made by an industry association, which submitted that '[m]ost financial firms that interact with consumers or small businesses are required to assess "fair value" under the Consumer Duty'. While cost is a relevant factor, value for money is the major consideration. According to UK Finance, '[a]ll participants in the card networks would agree that the card market and the benefits it brings to merchants and consumers, is value for money'.[538]

Our assessment

6.145 That 'value' considerations constitute one of the main bases on which Mastercard and Visa base their prices is clear not only from the schemes' submissions during the market reviews (such as those summarised above), but also from the schemes' internal documents.

6.146 As set out in Annex 8, for both schemes 'reflecting the value of the service' was often one of the reasons stated in internal documents for the sample of fee changes we analysed (see paragraphs 6.85 to 6.86), although this was more common among the Mastercard documents than in those from Visa.[539]

6.147 For Mastercard[540], the value of the service and [✁] are the rationale that we identified most frequently for its fee changes. [✁]. In some cases, Mastercard refers to what other providers charge for similar services to assess the value of a service of their own, while, in other cases, it does not identify any direct competitor and value is interpreted as the benefit a customer (or merchant) may receive from the service. In most of these cases, the assessment and measurement of value in these documents is qualitative in nature.

6.148 In the relevant Visa documents[541], in relation to the four fee changes involving the introduction of an optional service, there is discussion of setting the fee at a level considered consistent with the value of the service, while this rationale is also mentioned in documents relating to the change to core processing fees. The relevant Visa documents often include a qualitative description of how customers benefit from a service, but only in one case do they include an estimate of the value customers receive.

536 Visa Europe response to PSR questions dated 9 November 2022 [✁].
537 Visa response to MR22/1.9 (21 May 2024), Technical Annex 6, paragraph 6.44(b).
538 UK Finance response to MR22/1.9 (21 May 2024), page 8.
539 See Annex 8, paragraphs 8.66 to 8.70 and 8.110 to 8.115.
540 See Annex 8, paragraphs 8.71 to 8.74.
541 See Annex 8, paragraph 8.114.

6.149 Mastercard told us that: (i) precisely quantifying the value derived from improved or new services can be a complex and time-consuming task; and (ii) in practice, however, much of the time this will not be necessary, since the qualitative assessment made through Mastercard's ongoing engagement with customers provides the 'insight and information needed for internal discussions, effective decision-making and communication of the rationale for the change to customers and market participants'.[542]

6.150 Both Mastercard and Visa engaged with customers primarily after approving a fee change, rather than as part of the work that leads to a fee change proposal. Acquirers who responded to our information request consistently made this point.[543] Visa also confirmed that [✂].[544] However, when introducing optional new services, Mastercard and Visa need to have some understanding of demand and of customers' willingness to pay, likely as a result of their regular interaction with them. One customer told us that, particularly in relation to new products or services, there are occasions when Mastercard and/or Visa will seek input from the ecosystem.[545]

6.151 As seen in paragraphs 6.142 and 6.143, both schemes stated that value-based pricing is an outcome of competition or even, for Visa, 'the essence of competition'. We recognise that, when competition takes place in relation to both price and quality, the competitive process will result in higher quality products being offered at a higher price than lower quality alternatives. However, our competitive assessment, developed in Chapter 4, has found that there is a lack of effective competitive constraints in the supply of scheme and processing services. As such, prices are not being set as part of an effective competitive process. In a context where the customer has little or no choice of alternative supplier or service, as is the case here, the 'value-based' pricing schemes refer to is not an outcome of competition but only reflects customers' willingness to pay.

6.152 Visa's references to the FCA Consumer's Duty (see paragraph 6.143 and 6.144) are unpersuasive. Value assessments pursuant to the Consumer Duty need to demonstrate, in substantive detail, how value has informed decisions including product pricing.[546] The evidence we have gathered on this market review does not indicate that the schemes currently approach pricing decisions in this way. As set out above, our Annex 8 analysis of recent fee changes found that, although 'reflecting the value of the service' was a commonly cited rationale for fee changes analysed, in most cases the documents do not include any quantitative estimate of this value. There were only four instances of a more formal assessment which informed the level or the structure of a fee. Consumer Duty value assessments can also be completed by reference to cost information[547], yet the schemes' documents do not typically include data on the costs associated with the scheme and processing services affected by fee changes, except for the introduction of new optional services.[548]

542 Mastercard response to MR22/1.6 (30 June 2023) [✂].

543 [✂]. Some acquirers stated that, even when feedback is provided by acquirers after the announcement of a fee change, it does not lead to changes in the fee, but, at most, to temporary waivers [✂].

544 Visa response to PSR questions dated 9 November 2022 [✂].

545 [✂].

546 See PS22/9: *A new Consumer Duty*.

547 Principle 2A.4.9G, 2A.7.2G, 2A.11.4R.

548 See paragraphs 6.90 and 6.93.

6.153 We also note that, as seen in paragraph 6.41, in the case of Visa, fee increases implemented after the acquisition of Visa Europe were not always reflective of increased 'value' for customers but were – in part – responsive to Visa's strategy to 'close the gap' with Mastercard's higher fees.

6.154 For the reasons set out above, and building on our finding that they face ineffective competitive constraints on the acquiring side, we therefore find that the schemes are primarily focused on their own financial performance and acquirers' willingness to pay in setting their fees. We are concerned that prices set in the absence of effective competitive constraints to be higher than those that we would observe in a competitive market, where competing suppliers tend to drive prices down towards the firms' costs of supplying the service.

Customers have benefited from increasing quality of service and innovation

What the card schemes told us

6.155 The card schemes stated that the value that their services provide to merchants and consumers, and the quality of the services that they provide to customers, is constantly improving. They have pointed to increased payments efficiency, system availability, analytical tools, fraud controls, etc. The schemes' submissions are reported in Annex 11[549] and summarised below.

6.156 Mastercard submitted that it continually invests in the services it offers to ensure the provision and maintenance of a strong, secure, successful payment service, ensuring it remains attractive to cardholders and merchants and therefore to issuers and acquirers.[550] It pointed to payment efficiency and security and stability in the payments' ecosystem as areas where its quality of service had been improving.[551] Mastercard stated that innovation 'is often seen as the most important outcome of a well-functioning market' and that the UK payments landscape has seen a 'significant amount of innovation in recent years'.[552] It pointed to its role in driving innovation in the UK payments sector, noting that its 'innovation requires substantial investment and comes with considerable risks'.[553]

6.157 Visa pointed to its 'reliable and resilient payment infrastructure', its 'rapid and seamless transactions' and its 'innovative and dynamic functionality' as the 'outcomes that matter most to end users'. It told us that it 'invest[s] significantly to achieve and maintain this level/quality of service' and that 'the Visa group invests in market-leading innovation to enable new ways to pay and be paid and to improve the payment experience for end users'.[554]

549 Paragraphs 11.26 to 11.38.

550 Mastercard response to PSR questions dated 12 January 2022 [✂].

551 Mastercard response to PSR working paper dated 23 February 2023 [✂]. See also Mastercard response to MR22/1.9 (21 May 2024), pages 52 to 54.

552 Mastercard response to PSR working paper dated 23 February 2023 [✂].

553 Mastercard response to PSR working paper dated 23 February 2023 [✂].

554 Visa response to MR22/1.6 (30 June 2023) [✂]. See also Visa response to MR22/1.9 (21 May 2024), Technical Annex 3, paragraph 3.8.

6.158 In response to our interim report, Visa submitted an analysis of the benefits for UK merchants and consumers of two recent innovations – contactless and tokenisation. It told us that these innovations 'generated large benefits relative to their underlying costs'[555] and estimated that, between 2017 and 2027 alone, the total net benefit for UK merchants from its investments in contactless and tokenisation is in the range of £9-11 billion.[556]

Customer feedback to Mastercard and Visa

6.159 Both Mastercard and Visa pointed to the results of customers surveys they undertake in the normal course of business and that, the schemes submitted, indicate that acquirers and merchants value the schemes' innovations.

6.160 Mastercard told us that it receives regular feedback from a wide range of UK customers in its annual Voice of the Customer (VOC). It submitted that recent VOC survey results show that innovation is seen as an area of strength for Mastercard, by both issuers and acquirers, and that acquirers' ratings on innovation increased between 2020 and 2022.[557]

6.161 Visa commissioned merchant surveys in 2019, 2022 and 2024.[558] Visa told us that evidence from merchant surveys it commissioned demonstrate that merchants derive significant value from Visa's investments and that service quality has been improving.[559] Visa also conducts a Global Client Engagement Survey (GCES). Of the [✂] clients surveyed in 2023, Visa told us it identified [✂] acquirers with a focus on UK activity. Visa calculated a Net Promoter Score for this client segment at [✂].[560, 561]

6.162 While these surveys constitute useful sources of information, we consider that the aggregate responses to individual quantitative questions need to be considered with caution, given the small sample of respondents (in the case of Mastercard) or of methodological limitations of the surveys (in the case of Visa), as discussed below.

6.163 Mastercard's VOC surveys involved a limited number of respondents on the acquiring side. A small number of UK acquirers (between [✂]) responded to the VOC surveys between 2020 and 2022.[562] The 2023 and 2024 survey no longer distinguished between acquirers and issuers. Given that in previous years [✂] were contacted and submitted responses, the results in 2023 and 2024 are likely more reflective of issuers' views than of acquirers' views. The number of UK merchants responding was also small in all surveys since 2020 – between [✂].[563]

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555 Visa response to MR22/1.9 (21 May 2024), Technical Annex 3, paragraph 3.17.

556 Visa response to MR22/1.9 (21 May 2024), Technical Annex 3, paragraph 3.16.

557 Mastercard response to MR22/1.9 (21 May 2024), page 59 (second paragraph).

558 Visa response to the information request dated 10 October 2024 [✂].

559 Visa response to MR22/1.9 (21 May 2024), Technical Annex 3, paragraph 3.11.

560 [✂] of acquirers were promoters (rating Visa on average very positively at [✂]), [✂] were passive (rating Visa on average as [✂]) and [✂] are detractors (rating Visa on average [✂]).

561 [✂].

562 In both 2020 and 2021, there was one additional response from an anonymous individual respondent. Mastercard response to the information request dated 10 October 2024 [✂].

563 In each year, there were one or two additional responses from anonymous individual respondents. Mastercard response to the information request dated 10 October 2024 [✂].

6.164 We note the increasing score on innovation that Mastercard received from acquirers between 2020 and 2022, although the rating in 2020 was not particularly high.[564] We also note, however, that [✂] is highlighted in the 2020 presentation of the VOC survey results to the UK&I Division President and Senior Leadership Team as an area for improvement[565], with one acquirer stating that [✂].[566] While positive assessments from an acquirer are included in the presentation of the 2021 survey results[567], the 2024 presentation again indicates [✂] and [✂] as among the main opportunities for improvement.[568]

6.165 Visa's merchant survey results are often unclear, and closely related questions appear to elicit inconsistent responses. This may be a result of the way some questions were framed[569], or may indicate that respondents did not reply with sufficient care. This can be seen, for example, in relation to questions on the cost and value of card payments:

- In the 2019 survey, when asked whether cards are a low-cost way for their business to take payments, 41% of respondents agreed and 31% disagreed.[570] However, only 27% of the respondents agreed that the fees for accepting card payments are good value, while 46% disagreed.[571]
- In the 2022 survey, 43% of respondents agreed with the statement 'The fees I pay on electronic payment transactions are minimal', and only 29% disagreed. However, 33% considered cards an expensive way for their business to take payments (with 39% considering it low-cost) and 38% said that fees on card payments had frequently caused them problems.[572] 35% of them disagreed with the statement 'I don't have to worry about the charges I pay on transaction fees', with 34% agreeing.[573]
- Similar inconsistencies appear in the responses to the 2024 survey: only 18% of respondents disagreed with the statement 'The fees I pay on electronic payment transactions are minimal', but 35% considered cards an expensive way for their business to take payments and 44% said that fees on card payments had frequently caused them problems.[574]
- Visa's merchant surveys show high and increasing levels of agreement with the sentence 'Visa provides good value for money: from 49% in 2019 to 79% in 2024. However, in 2019, only 27% of respondents agreed with the more general statement that the fees for accepting card payments are good value, with 46% disagreeing. The question was not included in subsequent surveys.

564 [✂] out of 10. Mastercard response to the information request dated 10 October 2024 [✂].
565 Mastercard response to the information request dated 10 October 2024 [✂].
566 Mastercard response to the information request dated 10 October 2024 [✂].
567 Mastercard response to the information request dated 10 October 2024 [✂].
568 Mastercard response to the information request dated 10 October 2024 [✂].
569 We note in particular that [✂].
570 Respondents were asked to indicate on a scale from 1 to 5 with which of the two following statements they agreed more: Cards are a low-cost way for my business to take payments; Cards are an expensive way for my business to take payments. 41% of respondents selected 1 or 2, while 31% chose 4 or 5.
571 Visa response to the information request dated 10 October 2024 [✂].
572 Respondents were asked to indicate on a scale from 1 to 5 with which of the two following statements they agreed more: Fees on card payments have never previously caused me problems; Fees on card payments have frequently caused me problems. 38% of respondents selected 4 or 5.
573 Visa response to the information request dated 10 October 2024 [✂].
574 Visa response to the information request dated 10 October 2024 [✂].

6.166 In Visa's 2023 and 2024 GCES surveys, responses were submitted by [✂] and [✂] UK acquirer contacts respectively, and by [✂] and [✂] UK merchant contacts.[575] [✂], the number of acquiring and merchant organisations that submitted responses may be lower than these numbers indicate. [✂].[576] We are concerned that this may introduce a bias in the results.

6.167 Looking at the Net Promoter Score, we note that scores from UK acquirers were significantly lower than the average score across all UK survey respondents, and decreased between 2023 and 2024 – from [✂] to [✂] for acquirers, and from [✂] to [✂] for merchants.[577]

6.168 We therefore consider that the survey evidence provided by the schemes is not sufficiently robust to indicate that acquirers and merchants are satisfied with the extent of recent innovation from Mastercard and Visa.

What other stakeholders told us

6.169 As set out in Annex 2[578], we received evidence from nine merchants in response to our questionnaire, as well as from the BRC.[579]

6.170 Five merchants commented on whether there had been innovation which could have benefited them:[580]

- Four merchants told us that they did not consider there to be new innovation and services from either Mastercard or Visa to justify the fee increases.
- One merchant mentioned Strong Customer Authentication (3D Secure) while another said that there have been very few useful innovations – with the Account Updater being noted as among the most useful.

6.171 Two merchants and a merchant association responded to a question in our consultation on the interim report about the extent to which changes in average fees levels in recent years had been accompanied by commensurate changes in the value or quality of service, or in innovation by the schemes. As reported in Annex 2, these merchants submitted that they have not seen changes in quality commensurate to the increases in fees.[581] Two acquirers and a trade association also responded to the same question. As reported in Annex 2, their responses were similar to those we received from merchants.[582]

6.172 While not responding directly to the same question, submissions by two issuers also relate to the schemes' innovation. The two issuers stressed the innovative nature of the cards market. One issuer submitted that cards play a fundamental role in driving growth and innovation in the UK economy, and noted that the Future of Payments Review found that 'innovation appears to be occurring in the cards payments market at a significant rate'.[583]

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575 Other responses were submitted by issuer contacts (45 in 2023 and 42 in 2024) and other contacts (20 in 2023 and 21 in 2024). Visa response to the information request dated 10 October 2024 [✂].

576 Visa response to the information request dated 10 October 2024 [✂].

577 Visa response to the information request dated 10 October 2024 [✂].

578 See Annex 2, paragraphs 2.104 to 2.112.

579 See Annex 2, paragraph 2.104.

580 See Annex 2, paragraph 2.111.

581 See Annex 2, paragraphs 2.115 to 2.117.

582 See Annex 2, paragraphs 2.118 and 2.119.

583 Stakeholder response to MR22/1.9 (21 May 2024) [✂].

The other issuer stressed Visa's commitment to innovation, shown by its investments in AI and security-led technology to reduce fraud and increase card acceptance.[584]

Our assessment

6.173 We recognise that the schemes provide valuable services to merchants and consumers, and that the payment sector has seen innovation in recent years – including from Mastercard and Visa. Promoting innovation in payment systems is one of the PSR's statutory objectives. As such, we are mindful that our regulatory oversight should not prejudice the kinds of innovation that effective markets foster.

6.174 Analysis submitted by Visa estimates that contactless and tokenisation have brought and will continue to bring large benefits to merchants and consumers (see paragraph 6.158). We recognise that merchants and consumers have benefited from these innovations, although a precise estimate of those benefits is challenging, as recognised by Visa's consultants.[585]

6.175 However, in many cases submissions from acquirers and merchants tend not to support a view that quality of service has been rising in step with fee increases. The merchants and acquirers that responded to our information requests and interim report submitted that the recent increases in scheme and processing fees were not, in their experiences, associated with commensurate improvements in service quality or increases in the value that they receive from the card schemes' services. We note, however, that the number of submissions we received, especially from merchants, is limited, and that these are not necessarily representative of the full merchant population.[586] We also note Mastercard's submission that many merchants may not be able to observe the changes (particularly improvements which are gradual and which take place 'behind the scenes') and how such changes benefit them directly.[587]

6.176 Nonetheless, the evidence still reveals a perception among some acquirers and merchants that recent fee increases have not been accompanied by commensurate quality improvements. As we concluded in paragraph 6.168, the survey evidence provided by the schemes is not sufficiently robust to indicate that acquirers and merchants are satisfied with the extent of recent innovation by Mastercard and Visa.

6.177 In any case, the fact that Mastercard and Visa provide valuable services and have innovated does not mean that we should be unconcerned about the pricing of scheme and processing services. More generally, in the context of competition-based market assessments, there is no inconsistency between finding that services are beneficial to consumers and (economically or socially) valuable, while also finding that there are problems in how the market operates, including the fees charged for those benefits. In Chapter 4 we have concluded that Mastercard and Visa do not face effective competitive constraints on the fees they charge on the acquiring side. The value of their services for acquirers and merchants, and the benefits of recent innovations, do not remove our concern that their fees are not effectively constrained by competition.

584 Stakeholder response to MR22/1.9 (21 May 2024) [✂].

585 Visa's consultants [✂] submitted that the aim of their analysis [✂].

586 It is also possible that that the sample is biased towards merchants with a negative view of the schemes' services, as these may have had greater incentive to engage with our information requests. This possibility was suggested by Mastercard in its response to MR22/1.9 (21 May 2024), page 62.

587 Mastercard response to MR22/1.9 (21 May 2024), page 67.

Scheme and processing fees are necessary to support the schemes' investments

What the card schemes told us

6.178 In their submissions, both Mastercard and Visa refer to the importance of their fees to support and incentivise their investments. The schemes' submissions are reported in Annex 11[588] and summarised below.

6.179 Mastercard submitted that 'the setting and changing of scheme fees reflect the need to support and encourage value-generating activities'.[589]

6.180 Visa submitted that its 'scheme and processing fees are necessary to support its significant investments to improve the "quality, efficiency and economy" of its payment system – including significant ongoing investments in innovation and related risk-taking'.[590] It pointed to the risk of unintended consequences from regulatory interventions which have the effect of dampening private innovation incentives[591], submitting that this can be seen from the slower pace of development of domestic card schemes charging low fees, such as eftpos (Australia), Girocard (Germany), Dankort (Denmark) and BankAxept (Norway).[592]

Our assessment

6.181 While revenues (or the prospects of revenues) can support and encourage investment, high returns are generally not a prerequisite to fund investment; rather, successful investment should generate the returns to fund it. Therefore, we do not consider that either the current level of acquiring-side fees charged by Mastercard and Visa or their profit margins are necessary to support and incentivise their investments. We note that the EBIT margins we estimated in paragraph 6.132 do account for investments by the schemes. However, the financial data we received from the schemes was not sufficiently granular to reach a firm conclusion on whether the fee increases Mastercard and Visa have introduced in recent years have been accompanied by comparable increases in investments to innovate or to improve the quality of their respective payment systems.

6.182 Visa has submitted that domestic card schemes charging low fees have shown a slower pace of development and innovation compared to Visa (and, by extension, Mastercard). While this may have been the case, we consider that domestic schemes' incentives to innovate could have been affected by factors that go beyond the simple difference in fee levels.

6.183 As observed by Professor Carl Shapiro, 'there is a very substantial body of empirical evidence supporting the general proposition that "more competition," meaning greater contestability of sales, spurs firms to be more efficient and to invest more in R&D'.[593] We would therefore expect greater competitive pressure on the acquiring side to lead to greater, not lower, innovation to the benefit of merchants, even if it were to lead to lower acquiring-side fees.

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588 Paragraphs 11.39 to 11.42.

589 Mastercard response to PSR questions dated 12 January 2022 [✂].

590 Visa response to MR22/1.9 (21 May 2024), Technical Annex 3, paragraph 3.14.

591 Visa response to MR22/1.9 (21 May 2024), Technical Annex 3, paragraph 3.17.

592 Visa response to MR22/1.9 (21 May 2024), Technical Annex 3, paragraph 3.21.

593 Carl Shapiro (2012). Competition and Innovation: Did Arrow Hit the Bull's Eye? In *The Rate and Direction of Inventive Activity Revisited*, edited by Josh Lerner and Scott Stern. University of Chicago Press.

By 'contestability', Shapiro means the ability of an innovating firm to gain or protect profitable sales by providing greater value to customers. Sales are highly contestable – in the sense relevant for innovation – if a firm that provides greater value to customers gains substantial unit sales from its rivals.

6.184 As stated in paragraph 5.40, we recognise that Mastercard and Visa do face competition for issuers and for cardholders, and this will have informed and contributed to innovation by the schemes. We also recognise that there may be a trade-off between the degree of competition on the two sides. The schemes' lack of competitive constraints on the acquiring side and their ability to charge high fees to acquirers increase the value of winning issuing contracts and the associated transaction volumes. As a result, the schemes have a greater incentive to compete on the issuing side. However, we do not consider that greater rivalry on the acquiring side would necessarily imply reduced rivalry on the issuing side to the extent of negating the positive effect of competition on innovation. For example, for some of the services that Mastercard and Visa provide, such as processing services or optional services, we do not consider there is any trade-off between competition on the two sides that would impact incentives to innovate. As seen in Chapter 4, in relation to processing services, in the UK there is currently no competition on either side, while optional services often target one side only. It is possible that, for core scheme services, some ways of achieving greater competition on the acquiring side could somewhat reduce competitive pressure on the issuing side.[594] However, we do not consider that this would necessarily be the case for any form of increased acquiring-side competition or that it materially reduces the schemes' incentive to innovate to be attractive to issuers and consumers.

6.185 We would therefore expect greater competitive pressure on the acquiring side to lead to greater innovation from Mastercard and Visa to the benefit of merchants and consumers.

Conclusion on quality and innovation

6.186 Mastercard and Visa provide valuable services to merchants and consumers; they have also introduced innovations in recent years, to the benefit of both the issuing and acquiring sides, including to the benefit of merchants and consumers. However, we remain concerned about how the market operates and about the pricing of scheme and processing services.

6.187 We note that 'value' considerations constitute one of the main factors on which Mastercard and Visa base their prices, although based on a review of the schemes' internal documents, we consider that, in general, they do not seek to quantify such value for the purposes of their pricing decisions. While we accept that, in a competitive market, higher-quality services would be expected to be priced higher than lower-quality alternatives, the schemes face ineffective competitive constraints on the acquiring side and are therefore primarily focused on their own financial performance and acquirers' willingness to pay in setting their fees. We are therefore concerned that scheme and processing fees charged to acquirers, which are set in the absence of effective competitive constraints, may be higher than those that we would observe in a competitive market, where competing suppliers tend to drive prices closer to the firms' costs of supplying the service.

6.188 While revenues (or the prospects of revenues) can support and encourage investment, we do not consider that the current level of acquiring-side fees charged by Mastercard and Visa are necessary to support and incentivise their investments. Consistent with economic theory and empirical evidence, we expect greater competitive pressure on the acquiring side would lead to greater, not lower, innovation from Mastercard and Visa to the benefit of merchants and consumers, even if it were to lead to lower acquiring-side fees.

594 This may be the case, for example, if increased issuing-side competition was achieved by mandating cards to support both Mastercard and Visa's networks and giving the merchants the ability to select which network to use for a transaction.

6.189 We are therefore concerned that the current level of fees fails to balance the interests of all service users (taking account of value to those users) and the promotion of innovation, and that the high level of EBIT margins reflect the lack of effective constraints we have identified in Chapter 4 (recognising at this stage the limitations of our assessment of the levels of EBIT margins).

6.190 However, as noted above, we are not reaching firm conclusions on whether fees and profits are higher than would be expected in a competitive market that serves the interests of all service users and promotes innovation. This is because of the limitations of the data currently available and limitations in the evidence relating to how schemes have taken into account value to consumers into price decisions.

Conclusion on pricing, profitability, innovation and quality outcomes

6.191 Mastercard and Visa provide valuable services to merchants and consumers, and in recent years have introduced innovations that have benefited card users. However, we remain concerned with how the market operates, based on the analysis developed in Chapter 4, and with overall market outcomes for merchants and consumers.

6.192 As set out above, in relation to pricing and profitability, we have found that:

- Mastercard and Visa's revenues from scheme and processing fees have risen substantially in recent years, with gross fee revenue from acquirers increasing substantially – [✁]% for Mastercard between 2017 and 2023 and [✁]% for Visa between 2018 and 2023 – partly as a result of rising transaction volumes (see paragraph 6.104).
- The balance of scheme and processing fees that Mastercard and Visa charge falls heavily on the acquiring side of the schemes rather than on the issuing side, with net fee revenue from acquirers accounting for [✁] most net scheme and processing fee revenue for Mastercard (in the period between 2017 and 2023) and for Visa (see paragraph 6.105).
- Average acquirer fees for mandatory services increased substantially in recent years in real terms, with average fees (as a proportion of transaction value) rising by [✁]% for Mastercard between 2017 and 2021, with no evidence that fees fell between 2021 and 2023, and by [✁]% for Visa between 2019 and 2023. We also consider our analysis of overall fees is consistent with a similar increase in overall fees, although we acknowledge our analysis does not fully control for the take-up of optional services (see paragraph 6.106).
- Looking at determinants of fee changes, our analysis of a set of specific fee changes finds very limited evidence that new fees are set on the basis of detailed cost analysis. We also find little evidence in the schemes' internal documents of competition being considered with respect to these fee changes implemented on the acquiring side. However, our understanding of the drivers of fee changes was limited as Mastercard and Visa do not consistently record in writing all the factors considered by decision-makers when approving fee changes (see paragraph 6.107).

- Our profitability analysis found that there was a sizeable gap between the EBIT margins of comparable companies operating in competitive markets (the benchmark comparators), which are in a range of 12% to 18% in the period 2018 to 2023, and the upper end of the margin range derived from Mastercard's financial information. There was a sizeable gap for the [✁] margin range derived from Visa's financial information. For Mastercard, this range of EBIT margins was between [✁]% (the fully loaded UK P&L accounts) to 54% (the EBIT margins in its global accounts). For Visa, the equivalent range was [✁]% to 64% (see paragraphs 6.126 to 6.137). We consider that this evidence is consistent with a finding that Mastercard's and Visa's margins are higher than would be expected in competitive markets, and consistent with our finding of a lack of competitive constraints[595], in particular considering that the UK P&L accounts are likely to understate the economic benefits the schemes derive from the UK operations (see paragraphs 6.132 to 6.133).
- However, as stated in paragraphs 6.133 to 6.136, in view of the limitations of the data available, we do not consider that we could reach firm conclusions on the schemes' UK profitability.This is because Mastercard and Visa do not report financial performance for their respective UK businesses, and because there are large discrepancies in the schemes' financial performances across the datasets we have looked at. This in turn means that, on the basis of the data currently available, we are not in a position to effectively assess the schemes' financial performance in the UK. Such an assessment of the level of economic profits would require the collection of more robust data. We also consider that obtaining such data on an ongoing basis would strengthen our ability to monitor the schemes' UK financial performance over time (and, if appropriate, consider whether further action may be warranted).
- As we conclude in paragraph 6.187, in the context of a lack of effective competitive constraints, the 'value-based' pricing schemes refer to is not an outcome of competition but only reflects customers' willingness to pay and therefore is focused on the schemes' own financial performance. Moreover, as stated in paragraph 6.188, we do not consider that either the current level of acquiring-side fees charged by Mastercard and Visa or their profit margins are necessary to support and incentivise their investments. Consistent with economic theory and empirical evidence, we expect greater competitive pressure on the acquiring side would lead to greater, not lower, innovation from Mastercard and Visa to the benefit of merchants and consumers, even if it were to lead to lower acquiring-side fees.

595 See Chapter 4, paragraphs 4.203 to 4.206.

6.193 We recognise the limitations of our analysis on profitability and understanding of pricing, and we have not reached a firm conclusion on whether prices and profits are higher than would be expected in a competitive market (and on the level of any harm arising from it). However, we consider our findings set out above to be consistent with a finding of a lack of competitive constraints, with harm to customers on the acquiring side of both schemes.

6.194 This is particularly concerning in the context of the findings set out in Chapter 4 that on the acquiring side, Mastercard and Visa do not face effective competitive constraints in the provision of core scheme and processing services, and that they are subject to varying degrees of constraint across their optional services, with stronger indications that lack of effective alternatives results in Mastercard and Visa not facing effective competitive constraints in the supply of some of these services. Therefore, overall, the evidence and our assessment as set out above is sufficient to raise significant concerns that the market is not working well for users. The lack of appropriate data, the findings of a lack of competitive constraints on the acquiring side and the patterns of behaviour described above point to the need for the schemes to disclose data that would allow the PSR to accurately monitor financial performance.

7 Market outcomes: Transparency and complexity of pricing information

This chapter summarises the main ways that card schemes' customers access, assess, and act on information from Mastercard and Visa. This includes information provided to us by the schemes, acquirers and issuers.

We set out our assessment of the issues and their impact.

Introduction

7.1 As part of our market review, we examined the information that issuers and acquirers receive from Mastercard and Visa about their services.

7.2 Using both our formal powers and informal questionnaires, we collected evidence from issuers and acquirers about their experiences with Mastercard and Visa. We also requested internal documents and information from Mastercard and Visa to help us understand their approach and the feedback they receive from their customers. We have considered this evidence in the round, and set it out in Annex 12 to this report. We explain below why we consider that schemes' feedback from their customers is not inconsistent with our findings with regards to the transparency and complexity of pricing information.

7.3 This chapter is structured in five sections:

- The first section outlines and addresses representations the schemes made, when responding to our interim report, about the robustness of the evidence and our assessment.
- The second section assesses evidence from the schemes about the different ways in which issuers and acquirers can obtain information about fees, focusing on acquirers' experiences in practice.
- The third section assesses evidence from issuers on their experience as customers of the schemes.
- The fourth section assesses evidence from acquirers on their experience as customers of the schemes. Specifically, we assess the quality of the information acquirers receive on behavioural fees, and on mandatory and optional fees. We also assess the acquirers' experience with asking scheme staff to clarify the information they received, and with using the schemes' portals.
- The last section presents our conclusions.

Robustness of the evidence and of our assessment

7.4 Mastercard submitted that the interim report does not set out an 'explicit methodology for how the evidence has been weighted to inform the PSR's conclusions'; instead, we relied 'on anecdotal comments and case study evidence provided by individuals within a small sample of acquirers which is not representative of the acquirer market'.[596] Visa similarly submitted that 'the [interim report]'s approach to evidence gathering is not systematic, appears to be driven by anecdotal evidence and is biased towards negative feedback'.[597]

7.5 We do not agree with those statements and we consider that a mechanical exercise for weighing evidence is unlikely to be appropriate when dealing with qualitative evidence such as the responses to information notices, and our own analysis and evaluation of stakeholder submissions and internal documents. We set out in this chapter our evaluation of the evidence gathered, noting, where appropriate, its relative strengths and shortcomings, and the conclusions we have reached after considering this evidence in the round.

7.6 We also do not consider that our evidence is 'anecdotal'. The 17 acquirers that responded to our information requests accounted for over 90% of the value of Mastercard and Visa's transactions in the UK in 2023. As shown in Table 4, we engaged not only with the largest acquirers, but also with a number of smaller ones, to ensure our evidence-gathering approach is balanced. We consider that the very large share of transactions covered by those acquirers and the range of sizes included allow for a robust assessment of acquirers' experiences with the schemes.

Table 4: Acquirers responding to our information requests

Acquirer	Share of Mastercard and Visa's transactions in the UK in 2023
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]

596 Mastercard response to MR22/1.9 (21 May 2024), page 78. Mastercard also noted that we have not described 'how acquirer evidence was collected, such as the questions asked'.

597 Visa response to MR22/1.9 (21 May 2024), Technical Annex 5, paragraph 5.2(a).

Acquirer	Share of Mastercard and Visa's transactions in the UK in 2023
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]

7.7 Our information requests to acquirers covered a range of topics on the schemes' pricing information, including:

- the accuracy and clarity of information regarding the application and trigger point of behavioural fees
- the length of notice period to implement operational, or other, changes required to avoid behavioural fees
- the complexity and accuracy of information on fees and fee changes for mandatory and optional scheme and processing services
- any requirement to purchase optional data or consulting services to implement or understand scheme and processing fees
- accessing clarifications from the schemes' account managers
- using the schemes' online portals

7.8 We assessed acquirers' individual experiences within the context of a broader set of factual evidence gathered from 17 acquirers. We considered these individual experiences thematically, with similar issues grouped together, in order to understand where issues relate to similar factors that affect acquirers' experiences with the schemes.

7.9 We followed up on some of the issues acquirers raised, to better understand the impact of these issues. Further information was received in responses to our consultation on the interim report. Responses from acquirers and merchants confirmed our understanding of the issues with the transparency and complexity of the schemes' pricing information. Six acquirers, two merchants and two merchant associations commented on the transparency and complexity of pricing information. Their views were consistent with our findings in the interim report, and reinforced and supplemented the evidence set out in the interim report.[598] We have referred to these submissions further below.

7.10 Responding to the interim report, Visa observed that we developed our assessment almost entirely based on acquirer submissions and submitted there was 'no evidence of the PSR asking merchants directly about their experiences'. Visa told us that, as a result, the interim report 'comments extensively on the impact on and experiences of merchants without any insight into the critical role that acquirers play (or should play) in providing information to merchants'.[599]

598 See responses to MR22/1.9 (21 May 2024) by [✂].

599 Visa response to MR22/1.9 (21 May 2024), Technical Annex 5, paragraph 5.11.

7.11 As our analysis aims to understand the quality of information provision by the schemes, we have asked for information from the schemes' customers (issuers and acquirers). As merchants receive information from the acquirers, rather than from the schemes, gathering information from them was less likely to provide information useful to our analysis. In this chapter, where appropriate, we discuss the impacts on merchants of the issues we identify. In most cases, these are impacts that directly follow from acquirers' actions (for example, services being mispriced, or merchants not being charged behavioural fees based on their actions), or that acquirers would have very good visibility of (for example, a merchant's lack of confidence in its acquirer). We therefore consider that these impacts can be assessed without the need to gather information directly from the merchants.[600]

7.12 We have assessed the evidence in the round, looking at issuers' and acquirers' ability and willingness to access, assess and act on information about the services they purchase from Mastercard and Visa.

Information from the schemes

7.13 Mastercard and Visa provided us with detailed information about the ways issuers and acquirers can obtain information about fees. The primary options are to use the schemes' online portals[601] or contact the designated account handler.[602] In addition, we have received information from the schemes on their customer satisfaction summaries and on recent improvements to how their clients are able to access information.

Customer satisfaction surveys

7.14 Both schemes provided us with information about surveys they use to collect feedback and data on customer satisfaction. Both schemes also provided us with additional internal documents that relate to the provision of information to their customers.[603]

Mastercard's VOC surveys

7.15 Mastercard told us that it uses its annual *Voice of the Customer* (VOC) survey to understand its customers' needs and gather feedback.[604]

7.16 We consider Mastercard's VOC surveys to be a valuable source of information on the experience of acquirers, issuers and other categories of customers when dealing with Mastercard. We also recognise that the ratings acquirers gave to Mastercard's account management teams are high. However, we have looked behind the headline numbers to understand the survey results more fully. When considering all the information in the survey responses and in Mastercard's accompanying internal documents, the evidence on acquirers' experience is more nuanced.

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600 The only instance where this may not be the case is appropriately caveated (see paragraph 7.63).

601 See Annex 12, paragraphs 12.5 to 12.9. We consider the information provided via the schemes' online portals further below (see paragraph 7.108). In summary, the evidence shows that acquirers accounting for 45% of the total acquiring market experience difficulties accessing information from the schemes' portals.

602 See Annex 12, paragraphs 12.10 to 12.14. We consider acquirers' experiences of accessing information via account managers or support teams further below (see paragraph 7.100). In summary, the evidence shows that acquirers accounting for over 65% of the total acquiring market face difficulties in obtaining, in a timely and adequate manner, responses to their requests for clarifying information from the schemes (that is, via account managers or support teams).

603 Information on customer surveys and the schemes' internal documents is presented in Annex 12, paragraphs 12.15 to 12.27.

604 Information on Mastercard's VOC survey is presented in Annex 12, paragraphs 12.16 to 12.22.

7.17 Average scores are only part of the information included in the VOC survey results. The 'results are communicated to the UK&I Division President and Senior Leadership Team through … presentations'[605] that also include a large number of quotes from survey responses, which are used to illustrate Mastercard's strengths and areas for improvements. In analysing the results, we note that the quotes give a more detailed and nuanced view than the simple scores.

7.18 Indeed, scores can be misinterpreted if not seen in the context of the complete responses. In particular, high scores given to account management teams do not necessarily mean that customers' issues are efficiently resolved. For example, an acquirer responding to the 2021 survey submitted that the account '…team themselves are really outstanding, but I feel they're somewhat hamstrung by the organization. [✁].[606]

7.19 Similar comments were made by respondents to the 2023 survey. One respondent submitted that 'the Mastercard hierarchy does not make it easy even for our Account Management Team to [✁], while another said that [✁].[607]

7.20 In several years, Mastercard's survey documents highlight issues with 'communication clarity' or 'issue resolution' as key areas for improvement.[608] Therefore, we consider that the survey results and the schemes' assessment of them are not inconsistent with the evidence on acquirers' experience collected as part of this market review (discussed later in this chapter and in Annex 12).

Visa's GCES surveys

7.21 Visa runs yearly Global Client Engagement Surveys (GCES), covering issuers, acquirers and merchants, as well as other customers such as fintechs and other financial institutions. From the responses to these surveys, Visa computes Net Promoter Scores.[609]

7.22 We consider Visa's GCES surveys can provide useful information on the experience of acquirers (and of other categories of customers) when dealing with Visa. However, we have looked behind the headline numbers to understand the survey results more fully. When considering all the information in the survey responses and in Visa's accompanying internal documents, the evidence on acquirers' experience is more nuanced.

7.23 We also note that the Net Promoter Score is a very high-level indicator. Its reliability as a performance measure has also been questioned in the technical literature. Moreover, we are concerned that the fact that responses can be attributed to individual clients may introduce a bias in the results. We therefore consider that the survey results should be treated with care.

7.24 Having reviewed the survey results for the UK for the surveys conducted in 2023 and 2024, we note that in both years, Net Promoter Scores from UK acquirers, although still good, were significantly lower than the average score across all of Visa's UK customers responding to the surveys ([✁] versus [✁] in 2023 and [✁] versus [✁] in 2024).[610] In several years, Visa identifies [✁] and the need for [✁].[611] Therefore, we consider that the survey results and the schemes' assessment of them are not inconsistent with the evidence on acquirers' experience collected as part of this market review (discussed later in this chapter and in Annex 12).

605 Mastercard's response to the PSR's letter dated 22 June 2023 [✁].

606 Mastercard's response to the information request dated 10 October 2024 [✁].

607 Mastercard's response to the information request dated 10 October 2024 [✁].

608 See Annex 12, paragraphs 12.21 and 12.22.

609 Information on Visa's GCES surveys is presented in Annex 12, paragraphs 12.24 to 12.26.

610 Visa's response to the information request dated 10 October 2024 [✁].

611 See Annex 12, paragraph 12.26.

Improvements to service

Schemes' submissions

7.25 Both schemes told us they continually seek to improve the experience of their customers, and provided evidence to us on improvements that had been made to their service in 2023 and more recently.[612] For example, in their responses to the interim report:

- Mastercard submitted that it had taken various initiatives to improve access to information, such as:
  - the creation of the technology account manager
  - the extension of notice periods before scheme changes
  - upgrades to the tools available on Mastercard Connect
  - the de-tiering of the UK volume fee[613]
- Visa told us that it [✂], and has therefore already implemented changes to address instances such as those referenced in the [interim report] regarding insufficient notice to acquirers'.[614]

7.26 Most of the improvements set out in Annex 12 were made after our evidence-gathering from acquirers in July 2023, and would not have been known when acquirers responded to our July 2023 information request. This applies in particular to Mastercard's improvements set out in paragraph 12.29 and Visa's improvements set out in paragraph 12.33.

Submissions from others

7.27 Responses to the interim report that specifically addressed the analysis set out in the interim report version of this chapter – from five acquirers, two merchants, and two merchant associations – were consistent with our provisional findings in the interim report. Although those responses were submitted in the summer of 2024, most (seven) of them did not mention the recent improvements introduced by the schemes, indicating that they were not considered sufficient to address the issues identified in the interim report. The other two respondents both noted, positively, recent improvements made by the schemes to improve their engagement with acquirers. However, as explained in Annex 12 (paragraph 12.34), both still thought that more should be done:

- One acquirer considered that 'there may still be room for improvements to the way the schemes apply and change their rules and fees' and said it 'support[ed] the transparency objectives behind the proposed remedies'.[615]
- Another acquirer stated that we had 'correctly diagnosed the problem that needs addressing on the Acquiring side: the need for increased transparency, consultation and simplicity for Acquirers'.[616]

612 See Annex 12, paragraphs 12.28 to 12.33.

613 See Annex 12, paragraph 12.30.

614 See Annex 12, paragraph 12.32.

615 Stakeholder response to MR22/1.9 (21 May 2024) [✂]. See Annex 12, paragraph 12.34.

616 Stakeholder response to MR22/1.9 (21 May 2024) [✂]. See Annex 12, paragraph 12.34.

Our assessment

7.28 In light of the feedback summarised above and in Annex 12, we are not persuaded that the improvements made by the schemes since July 2023 have had, or are likely to have, a sufficiently material effect in resolving or mitigating the detriment we have identified. However, these improvements may be relevant to – and will be taken into account in the consideration of – possible remedies to resolve or mitigate the issues we have identified.

Issuers' experiences

7.29 Issuers generally indicated that they are sufficiently able to access, assess and act on the information they receive from Mastercard and Visa. While there were some instances where they experienced difficulty, this did not negatively impact their experience as customers of the schemes.[617]

7.30 We consider that the concerns expressed by issuers do not offset issuers' generally positive experience of interacting with the schemes. Submissions received in response to the interim report do not change our initial view, and we have therefore decided not to look further at customer experiences on the issuing side at this time.

Acquirers' experiences

7.31 In contrast to issuers, as set out below acquirers indicated that they often experience difficulties accessing, assessing and acting on information they receive from Mastercard and Visa. We have considered whether action by the PSR is appropriate given the problems they describe and the impact of them.

7.32 In relation to the issues described by acquirers, we have considered both the type and scale of impact on the acquirers, their merchants, and the market more broadly.

Evidence base and methodology

7.33 We gathered a range of qualitative and quantitative evidence. We assessed this in the round taking account of, for example, the following:

- **The type of impact the issue had:** We consider that the difficulties experienced by acquirers can lead to one, or both, of the following outcomes:
  - **Acquirers' responses to the schemes' price signals are distorted:** That is, acquirers would have acted differently had they better understood the schemes' price signals. In some cases, merchants also experienced this.
  - **Additional or unnecessary costs are incurred by acquirers:** Acquirers incur additional direct or indirect costs when accessing or assessing information or when seeking to act on it.

617 Issuers' submissions on their experiences as customers of the schemes are summarised in Annex 12, paragraphs 12.35 to 12.41.

- **The proportion of the total acquiring market affected by the issue**[618]**:** In general, we consider the greater the proportion of the market that is affected, the more likely the issue is to be considered material. We also take account of the relative size of acquirers (a particular percentage can represent either one or two very large players or a much greater number of smaller ones) and that in some instances a severe impact on a small percentage of the market may also be material.
- **Acquirers' qualitative descriptions of the impact on their businesses:** We consider that material issues may lead to a range of negative impacts, for example acquirers being unable to accurately pass on fees, inaccurate forecasting and misbilling their merchants.
- **Acquirers' decisions to escalate issues with the schemes or within their businesses:** We consider this supportive of those issues having a greater impact. We note that in practice most acquirers tended to escalate issues with the schemes.
- **Acquirers' descriptions of the impact on their merchants:** Examples of relevant impacts include being mispriced by their acquirer, merchant confusion and lack of confidence in the acquirer. A more significant impact on merchants suggests an issue is more material.

7.34 We also considered acquirers' own estimates of the financial cost of the issue.[619] Greater financial costs potentially indicate that an issue is more material. However, we use this evidence only as corroborative of other evidence, rather than as primary evidence in itself, given its apparent limitations. These include:

- Several acquirers were unable to submit estimates.
- Estimates detail the costs associated with individual fees, rather than the aggregate cost of any lack of transparency in behavioural fees.
- Estimates exclude relevant time and resource costs for the acquirers.
- Acquirers were unable to submit UK-specific estimates, and instead provided estimates of costs related to wider regions.
- The figures also do not take account of the differential impacts on acquirers of different sizes – that is, a £1 impact is likely to have a greater impact on a smaller acquirer than a larger one.

7.35 Some of these factors would suggest the figures quoted are underestimates of the real impact, while for others the impact is overestimated or unclear.

618 We received responses from acquirers accounting for over 90% of the UK's acquiring market, where shares are calculated on the basis of the value of Mastercard and Visa's UK transactions.

619 Where acquirers submitted cost estimates in foreign currencies, we have converted these to pounds sterling using the Bank of England's annual average spot exchange rate for the appropriate currency. See the Bank of England | Database.

7.36 In their responses to our interim report, the schemes suggested that the estimates were 'unsuitable' (Visa) and 'unreliable' (Mastercard).[620] Whilst we have acknowledged the limitations of the estimates, we do not consider it appropriate to dismiss them entirely. It is not disputed by the schemes that there are, or may be, financial impacts to acquirers' experiences. As such, we continue to consider that acquirers' own estimates, in conjunction with the other evidence gathered in this market review, provide a relevant, albeit most likely corroborative or supporting, piece of analysis.

7.37 We have used the factors discussed above to assess the submissions we received relating to acquirers' experiences of:[621]

- the quality of the information they receive on behavioural fees (paragraphs 7.41 to 7.66)
- the quality of information they receive on other scheme and processing fees (both mandatory and optional) (paragraphs 7.67 to 7.83)
- asking scheme staff to clarify the information they received (paragraphs 7.84 to 7.100)
- using the schemes' portals[622] (paragraphs 7.101 to 7.108)
- being charged behavioural fees that they or their merchants did not trigger (paragraphs 7.109 to 7.113)

7.38 We note that the analysis set out below and in Annex 12 does not consider whether particular services and the fees charged for them are justified.

7.39 Responding to the interim report, Visa submitted that 'while the [interim report] makes general conclusions with regards to both Visa and Mastercard, it does not appear to account for the differences in experiences that acquirers have with each scheme based on acquirer feedback set out in the [report]'. Visa submitted that 'several of the acquirer concerns that are described in the [interim report] appear to be more applicable to Mastercard', and referred specifically to the issues with behavioural fees, the issues with the quality of information on mandatory and optional fees, and the issues with clarifying information that acquirers receive from their account manager or account executive.[623]

7.40 We carefully reviewed the evidence provided by acquirers to assess whether it indicated material differences between their experiences with Mastercard and with Visa. Where we identified such differences, we acknowledge them in our assessment below (see in particular paragraph 7.82).

620 Mastercard response to MR22/1.9 (21 May 2024), page 79 (fourth paragraph), and Visa response to MR22/1.9 (21 May 2024), Technical Annex 5, paragraph 5.27(b)). In their responses to the interim report, Mastercard and Visa have both cast doubt on the suitability of acquirers' own estimates of financial costs. Visa stated that the estimates are likely 'not consistent and are therefore unsuitable as measures of the potential impact of any issue. While this is recognised in the [interim report], it continues [to] rely on these acquirer estimates throughout its analysis' (Visa response to MR22/1.9 (21 May 2024), Technical Annex 5, paragraph 5.27(b)). Mastercard states that 'the estimates appear to be unreliable, given the wide range of financial impacts reported by acquirers in response to informal and imprecise requests' (Mastercard response MR22/1.9 (21 May 2024), page 79 (fourth paragraph)).

621 As set out in paragraph 7.8 above, we have applied the 3As framework of Access, Assess and Act; however, we have ordered this section according to the strength of evidence/issue we consider to be most material.

622 In this subsection we consider submissions relating to the format and functionality of the portals, rather than the quality of information provided.

623 Visa response to MR22/1.9 (21 May 2024), Technical Annex 5, paragraphs 5.15 to 5.17.

Quality of information received: behavioural fees

What acquirers told us

7.41 Acquirers indicated that in some instances the information they receive from Mastercard and Visa does not help them understand behavioural fees sufficiently to enable an appropriate response to them.[624] In particular, they described difficulties accessing and assessing the relevant information. This can lead to difficulties acting on this information for both acquirers and merchants.

7.42 Acquirers described various issues related to understanding behavioural fees.

7.43 Several acquirers told us that **they struggle to understand the triggers and drivers of behavioural fees**.[625] For example, some described having to undertake lengthy and costly correspondences with the schemes or internal reviews, before they could understand what they were being charged for. Several acquirers also explained that there can be cases where they are unable to pass on, or experience difficulty passing on, behavioural fees to the merchants that trigger the fee.

7.44 Several of the acquirers we contacted indicated in their responses that they **have to purchase optional services (such as data or reporting) from Mastercard or Visa to understand behavioural fees**.[626] Some acquirers provided information on the costs of the optional reporting they described; as explained above, we treat this information as corroborative, rather than indicative, of potential harm.

7.45 Several acquirers explained that they can face **difficulties preparing for new or modified behavioural fees within the implementation periods Mastercard and Visa set**.[627] Some of these acquirers told us that the schemes do not provide a sufficient notice period. Other acquirers told us that they struggled to implement the necessary changes in the time required because Mastercard and Visa do not provide adequate information at the beginning of the implementation period, or because they change their approach to the updates midway through it. Some acquirers indicate that this raises the cost they incur as a result of these changes.

What the schemes told us

7.46 Mastercard's and Visa's submissions outlined the support they offer acquirers and the process they use when introducing new behavioural fees.[628]

7.47 Mastercard said that it uses behavioural fees to ensure acquirers (and issuers) 'keep pace with the evolving risks in the payment ecosystem'.[629] It said that it works closely with acquirers to ensure they can understand and comply with behavioural fees.[630]

624 [✂].

625 See Annex 12, paragraphs 12.47 to 12.49.

626 See Annex 12, paragraphs 12.50 to 12.54.

627 See Annex 12, paragraphs 12.55 to 12.57.

628 For Mastercard, see Annex 12, paragraphs 12.58 to 12.62; for Visa, see Annex 12, paragraphs 12.63 to 12.73.

629 Mastercard's response to the PSR's letter dated 22 June 2023 [✂]. See Annex 12, paragraph 12.58.

630 Mastercard's response to the PSR's letter dated 22 June 2023 [✂]. See also Mastercard response to MR22/1.9 (21 May 2024), page 81. See Annex 12, paragraph 12.59.

7.48 Mastercard said that it typically gives acquirers [✂] to implement fee changes, and that it can extend this period in some cases.[631] It also said that it considers a 'number of factors' when assessing the impact and viability of imposing new behavioural fees, including assessing its customers' ability to make the associated changes within their organisation.[632]

7.49 While acquirers consistently described having to purchase 'optional' reporting to understand behavioural fees, Mastercard said that the vast majority of its consulting services, including the purchase of data services, 'are not aimed at understanding fees'. It stated that instead, the 'primary means' of understanding fees are using its portal and engaging with Mastercard staff.[633]

7.50 Visa said that behavioural fees are 'designed to encourage behaviours that improve the security, system integrity and efficiency of the overall ecosystem'. Visa also said that these fees are avoidable and are intended to let clients choose whether to incur the fee, or invest to avoid triggering it.[634] Visa explained that behavioural fees can tend to zero if issuers and acquirers choose to make those investments.[635]

7.51 Visa said that it reviews new and modified behavioural fees periodically to assess their suitability.[636] Its expectation is that associated revenues will decline over time, as clients change their behaviours.[637]

7.52 Visa told us that it uses the [✂].[638] It said that following feedback from clients, it now aims [✂].

7.53 While acquirers consistently described having to purchase 'optional' reporting to understand behavioural fees, Visa said it 'does not charge clients for additional data to understand fees or fee changes' and does not 'provide consultancy services to understand fees or fee changes'.[639]

Our assessment

7.54 The schemes' submissions show that both schemes carefully consider how best to use behavioural fees to incentivise behaviour beneficial to the ecosystem. This is consistent with submissions from various acquirers describing the support they received from one or both schemes. However, the evidence we have received shows that a large proportion of the acquiring market continues to experience difficulties understanding behavioural fees.

7.55 In particular, the evidence gathered from acquirers indicates that the quality of information acquirers receive from the schemes often causes them difficulties understanding behavioural fees.[640] Their submissions also indicate that these difficulties can have different effects on the acquirers and the wider market.

631 Mastercard's response to the PSR's letter dated 22 June 2023 [✂]. See also Mastercard response to MR22/1.9 (21 May 2024), page 82. See Annex 12, paragraph 12.60.

632 Mastercard's response to the PSR's letter dated 22 June 2023 [✂]. See Annex 12, paragraph 12.61.

633 Mastercard's response to the PSR's letter dated 22 June 2023 [✂]. See Annex 12, paragraph 12.62.

634 Visa's response to the PSR's letter dated 22 June 2023 [✂].

635 Visa's response to the PSR's information request dated 12 January 2022 [✂].

636 Visa's response to the PSR's letter dated 22 June 2023 [✂]. See Annex 12, paragraph 12.66.

637 Visa's response to the PSR's information request dated 12 January 2022 [✂].

638 Visa's response to the PSR's letter dated 22 June 2023 [✂]. See Annex 12, paragraphs 12.67 to 12.72.

639 Visa's response to the PSR's letter dated 22 June 2023 [✂]. See Annex 12, paragraph 12.73.

640 See further, Annex 12, paragraphs 12.47 to 12.57.

7.56 Acquirers' submissions show that difficulty accessing and assessing the necessary information can raise their costs.[641] We would expect additional costs to be passed on ultimately to merchants but not necessarily in a manner that is reflective of the actions of a particular merchant in the case of behavioural fees. Some acquirers indeed indicated that they have responded to these difficulties by raising prices – for example by adjusting the blended rates they offer merchants.

7.57 Several acquirers reported difficulty identifying which merchants were triggering behavioural fees and in turn passing on those fees / increased costs directly to those that triggered them.[642] Where this occurs, it is unlikely that behavioural fees are working to incentivise the intended behaviour within the card payment ecosystem, as described by the schemes. We consider it is likely to be distorting at least some acquirers', and their merchants', responses to price signals.

7.58 We also note that evidence from acquirers sometimes conflicted with statements from the schemes. For example, one acquirer said that the schemes have implemented fees using notice periods shorter than those the schemes themselves describe (see Annex 12, Table 4). Moreover, as summarised above, while acquirers consistently described having to purchase 'optional' reporting to understand behavioural fees, Mastercard and Visa did not accept these submissions (see above, paragraphs 7.49 and 7.53). However, we note that, based on acquirer feedback above, neither Mastercard nor Visa is taking comprehensive action to alleviate the issues faced by acquirers in understanding their fees.

7.59 The large majority of acquirers we contacted, accounting for over 90% of the overall acquiring market, told us they experience difficulties understanding behavioural fees.[643]

7.60 The evidence shows the impact on individual acquirers of the issues they described was mixed, including in terms of the scale of the financial impact. In reaching this assessment we are conscious of the limitations of the data as set out above. For example, while every acquirer that experienced issues contacted the relevant scheme, some described lengthy and costly processes of engagement. Several acquirers told us that it had taken months to resolve the relevant issues[644], with two acquirers indicating that these issues had persisted for over a year.[645]

7.61 Several acquirers also submitted estimates of the financial costs associated with the issues they had experienced. These estimates varied, with some acquirers reporting costs ranging from thousands to hundreds of thousands of pounds in estimated costs.[646] However, some acquirers told us that the financial costs of these issues were minimal or non-existent.

7.62 Acquirers also provided qualitative descriptions of several negative consequences the issues they faced have had on their businesses. As noted, they consistently described struggling to accurately price their services due to the difficulty or impossibility of passing on behavioural fees to their merchants.

641 See further, Annex 12, paragraphs 12.48, 12.49, 12.52, 12.56, and 12.57.

642 See further, Annex 12, paragraph 12.49.

643 Market shares calculated on the basis of total Mastercard and Visa 2023 UK transaction value.

644 [✂].

645 [✂].

646 As described at paragraph7.34, we consider that these estimates are subject to various limitations and are therefore unlikely to represent robust estimates of the financial costs associated with these issues.

7.63 Finally, acquirers indicated that these issues also have impacts on merchants: reducing their ability to plan[647], creating confusion around the scheme and processing fees that they are charged[648], and increasing their costs.[649]

7.64 We recognise that, unlike the other impacts on merchants discussed in this chapter, acquirers may have limited visibility of merchants' ability to plan, or of their costs. However, the merchants and one merchant association that responded to the consultation on our interim report mentioned some of these issues. One merchant told us that the complexity of scheme fees makes it very difficult for a merchant to budget and forecast accurately[650]; another said it had experienced difficulty in getting information on what triggered behavioural fees.[651] The merchant association submitted that retailers frequently report concerns about unexpected behavioural fees, their complexity, and the lack of clarity around their application, and that the increasing complexity of scheme fees is becoming a major challenge for retailers, who must often dedicate entire teams to decode the many hundreds of fees imposed by the schemes.[652] Merchants at our merchant roundtable also told us about their difficulty in understanding why fees are being charged.[653]

7.65 However, we note that some acquirers' submissions described the support they had received from the schemes – for example, in the form of complimentary reporting tools provided by the schemes, or temporary waivers to allow them to implement necessary updates.

7.66 Overall, the evidence indicates that acquirers accounting for over 90% of the acquiring market consider that the quality of information they receive from the schemes is often insufficient for them to understand behavioural fees (which in turn impacts the quality of the information merchants receive). Evidence shows that these issues may have a varying impact on acquirers' costs, with some acquirers estimating an impact in the hundreds of thousands of pounds. In addition, the evidence indicates that these issues may also be distorting the behaviour and responses of acquirers and merchants and limiting the efficacy of behavioural fees (that is, even where they can access the relevant information, they cannot always assess and act on it effectively).

Quality of information received: mandatory and optional fees

What acquirers told us

7.67 Acquirers told us that the information the schemes provide leaves them struggling to understand both mandatory and optional scheme and processing fees. Acquirers described various issues, such as the schemes' bulletins being complex, insufficient, and sometimes containing errors.

7.68 These issues lead to increased acquirer costs and further errors, such as misbilling merchants. Acquirers often have to engage further with the schemes to understand the communications they receive.[654]

647 [✁].
648 [✁].
649 [✁].
650 Stakeholder response to MR22/1.9 (21 May 2024) [✁].
651 Stakeholder response to MR22/1.9 (21 May 2024) [✁].
652 Stakeholder response to MR22/1.9 (21 May 2024) [✁].
653 [✁].
654 [✁].

7.69 Some of the consequences acquirers described included:

- **Increased costs due to pursuing investigations into understanding the services they have purchased**[655]**:** For example, some acquirers described purchasing optional data, reporting and consulting services from one or both schemes to understand their fees.[656,657]
- **Inability to pass fees onto their merchants**[658]**:** For example, one acquirer told us that there were cases of Visa giving less than one month's notice in bulletins, and that it had identified 13 bulletins in 2024 where the billing event was not shown.[659] These issues mean the acquirer cannot set up or track new fees, since it does not know the billing event until after it has been billed the new fee and seen the charge on the invoice.
- **Difficulty in conducting impact assessments**[660]**:** In response to the interim report, a merchant told us that this has a material impact on acquirers, as merchants will expect the acquirer to perform impact analysis and, in lots of cases, hold the acquirer liable for accurately assessing these.[661]
- **Potentially misbilling their merchants**[662]**:** For example, one acquirer told us that over two years it had experienced eight instances of misalignment between its understanding of fee trigger details and Mastercard's fees caused by missing technical details, resulting in overbilling and underbilling merchants.[663] Misbilling issues were raised by several other acquirers.[664]

7.70 Acquirers had differing views on whether the number of fees causes a problem. In response to the interim report, one acquirer told us that the high volume of fee changes causes difficulty in understanding new fees and changed fees, and two acquirers said the reducing the number of fees would be beneficial. Two other acquirers, however, told us that the number of fees does not cause a problem, that intervention could cause detriment to acquirer outcomes, or that acquirers risk facing an unsustainable increase of operational costs.[665] This issue was explored further on calls to discuss possible remedy options, with differing views offered:

- Three acquirers said the high number of fees does add to the complexity of understanding fees, together with the non-transparency of individual fees and the frequency of fee changes.[666] The high number of changes was also mentioned by another acquirer.[667]
- Two acquirers told us that we should focus on other remedies to reduce the complexity and increase the transparency of each fee.[668]

655 [✂].

656 As set out in more detail in Annex 12, paragraphs 12.50 to 12.52, several acquirers told us that they have to purchase optional services in order to understand behavioural fees they are charged by the schemes. We consider in this section submissions relating to mandatory scheme and processing fees.

657 See Annex 12, paragraph 12.81.

658 [✂].

659 [✂].

660 [✂].

661 See Annex 12, paragraph 12.79.

662 [✂].

663 See Annex 12, paragraph 12.78.

664 See Annex 12, paragraph 12.80.

665 See Annex 12, paragraphs 12.83 to 12.84.

666 [✂].

667 [✂].

668 [✂].

What the schemes told us

7.71 The schemes did not characterise their fees as complex, pointing to efforts they make to engage with clients on changes[669], or to reduce pricing complexity where possible.[670]

7.72 The schemes both considered that acquirers are in the best position to review and determine the implications of fee changes for their business. Mastercard stated that its own analysis of the likely impact of a new or modified fee is based on historical data, and that acquirers may change their behaviour to influence the impact. Mastercard therefore considered that acquirers will be in a 'better position' to determine the impact of fee changes on their business.[671] Visa said that its clients are in the 'best position to review and determine the overall implications of fee changes for their business'.[672]

7.73 Regarding optional services, Mastercard noted the [✂].[673] Mastercard also noted the 'growing importance of "opt-out" services'.[674] Visa noted that its review of fee changes for UK clients over the period 2014 to 2021 showed a [✂], which it [✂].[675]

7.74 In their responses to the interim report, neither scheme engaged directly with concerns that the number of fees may be a cause of complexity. However, both schemes were strongly opposed to a possible remedy to reduce the number of scheme and processing fees, citing concerns including dampened incentives to innovate and expand.[676]

Our assessment

7.75 The schemes' submissions outline their approach to communicating fees and fee changes to their customers. We note that the schemes provide a range of ways for their customers to access information on fees, with additional support to understand and implement changes. Regarding optional fees, we note Mastercard's submissions confirming the existence of 'opt-out' optional services, as described by acquirers.[677]

7.76 A large proportion of the acquiring market reports issues relating to understanding mandatory and optional scheme and processing fees.

7.77 The acquirer submissions we reviewed indicate that the issues acquirers face relating to understanding these fees can increase their costs. For example, acquirers may:[678]

- incur resource costs from additional engagement with the schemes
- have to purchase optional services to understand the fees they pay
- make costly errors such as undercharging their merchants or failing to pass on fees

669 Visa's response to the PSR's letter dated 22 June 2023 [✂]. See Annex 12, paragraph 12.92.

670 Mastercard's response to the PSR's letter dated 22 June 2023 [✂]. See also Mastercard response to MR22/1.9 (21 May 2024), page 83. See Annex 12, paragraph 12.86.

671 Mastercard's response to the PSR's letter dated 22 June 2023 [✂]. See Annex 12, paragraph 12.88.

672 Visa's response to the PSR's letter dated 22 June 2023 [✂]. See Annex 12, paragraph 12.93.

673 Mastercard's response to the PSR's letter dated 22 June 2023 [✂]. See also Mastercard response to MR22/1.9 (21 May 2024), page 83. See Annex 12, paragraph 12.89.

674 Mastercard submission, May [✂]. See Annex 12, paragraph 12.90.

675 Visa's response to the PSR's letter dated 22 June 2023 [✂]. See Annex 12, paragraph 12.94.

676 See Annex 12, paragraphs 12.91 and 12.95.

677 Mastercard's analysis of variation in acquirers' take-up of optional services is considered in Annex 4.

678 See paragraph 7.69.

7.78 In some cases, the acquirer submissions also indicate that the difficulty understanding scheme and processing fee changes may distort their responses to Mastercard and Visa's price signals. Examples of this include:

- absorbing fees that would otherwise be passed on to specific merchants[679]
- unintentionally purchasing optional services, because they do not understand the services are optional or because they are automatically enrolled[680]

7.79 A large majority of acquirers described issues relating to the transparency of information on mandatory and optional fees. In total, the acquirers reporting such issues accounted for over 65% of the total acquiring market.

7.80 The submissions indicate these issues had a range of impacts on individual acquirers.

7.81 For example, some acquirers reported financial costs amounting to hundreds of thousands of pounds.[681] Similarly, some acquirers provided qualitative descriptions of substantial impacts, such as mispricing their merchants or being less able to make effective plans.[682] However, others said that there were only minimal financial costs.[683]

7.82 Overall, the evidence indicates that many acquirers face difficulties relating to understanding mandatory and optional scheme and processing fees, due to the complexity of the fees and the insufficiency of the information provided by the schemes. The evidence indicates that this issue affected acquirers accounting for over 65% of the total acquiring market and, although the severity of impact varies across acquirers, some reported substantial impact. We note, however, that acquirers have provided more evidence of these issues in relation to the information provided by Mastercard than by Visa, possibly reflecting a difference between the two schemes in the quality of information on mandatory and optional services.

7.83 Submissions from some acquirers also indicate that the volume of fees charged by Mastercard and Visa may be a significant factor contributing to acquirers' difficulty understanding fees. However, we note that views on this point are mixed and that both the schemes, and some acquirers, have highlighted potential detriment to acquirers if schemes were required to reduce the number of fees.

Provision by the schemes of clarifying information

7.84 Acquirers can direct questions to their account manager at Mastercard or their account executive at Visa. Both Mastercard and Visa also have other staff and teams responsible for offering customer support and supporting acquirers with queries.

679 See paragraph 7.69.

680 See Annex 12, paragraphs 12.77 and 12.82.

681 See Annex 12, paragraphs 12.77 and 12.81.

682 See Annex 12, paragraphs 12.78 and 12.80.

683 As described at paragraph 7.33, we consider that these estimates are subject to various limitations and are therefore unlikely to represent robust estimates of the financial costs associated with these issues.

What acquirers told us

7.85 Acquirers told us that they face difficulties successfully obtaining clarifying information from the schemes, with responses sometimes late or inadequate. Acquirers said that it can take weeks or months to receive a response when they send questions to their contacts at Mastercard and Visa.[684] They said that these protracted engagements with the schemes lead to additional resource costs, and their inability to access information can lead to errors in assessing the impact of fees and pricing their merchants.[685]

7.86 For example, one acquirer said that Mastercard and Visa are 'very slow' to respond to questions about fee codes, and that it can take four to five weeks to receive a sufficiently detailed answer. Similarly, another acquirer told us that both Mastercard and Visa take several weeks to respond to questions. Both acquirers described financial impacts as a result of these delays.[686]

7.87 Acquirers also told us that the quality of the responses that they receive from one or both schemes can be inadequate.[687] For example:

- One acquirer said that the information it receives from different Mastercard departments is vague and inconsistent.[688]
- Another acquirer said that its contacts at both Mastercard and Visa provide 'late and unsatisfactory' responses, demonstrating a 'lack of expertise around their own billing systems'.[689]

7.88 Some acquirers' submissions described recent improvements the schemes had made. A few said that one or both schemes have assigned dedicated technical support staff to their account.[690]

What the schemes told us

7.89 Both schemes pointed to the results of their customer surveys. Visa, for example, pointed to its 'very high' Net Promotor Score (NPS) for the 2022 financial year, and a more detailed analysis of client satisfaction surveys, indicating relatively high scores for considerations such as 'ease of doing business' and 'speed of the (query) acknowledgement'.[691] Mastercard pointed out that its acquirer account management teams received high average ratings between 2020 and 2022.[692]

7.90 Mastercard also pointed out the creation of its new technology account manager role.[693]

684 See Annex 12, paragraph 12.98.

685 See Annex 12, paragraphs 12.98 to 12.104.

686 See Annex 12, paragraphs 12.99 to 12.100.

687 See Annex 12, paragraphs 12.101 to 12.103.

688 [✁]. See Annex 12, paragraph 12.102.

689 [✁]. See Annex 12, paragraph 12.103.

690 [✁].

691 Visa's response to the PSR's letter dated 22 June 2023 [✁]. See Annex 12, paragraphs 12.108 to 12.112.

692 Mastercard's response to the PSR's letter dated 22 June 2023 [✁]. See also Mastercard response to MR22/1.9 (21 May 2024), page 83. See Annex 12, paragraph 12.105.

693 Mastercard's response to the PSR's letter dated 22 June 2023 [✁]. See Annex 12, paragraph 12.106.

Our assessment

7.91 The schemes described various teams they employ to support acquirers with their queries, including Mastercard's new 'technology account manager' role. We consider Mastercard's submissions to be consistent with acquirers' descriptions of additional technical resources being assigned to their accounts.

7.92 Notwithstanding this, the evidence gathered shows that several acquirers encountered difficulties in clarifying information with scheme staff, which in turn:

- increase their costs, for example due to the resource burden of carrying out further engagement
- distort their responses to the schemes' pricing, for example by causing them to make errors in forecasting or billing their merchants

7.93 A majority of acquirers who submitted responses to us described experiencing difficulties clarifying information with the schemes. In total, the acquirers reporting such issues accounted for over 65% of the total acquiring market.

7.94 The evidence we gathered indicates that the severity of impact on individual acquirers varied.

7.95 For example, several acquirers told us that they incur additional costs as a result of these difficulties. However, some acquirers were unable to specify the value of these costs.[694] Other estimates ranged between thousands[695] and hundreds of thousands of pounds.[696]

7.96 Acquirers also told us that these issues had various non-financial consequences. For example, acquirers described negative impacts on their relationships with their merchants[697] and on their ability to develop or progress certain projects.[698] However, one acquirer told us that the issues they experienced had no impact on their ability to make commercial decisions.[699]

7.97 Most acquirers told us that they had escalated these issues internally – for example, to senior management.[700] This indicates that the issues had a relatively severe impact.

7.98 Some acquirers also indicated that these issues affect their merchants, including through misbilling. However, others indicated that the issues they experienced did not affect merchants, often because the acquirer absorbed the related costs. However, we would expect such costs to be ultimately passed down from acquirers to their merchants.

694 [✁].

695 [✁].

696 As described at paragraph 7.33, we consider that these estimates are subject to various limitations and are therefore unlikely to represent robust estimates of the financial costs associated with these issues.

697 [✁].

698 [✁].

699 [✁].

700 [✁].

7.99 We note Visa's analyses of customer feedback on query resolution and Mastercard's summary of feedback to its customer survey:

- We have discussed in paragraph 7.18 why the aggregate rating for Mastercard's acquirer account management teams may not necessarily mean that acquirers are satisfied with the resolution of their queries. Moreover, as shown in paragraph 7.20, respondents to Mastercard's own customer surveys have reported concerns with issue resolution, and Mastercard identified this as a key area for improvement in both 2020 and 2024.
- We note that, between November 2021 and December 2022, Visa resolved [✂] of complex queries within [✂] days.[701] This, however, does not necessarily contradict the submissions made to us by acquirers. First, it is unclear whether [✂] days is a reasonable time to respond to such queries. Those acquirers that, during one-on-one calls to discuss remedy options, expressed a view on the appropriate response times to queries indicated between 24 hours/one business day and three days.[702] Second, the concerns expressed by acquirers would still be valid even if only a significant minority of the most complex queries took too long to be resolved.

7.100 Overall, the evidence shows that acquirers accounting for over 65% of the total acquiring market face difficulties in obtaining, in a timely and adequate manner, responses to their requests for clarifying information from the schemes (that is, via account managers or support teams). Although the severity of impact varies across acquirers, some of them reported significant financial and non-financial consequences.

Using the schemes' portals

What acquirers told us

7.101 Some acquirers indicated that they experience difficulty using the schemes' portals to access information.[703] The issues raised include[704]:

- struggling to access historical data using one or both schemes' portals
- difficulties understanding fees as the pricing bulletin codes used by one or both schemes' portals do not match those used on invoices

7.102 Acquirers told us that these issues force them to engage further with the schemes, leading to additional costs, and increase the likelihood of merchants being mispriced.[705]

What the schemes told us

7.103 Mastercard told us that its portal, Mastercard Connect, gives all acquirers access to features such as a consolidated billing system in near real-time, a 'technical' resource centre used to communicate price changes, a chat function to interact in real time with customer support, and a help desk.[706]

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701 See Annex 12, paragraph 12.113.

702 Call with [✂].

703 We focus in this section on submissions relating to the format and function of the schemes' portals, rather than the quality of information provided in the portals. Submissions relating to the quality of the information provided in the portals are considered in the sections on *Quality of information received* above.

704 See Annex 12, paragraph 12.114.

705 See Annex 12, paragraph 12.115.

706 See Annex 12, paragraphs 12.6 to 12.8.

7.104 Visa told us that its Visa Access portal is a searchable database of material on all client-related matters and provides further tools and services including an analytics platform, an integrated Support Hub, and help functions such as tutorials, webinars and FAQs.[707]

Our assessment

7.105 We consider that acquirers' difficulties accessing information through the schemes' portals have broadly the same effect on acquirers' businesses as the other problems we have identified, namely:

- increasing their costs – for example, due to the resource burden of carrying out further engagement to access the information
- distorting their responses to the schemes' pricing – for example, by causing them to make errors in forecasting or billing their merchants

7.106 A lower proportion of the acquiring market reports these concerns compared to the other issues we examine in this section. In total, the acquirers that reported experiencing these concerns account for approximately 45% of the UK's acquiring market.

7.107 The submissions we reviewed show these issues had a varied range of impacts on individual acquirers including:

- **Estimates of financial impacts:** Many acquirers told us that it was difficult or impossible to estimate the costs of the issues they described.[708] Two provided a more general outline of the quantitative impact of fee complexity: one stated that [✂].[709] The other told us that it has unmodelled fees amounting to several million points, [✂] globally, due to the quality of information provided by Mastercard.[710] A few acquirers said that the financial costs are minimal or non-existent.[711]
- **Qualitative descriptions of impacts:** Acquirers told us that these issues cause delays in their decision making[712], can lead to difficulties billing their merchants[713], and create operational costs associated with reviewing the fees.[714] One acquirer said that the issues it experienced mean it is less able to assess fee changes, and less able to mitigate them for its merchants.[715] However, a couple of acquirers indicated that the issues they experienced had no impact on their ability to make decisions.[716]

7.108 Overall, the evidence shows that acquirers accounting for around 45% of the total acquiring market experience difficulties accessing information through the schemes' portals, with severe financial and non-financial impacts reported by at least some of the affected acquirers.

707 See Annex 12, paragraph 12.9.
708 [✂].
709 [✂].
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712 [✂].
713 [✂].
714 [✂].
715 [✂].
716 [✂].

Behavioural fees charged to acquirers when not triggered by them or their merchants

What acquirers told us

7.109 Some acquirers told us they had been charged behavioural fees when neither they nor their merchants were responsible for triggering them.[717] These acquirers identified a variety of stakeholders responsible for triggering fees that the acquirers were then charged, specifically raising issues relating to fraudsters, third-party payment service providers, and banks involved in the transaction.[718]

What the schemes told us

7.110 Mastercard said that its behavioural fees are avoidable and are not charged when an acquirer displays 'good practice behaviour' (see Annex 12, paragraph 12.59).[719]

7.111 When we asked Visa about behavioural fees being triggered by events outside acquirers' control, Visa said that it was unsure which events we were referring to and sought further details.[720] However, when commenting on acquirers' abilities to understand fees more generally, it explained that some acquirers may partner with third-party processors, and if so, the acquirer's processor will be required to make technical changes to its systems when Visa updates its authorisation, clearing and settlement fees.[721]

Our assessment

7.112 Overall, we do not consider that the evidence we have seen suggests that the specific issue of behavioural fees being charged to acquirers when not triggered by them or their merchants is having a material impact on acquirers. We note that the relevant acquirers described investing in anti-fraud service in response to fees triggered by fraudulent behaviour. Regarding the behavioural fees triggered by third-party providers and banks, we note that we received only a couple of submissions describing this conduct. Acquirers did not consistently identify a stakeholder responsible.

7.113 We also do not consider the evidence shows that the schemes have failed to provide necessary information to acquirers, or otherwise prevented them from avoiding these fees.

Conclusions

7.114 In this chapter we have set out our assessment of the ways card schemes' customers access, assess, and act on information from Mastercard and Visa. We consider that the concerns expressed by issuers do not offset issuers' generally positive experience of interacting with the schemes. Submissions received in response to the interim report do not change our initial view and we have therefore decided not to look further at customer experiences on the issuing side at this time.

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717 [✄].

718 See Annex 12, paragraphs 12.117.

719 Mastercard's response to the PSR's letter dated 22 June 2023 [✄].

720 Visa's response to the PSR's letter dated 22 June 2023 [✄].

721 Visa's response to the PSR's letter dated 22 June 2023 [✄].

7.115 On the acquiring side, we consider that the evidence we have gathered indicates that the issues are sufficiently material as to create poor outcomes for acquirers and merchants, in particular by raising acquirers' costs and distorting acquirers' ability to respond to the schemes' price signals.

7.116 The poor outcomes we have observed include that:

- Acquirers accounting for over 90% of the acquiring market consider that the quality of information acquirers receive from the schemes is often insufficient for them to understand behavioural fees (which in turn impacts the quality of the information that merchants receive). Evidence shows that these issues may have a varying impact on acquirers' costs, with some acquirers estimating an impact in the hundreds of thousands of pounds. In addition, the submissions indicate that these issues may also be distorting the behaviour and responses of acquirers and merchants, and limiting the efficacy of behavioural fees (that is, even where they can access the relevant information, they cannot always assess and act on it effectively) (see paragraphs 7.41 to 7.66).
- Acquirers accounting for over 65% of the acquiring market face difficulties relating to understanding mandatory and optional scheme and processing fees, due to the complexity of the fees and the insufficiency of the information provided by the schemes. Although the severity of impact varies across acquirers, some reported substantial impacts[722] (see paragraphs 7.67 to 7.83).
- Acquirers accounting for over 65% of the acquiring market face difficulties in obtaining, in a timely and adequate manner, responses to their requests for clarifying information from the schemes (that is, via account managers or support teams). Although the severity of impact varies across acquirers, some of them reported significant financial and non-financial consequences (see paragraphs 7.84 to 7.100).
- Acquirers accounting for around 45% of the acquiring market experience difficulties accessing information through the schemes' portals, with severe financial and non-financial impacts reported by at least some of the affected acquirers (see paragraphs 7.101 to 7.108).

7.117 We also consider that, given the prevalence of these issues in the acquiring market as a whole, assessing individual instances in isolation may understate the associated costs and not properly account for the full impact of these issues.

7.118 While we recognise that the evidence on issues with the quality of information on mandatory and optional fees is stronger with respect to Mastercard than to Visa, the evidence shows concerns in relation to Visa as well. The evidence does not show other material differences between Mastercard and Visa in relation to the findings outlined above.

7.119 As we noted in paragraphs 7.20 and 7.24, we consider that the results of Mastercard and Visa's customer surveys and the assessment in the schemes' internal documents are not inconsistent with the evidence provided by acquirers on their experience.

7.120 Taking the evidence above in the round, we consider that the scale of the impact (in terms of proportion of affected acquirers and severity) of the difficulties experienced by acquirers is significant. This in turn is likely to affect the information received by merchants.

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722 We note, however, that acquirers have provided more evidence of these issues in relation to the information provided by Mastercard than by Visa, possibly reflecting a difference between the two schemes in the quality of information on mandatory and optional services.

7.121 We are also not persuaded that the improvements made by the schemes since July 2023 have had, or are likely to have, a sufficiently material effect in resolving or mitigating the detriment we have identified, as discussed in paragraphs 7.25 to 7.28.

7.122 We consider that these outcomes are significantly below the standard expected in a well-functioning market, taking into account our objectives and, in particular, the need to ensure that payment systems are operated and developed in a way that takes into account, and promotes, the interests of those who use services provided by payment systems. In particular, in the context of complex fee structures, the overall quality of the information that acquirers (and ultimately merchants) receive can be insufficient to understand the fees they are charged. This affects acquirers' ability to act on this information, including by avoiding unwanted optional services or adapting their behaviour to mitigate costs of behavioural fees, and can impact their merchants. For example, due to this complexity acquirers can find it difficult or impossible to accurately price their offerings to merchants. These issues are exacerbated by the time and costs spent to navigate this complexity across a very large number of fees. This situation is below the standard that we would expect in a well-functioning market, specifically because it does not serve the interests of service users well.

7.123 For these reasons, we find that the issues relating to the provision of information by Mastercard and Visa to acquirers are sufficiently material to warrant intervention under our service-user objective.[723]

7.124 While we have noted above some limited differences in the strength of the evidence in relation to each scheme, these are not sufficient to justify a different conclusion for each of the two schemes. However, such differences (as well as improvements made by the schemes since July 2023) will be considered as part of our assessment of potential remedies aimed at improving outcomes for acquirers and merchants.

723 As explained in Chapter 2, paragraph 2.26, our service user objective, set out in FSBRA, is to 'ensure that payment systems are operated and developed in a way that takes account of, and promotes, the interests of those who use, or are likely to use, services provided by different payment systems'.

8 Conclusions

We have sought to assess whether the supply of scheme and processing services is working well having regard to our competition, innovation and protection of service users objectives. This chapter summarises why, based on the evidence we have seen, we conclude that we have reason to be concerned that aspects of the market are not working well by reference to our payment systems objectives, and that intervention is required to allow us to effectively monitor the schemes and to provide increased clarity to users. Specifically, this chapter explains why we have concluded that we have reason to be concerned that current market outcomes do not reflect effective competition, support innovation, or take into account and promote the interests of users of the schemes' network.

Competitive constraints on the schemes

8.1 Effective competition supports good outcomes in payments markets, such as low prices, high service quality and continued innovation. Any decisions that Mastercard and Visa make on how much to charge the acquiring side for scheme, processing and optional services depend on how far they face competitive constraints on the merchants/acquirers' side of the market.

8.2 We assessed the extent of the competitive constraints that Mastercard and Visa face in the supply of core scheme services, core processing services, and a range of optional services offered to acquirers and merchants. We looked at the availability of alternative payment methods and from current or potential providers of processing services and of optional services, including the extent to which Mastercard and Visa are constrained by these alternatives when setting their prices.

8.3 We found that:

- Mastercard and Visa do not face effective competitive constraints in the provision of core scheme services and core processing services on the acquiring side.
- Mastercard and Visa are subject to varying degrees of constraint across their optional services, with stronger indications that a lack of effective alternatives results in the schemes not facing effective competitive constraints in the supply of some of these services.
- Mastercard and Visa face stronger competitive constraints on the issuing side than on the acquiring side. These constraints are mainly a result of competition between Mastercard and Visa, rather than with providers of other payment methods, as each scheme competes to win issuing portfolios.

The lack of competition impacts market outcomes

8.4 Card payments are critical to the smooth running of the UK economy as they enable people to pay for their purchases and merchants to accept payments for goods and services. They are a well-established method for consumers to make payments, and their use is growing. Mastercard and Visa are central to this; over 95% of transactions using UK-issued cards are made on their rails. However, in view of our findings on the lack of effective competitive constraints, we have investigated whether there were issues in relation to certain aspects of these services which might warrant intervention to promote the PSR's statutory objectives. In particular, we have assessed whether the level of prices and profitability of these services in the UK, and transparency of these products, are in line with outcomes that we would expect in a well-functioning market.

8.5 We assessed the outcomes for customers of Mastercard and Visa scheme and processing services in the UK, specifically:

- We assessed the card schemes' pricing of scheme and processing services to the acquiring side.
- We conducted a profitability analysis, comparing Mastercard's and Visa's profit (EBIT) margins to those of comparable companies that operate in more competitive markets.
- We considered the non-pricing dimensions of market outcomes for customers of Mastercard and Visa scheme and processing services, related to the quality of the schemes' services and to their product innovation.
- We considered the main ways that card schemes' customers access, assess, and act on information from Mastercard and Visa, and the transparency and complexity of this information.

8.6 We found that:

- The average fee levels charged by Mastercard and Visa to acquirers for core scheme and processing services rose by more than 25% in real terms between 2017 and 2021.
- The balance of scheme and processing fees that the Mastercard and Visa charge fall heavily on the acquiring side of the schemes rather than on the issuing side, with net fee revenue from acquirers accounting for most of net scheme and processing fee revenue for Mastercard (in the period between 2017 and 2023) and for Visa (between 2018 to 2023).
- There was a sizeable gap between the margins of comparable companies operating in more competitive markets, which are in a range of 12% to 18% in the period 2018 to 2023, and the margin range derived from Visa's financial information ([✂]% - 64%) as well as the upper end of the margin range derived from Mastercard's financial information ([✂]% - 54%). We consider that this evidence is consistent with a finding that Mastercard's and Visa's margins are higher than would be expected in competitive markets, and consistent with our finding of a lack of competitive constraints. However, we have not been able to obtain, as part of our analysis, sufficient clarity on the level of economic profits to determine whether these exceed competitive levels. This is because Mastercard and Visa do not report financial performance for their respective UK businesses, and because there are large

discrepancies in the schemes' financial performances across the datasets we have looked at. On the basis of the data currently available, we are not in a position to effectively assess the schemes' financial performance in the UK.

- The current level of fees charged is not a necessary condition to support the level of investment and innovation in the card industry. Increased competition would lead to more innovation to the benefit of card users.
- Mastercard and Visa do not provide sufficiently clear and detailed information to acquirers, resulting in their receiving complex or incomplete information on core and optional scheme and processing services and fees. This raises acquirers' and merchants' costs and distorts their ability to respond to the schemes' price signals.

Our final view

8.7 We have considered the above in light of our legal framework, including our general duties, objectives, and regulatory principles under the Financial Services (Banking Reform) Act 2013 (FSBRA). As Chapter 2 set outs, we have statutory objectives to:

- ensure that payment systems are operated and developed in a way that takes account of, and promotes, the interests of those who are likely to use services provided by payment systems (our 'service user' objective)
- promote effective competition and innovation in the interests of those users (our 'competition' and 'innovation' objectives respectively)

8.8 For the most part these objectives are mutually supportive.

8.9 Having regard to each of our general duties, objectives and regulatory principles, and in light of our conclusions set out in this chapter and the wider report, we conclude that the market is not working well for the following reasons:[724]

- Mastercard and Visa are subject to ineffective competitive constraints on the acquiring side of the market, which is unlikely to change in the short to medium term.
- Fees have risen substantially in recent years, with no clear evidence that new fees are set on the basis of detailed cost analysis, competition or innovation. While we have not been able to reach a firm view on the level of the schemes' economic profits, we found evidence of Mastercard and Visa's UK profits that is consistent with a finding that their margins are higher than would be expected in a well-functioning market.
- Mastercard and Visa's failure to provide sufficiently clear and detailed information creates poor outcomes for acquirers and merchants, in particular by raising their costs and distorting their ability to respond to the schemes' price signals.

724 We note that we were able to obtain differing amounts of evidence between the schemes in relation to the areas we assessed. However, we had sufficient evidence in all areas to reach all of these conclusions for both schemes.

8.10 As set out in Chapter 2, under the competition objective, we may have regard in assessing the effectiveness of competition (among other considerations) to:

a. the level and structure of fees, charges or other costs associated with participation in payment systems[725]

b. how far competition is encouraging innovation[726]

c. the need of different persons who use, or may use, services provided by payment systems and the ease with which persons who may wish to use those services can do so[727]

8.11 As Chapter 2 set out, our service-user objective means (among other things) that we expect payment systems to provide good value and be cost-effective.[728] For the reasons set out in paragraphs 8.6 and 8.9, our findings in this report lead us to have significant concerns that Mastercard and Visa's scheme and processing fees do not reflect good value or cost-effective payment systems from the perspective of UK acquirers, merchants or their customers.

8.12 The findings above indicate that certain aspects of the market, specifically the level and quality of information available to acquirers and merchants who use, or may use, the schemes' core and optional services, are not working well by reference to our objectives, including both the competition and the service-user objective. This is because they are insufficient to enable acquirers and merchants to use certain core and optional services in a way that best reflects their needs and promotes their interests.

8.13 In addition, certain aspects of the market, specifically the level and structure of fees may not be working well by reference to our objectives – that is, we are concerned that they do not reflect effective competition conditions and are not set at a level that takes into account both the need to promote innovation and the need to take account of the interests of users of the schemes' networks on both sides of the market (in particular acquirers, merchants and their customers). However, better information would be required in order to reach a firmer view (in particular for assessing the current level of fees).

8.14 As Chapter 2 also details, in undertaking this market review and reaching our conclusions, we have had regard to the regulatory principles in FSBRA, including the desirability of sustainable growth in the UK economy in the medium or long term.[729] We note in particular that UK acquirers and merchants may face higher costs and prices due to lack of effective competition. We conclude that the issues we have identified are not conducive to such growth.

8.15 Overall, taking our conclusions separately and together, we conclude the market is not working well and that UK merchants and their customers are likely to be suffering harm as a result. We therefore consider that intervention is warranted. Next steps in this regard are outlined at the end of Chapter 1 (*Executive summary*).

725 Section 50(k) FSBRA.

726 Section 50(n) FSBRA.

727 Section 50(a) and (b) of FSBRA.

728 Objectives Guidance (March 2015), paragraph 6.2.

729 FSBRA, section 53.

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