Consultation paper

Market review of card scheme and processing fees

Interim report

May 2024

MR22/1.9

We welcome your views on this consultation. If you would like to provide comments, please send these to us by **5pm on 30 July 2024**.

You can email your comments to **schemeandprocessingfees@psr.org.uk** or write to us at:

Scheme and processing fees market review team
Payment Systems Regulator
12 Endeavour Square
London E20 1JN

We will consider your comments when preparing our response to this consultation.

We will make all non-confidential responses to this consultation available for public inspection.

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

1 Executive summary

1.1 This report sets out our provisional findings on our market review of the scheme and processing fees associated with Mastercard and Visa (card schemes), the two largest card payment system operators in the UK. These fees are paid by acquirers and issuers to Mastercard and Visa.

1.2 We launched our review following concerns that a substantial proportion of prior increases in these fees to acquirers could not be explained by changes in the volume, value or mix of transactions. Based on the evidence it has gathered as part of this market review, the PSR estimates that UK businesses pay more than £250 million extra annually due to these fee increases. UK businesses have little choice but to pay these increased costs as Mastercard and Visa cards account for 95% of transactions using UK-issued cards.

1.3 We have provisionally found that Mastercard and Visa do not face effective competitive constraints:

- In respect of core scheme and processing services, and certain optional services where alternative providers do not exist, Mastercard and Visa face no direct constraint from alternative providers.
- While new entrants are considered as potential competitors by Mastercard and Visa, they do not pose a credible threat today or in the medium-term.
- In some optional services, alternative providers may provide varying degrees of constraint to Mastercard and Visa. However, as Mastercard and Visa can provide a one-stop shop solution for core and optional services, they are in a stronger position than alternative providers of optional services.

1.4 Our provisional findings in relation to pricing and non-pricing outcomes are consistent with our finding of a lack of competitive constraints:

- The overall fee levels charged to acquirers by Mastercard and Visa over the past five years have increased by more than 30% in real terms, with evidence pointing towards fees being increased with little or no link to changes in service quality.
- The evidence we have gathered is consistent with a finding that Mastercard's and Visa's margins are higher than would be expected in competitive markets. However, there is insufficient data available to us in order to reach a firm conclusion on the existence of unduly high prices or excessive profits (and the level of harm arising from it), noting the wide range of possible margins.
- Mastercard and Visa do not consistently provide high-quality information sharing services to acquirers, resulting in their receiving complex or incomplete information on scheme and processing services and fees, with consequential impacts for merchants.

1.5 Overall, taking our provisional conclusions separately and together, we provisionally conclude the market is not working well, and that intervention may be appropriate.

1.6 At this stage, we are outlining a wide range of potential high-level approaches we could take, as well as setting out certain approaches we are not intending to consider further within this market review.

1.7 These potential remedies include:

- regulatory financial reporting in respect of the card schemes' UK activities, in order to provide us with more detailed and accurate information of the profits the card schemes are earning from their UK businesses
- measures that would require the card schemes to set out the reasoning and evidence justifying any price increases (or pricing for new services)
- measures to improve the quality of information available to acquirers and merchants, in particular SMEs, to make it more suited to their particular needs, which address the information and transparency problems we have identified.

1.8 Our provisional findings also highlight the importance of the PSR's work to unlock account-to-account payments, and Open Banking in particular, to facilitate greater choice for merchants for retail payments in the longer-term.

1.9 We are seeking feedback on these provisional conclusions and potential remedies. Remedies are contingent on our final conclusions, and would be subject to further consultation after our final report.

Context

1.10 Cards are the most popular way for consumers to pay for goods and services in the UK.[1]

1.11 Every time a consumer initiates a card transaction 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. The merchant acquirer pays scheme and processing fees to Mastercard or Visa for these services and also pays interchange fees to the card issuer.

1.12 Acquirers provide a range of services that businesses, government 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.

1.13 Scheme and processing fees include, amongst others, core scheme fees, core processing fees, optional fees and behavioural fees, as defined in the simplified glossary below, and more fully in Chapter 2. A full glossary is provided at Appendix B.

Scheme fees	Fees charged by a card payment system operator in return for services relating to participation in the card system.
Processing fees	Fees charged by processing entities to their customers (issuers and acquirers) for authorisation, clearing and settlement services for card payments.

1 Worldpay from FIS, Global Payments Report 2023, page 75.

Mandatory or core scheme fees	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	Processing fees that an acquirer or issuer must pay as a condition for processing transactions through a processor.[2]
Optional fees	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.
Behavioural fees	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

1.14 Our work has considered the above set of fees. We have also considered payments that the card schemes make to service users. These include incentive payments and rebates to issuers on scheme and processing fees, as well as other fees and payments relating to the card schemes' scheme and processing activities.

1.15 In October 2022, we issued our final terms of reference for a market review on scheme and processing fees to understand:

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

2 For processing fees, no fee is strictly speaking mandatory, as a result of the separation between scheme and processing entities.

Key provisional findings

1.16 We have provisionally 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 various degrees of constraint across their optional services. 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 (e.g., digital wallets such as Apple Pay) and non-card based (e.g., account to account payments and digital currencies) alternative payment methods. While new entrants are considered as potential competitors by Mastercard and Visa, they do not pose a credible competitive threat in the short to medium term. Specifically, digital wallets have adopted a 'card friendly' approach, Buy Now Pay Later providers constitute a limited threat, and Open Banking and account-to-account retail payments are expected to become effective alternatives to cards only in the longer 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 find 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.
- As Mastercard and Visa can provide a one-stop shop solution for core and optional services, they are in a stronger position than alternative providers of optional services. Moreover, 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, alternatives available to acquirers and merchants appear to be very limited for some of these services.

1.17 We have considered a range of indicators in order to assess market outcomes, including pricing and profitability.

1.18 Our provisional findings in relation to pricing and profitability were consistent with our finding of a lack of competitive constraints:

- There have been significant increases in gross scheme and processing fee revenues for both schemes since 2017, with total revenues earned by Mastercard and Visa more than doubling.

- Revenue from the acquiring side accounts for over 75% of net scheme and processing fee revenue since 2017.
- The overall fee levels charged by Mastercard and Visa to acquirers have increased over the past five years, rising by more than 30% in real terms, with evidence pointing towards fees being increased with little or no link to changes in service quality, although some of the increase for Mastercard may in part be due to the increase in optional services purchased by acquirers in the period.
- 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. However, there is insufficient data available to us in order to reach a firm conclusion on the existence of unduly high prices or excessive profits (and the level of harm arising from it), noting the wide range of possible margins.

1.19 We have also looked at non-pricing outcomes. We considered the service-user outcomes of scheme participants and have provisionally found that Mastercard and Visa do not consistently provide high-quality information-sharing services 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 in order to properly understand their fees and services, and several acquirers reported their 'accidental' purchase of some services.
- Similarly, 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. Again, acquirers told us that they need to purchase additional optional or consultancy services from the schemes to properly understand behavioural fees and accurately pass them on to merchants. This can limit the effectiveness of behavioural fees where these are designed to incentivise or disincentivise specific merchant behaviours.
- 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 and not retained.

1.20 We also considered whether Mastercard and Visa face competitive constraints on the issuing side. We have provisionally found that the card schemes face some competitive constraints on the issuing side of the market, due to competition between Mastercard and Visa for issuer business:

- 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.
- Visa and Mastercard provide high incentives to issuers, in some cases more than totally offsetting the fees charged to issuers. The evidence also indicates that incentives have become larger in recent years, reflecting increased competition between the schemes. However, we have also found evidence that different issuers may have different levels of bargaining power, with large issuers, or those targeting affluent customer segments, able to negotiate larger rebates or incentives.
- 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.

1.21 We note there are other considerations emerging from the evidence base which we may wish to revisit or explore in due course, such as 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 portfolios.

Action we are considering

1.22 We are considering action to remedy the three main issues we've identified. At this stage, we are providing a high-level outline of potential approaches we could take. We welcome early feedback and proposals from stakeholders about how we could address these concerns.

1.23 In addition to the potential remedies we are considering within this market review, we are considering what further action may be necessary to accelerate the introduction of structural competition from account-to-account payments. Our finding that Mastercard and Visa face ineffective competitive constraints underscores the importance of our existing work to unlock the full potential of open banking payments, including in retail use cases.

1.24 We expect to carry out further detailed work to consider the most effective way to design and implement any remedies. Remedies are contingent on our final conclusions on the proposed findings outlined above.

Regulatory Financial Reporting

1.25 We encountered significant challenges in looking at UK profitability, and the bespoke datasets prepared by the schemes did not resolve these challenges due to issues including being able to establish with sufficient clarity the appropriate approach to cost allocation. As a result, we are proposing requiring the card schemes to provide us with their UK financial information and performance on an ongoing basis, in order to provide better insight on the schemes' financial performance in the UK.

1.26 We are considering the appropriate level of detail for this reporting and the extent to which it should provide additional information, disaggregated by service type.

1.27 We consider that that this remedy has the potential to provide us with an accurate and consistent understanding of the financial performance of Mastercard and Visa's UK businesses. This will enable the PSR, should intervention be merited, to take action to ensure that the supply of scheme and processing services is working in the interests of service users.

Other remedies we are considering

1.28 We have identified a number of possible remedies that could address the concerns that we have highlighted. These remedies are aimed at increasing transparency and enabling businesses and acquirers to make better-informed decisions to help reduce inefficiencies and costs, and, where possible (in particular for those optional services where alternative provision is available) support decisions to use alternative providers. These remedies include requiring Mastercard and Visa to:

- Develop and publish a pricing methodology to explain how the prices of these services relate to costs, together with obligations to document decisions.
- Demonstrate that a service is 'optional', i.e. that viable alternatives to supply by the two card schemes exist.
- Provide acquirers and merchants with more accurate and relevant information about behavioural fees, to better enable these fees to be avoided by acquirers or merchants or alternatively by enabling them to be allocated to the merchants incurring the fees.
- Consult more widely than they do at present before introducing new services or making changes to prices.
- Create and provide bespoke materials to help businesses, in particular SMEs, to understand the increasingly complex range of scheme and processing services they are purchasing, via their acquirer, from Mastercard and Visa.
- Improve the quality and timeliness of information provided to acquirers, including the billing information they receive.

1.29 These remedies have the potential to benefit service users by bringing about changes to pricing and non-pricing outcomes for service users, in particular better quality and more-informed experience.

1.30 It could take time to develop a suitable range of remedies, and within a package of possible remedies, certain elements may be achieved on a quicker timescale. We are therefore considering requiring the card schemes to adhere to the following requirements on an interim basis, pending implementing of final remedies on an enduring basis:

- Consulting acquirers, merchants and merchant associations before deciding on fee increases or introducing new fees.
- Recording internally the basis for pricing decisions and ensuring that any increases are by reference to demonstrable increases in costs.

1.31 Such interim remedies may benefit service users by more immediately requiring the card schemes to consider their interests before increasing prices.

1.32 An alternative option to imposing remedies on an interim basis, would be to progress at pace, with the cooperation of the schemes and stakeholders, to deliver any enduring remedies on an accelerated timetable.

Next steps

1.33 This Interim Report is being published for consultation. We welcome stakeholder feedback on our provisional findings and potential remedies including on the consultation questions set out in Appendix A.

1.34 Please send comments and contributions by **5pm on 30 July 2024** to schemeandprocessingfees@psr.org.uk

2 Introduction

We are consulting on the provisional findings of our scheme and processing fees market review. The aim of the market review is 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 provisional 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 may warrant regulatory intervention. We also outline potential measures to mitigate the service user detriment we are seeing.

2.1 This is the interim report of our market review into scheme and processing fees. Our payment systems objectives and regulatory principles have shaped our consideration of the issues explored in this review.

The scope of our work

2.2 Our aim is 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[3]
- identify, if any, possible actions to remedy or mitigate any problems we may find[4]

2.3 This review focuses on the scheme and processing fees associated with Mastercard and Visa, the two largest card payment system operators in the UK.[5] Schemes other than Visa and Mastercard account for a very small proportion of overall UK transactions across all card types.

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.

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

- **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.[6]

2.5 We categorise scheme and processing fees as follows:[7]

- **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.[8]
- **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.[9]
- **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).[10] In relation to fees, we examine:

- 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); and
- 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.

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6 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.

7 Further detail is set out in Chapter 3.

8 For processing fees, no fee is strictly speaking mandatory, as a result of the separation between scheme and processing entities. See further paragraphs 3.20 to 3.21.

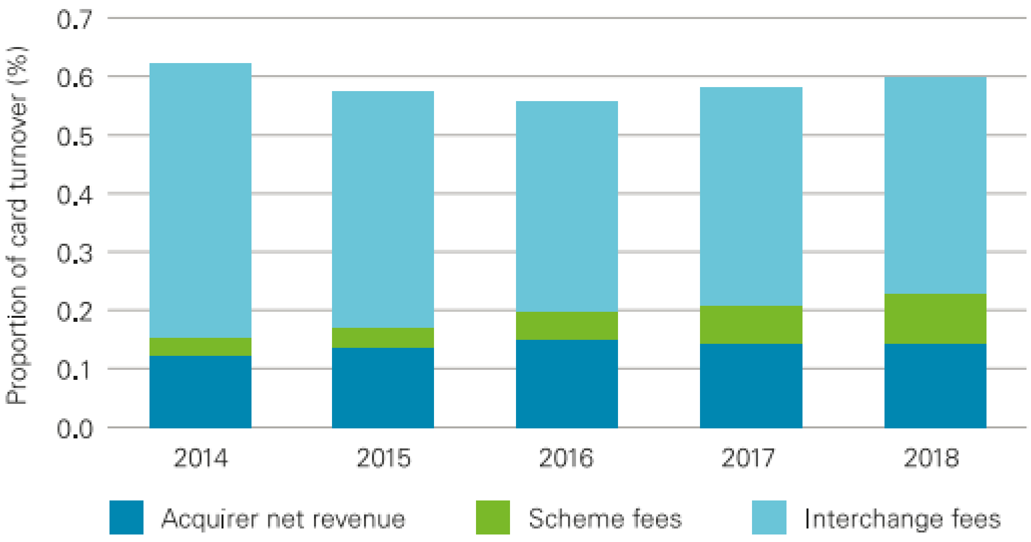
9 Our understanding of optional services has evolved as the market review progressed. This implied that data collection towards the beginning of the review was based on a partially different understanding of optional services, resulting in data that is not fully consistent with our current definition.

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

Issues this market review address

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.

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 recent survey carried out by the British Retail Consortium found that:

- Retailers spent £1.26 billion on processing card transactions in 2022, up from £1.09 billion in 2021.[11]
- In 2022, scheme fees saw a further increase from the previous year; 27% as a percentage of turnover.[12]

2.11 Given the prevalence of card use, discussed at the start of this chapter, it is important to look at whether the market is working well, or whether regulatory intervention might be required.

11 British Retail Consortium (BRC), *Payment Survey 2023*, page 16.

12 British Retail Consortium (BRC), *Payment Survey 2023*, page 17.

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.

2.13 As set out in our terms of reference, we aim 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 (i) assessed the constraints that Mastercard and Visa face and (ii) 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 constraint 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 recent changes in pricing. In particular, we have looked at recent trends in card scheme revenue, analysed the drivers of recent fee changes, and used econometric analysis to estimate recent changes in average fee levels, controlling for any changes in transaction value, volume and mix. 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. 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.

What we have done to date

2.17 In November 2021, we announced our market review of card fees.

2.18 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.

2.19 In June 2022, we published our draft terms of reference.

2.20 In July 2022, we held roundtables and consulted on our draft terms of reference with stakeholders including:

- two large merchants
- five merchant representative bodies
- seven issuers

- ten acquirers
- three card scheme operators

2.21 In October 2022, following feedback from our consultation and further engagement we published responses to our consultation alongside *our final terms of reference*.

2.22 In preparing this interim report, we have 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
- 11 issuers, accounting for over 90% of Mastercard's and Visa's UK card transaction value in 2021
- 17 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
- 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
- 11 merchants
- one merchant association

2.23 We have also 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[13]
- our February 2023 working paper on our proposed approach to analysing the profitability of the schemes;[14] and
- our June 2023 working paper on recent changes to scheme and processing fees.[15]

2.24 We published a summary of stakeholder responses to our February 2023 publications in September 2023, alongside the non-confidential version of those responses.[16]

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

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

15 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.

16 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).

2.25 We have also considered responses to a series of working papers provided confidentially to Mastercard and Visa in December 2023, setting out aspects of our analysis pertaining to each scheme.[17]

Our powers

2.26 We are conducting this market review using our powers under Part 5 of the Financial Services (Banking Reform) Act 2013 (FSBRA). We use market reviews to consider how well the markets for payment systems, or services provided by payment systems, are working in line with our objectives.[18] 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 have considered whether the supply of scheme and processing services is working well by reference to our payment systems objectives.

2.28 FSBRA gives us wide-ranging powers to take action, including the power to impose general and specific directions[19] and requirements[20], if we consider it appropriate following our review.

2.29 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[21], and in so far as is reasonably possible, to act in a way which advances one or more of our payment systems objectives[22] 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.

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

18 Financial Services (Banking Reform) Act 2013 (FSBRA), section 50 to 52.

19 FSBRA section 54.

20 FSBRA section 55.

21 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).

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

What we are seeking views on

2.30 The purpose of this document is to provide an update on our approach and our progress, to indicate the direction of travel our analysis is taking in relation both to concerns and potential interventions to address them, and to test these provisional findings with stakeholders.

2.31 We are seeking feedback on our:[23]

- analysis of, and provisional findings on, the lack of competitive constraints Mastercard and Visa face in the supply of core scheme and processing services, and some optional services
- analysis of, and provisional findings in relation to, customer relationships, pricing and profitability
- current view on possible remedies

Who this applies to

2.32 The analysis and recommendations outlined in this interim report will be of particular relevance to:

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

2.33 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

2.34 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.

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

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23 A full list of questions we are asking as part of this consultation is set out in Appendix A.

How to respond

2.36 We are inviting comments on this interim report by **30 July 2024**. You can email your comments to schemeandprocessingfees@psr.org.uk.

2.37 We plan to publish our final report in Q4 2024.

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 within the four-party card scheme

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 27.1 billion transactions made in 2022 using either a debit or credit card worth an aggregated value of £954 billion. In 2022, 59% of all payments in the UK were made using cards and 95% of all UK adults now hold at least one debit card and 65% hold a credit/charge card.[24]
- Data from the British Retail Consortium (BRC) shows that in 2022 consumer credit and debit cards accounted for 85% of the total value of retail transactions in the UK.[25]
- In 2022, Mastercard and Visa together accounted for around 99% of all UK debit and credit card payments, both by volume and value.[26]

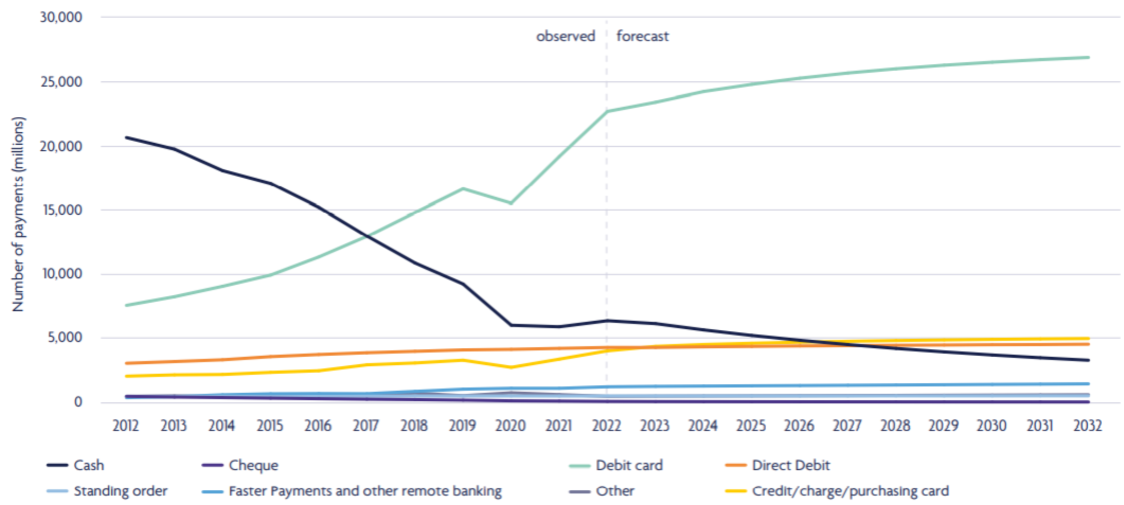
3.2 Figure 2 shows how this has changed between 2012 and 2022, and projections until 2032. In 2012, cash was the most popular method of payment. However, since then, the use of cash has declined substantially, while cards have grown and are expected to grow even more.

24 UK Finance, *UK Payment Markets 2023*, pages 19-20.

25 British Retail Consortium (BRC), *Payments Survey 2023*, page 11.

26 UK Finance, *UK Payment Statistics 2023*, table 8.1.

Figure 2: Payment volumes (millions), 2012 to 2032



Source: UK Finance, UK Payment Markets Summary 2023

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.[27] 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.

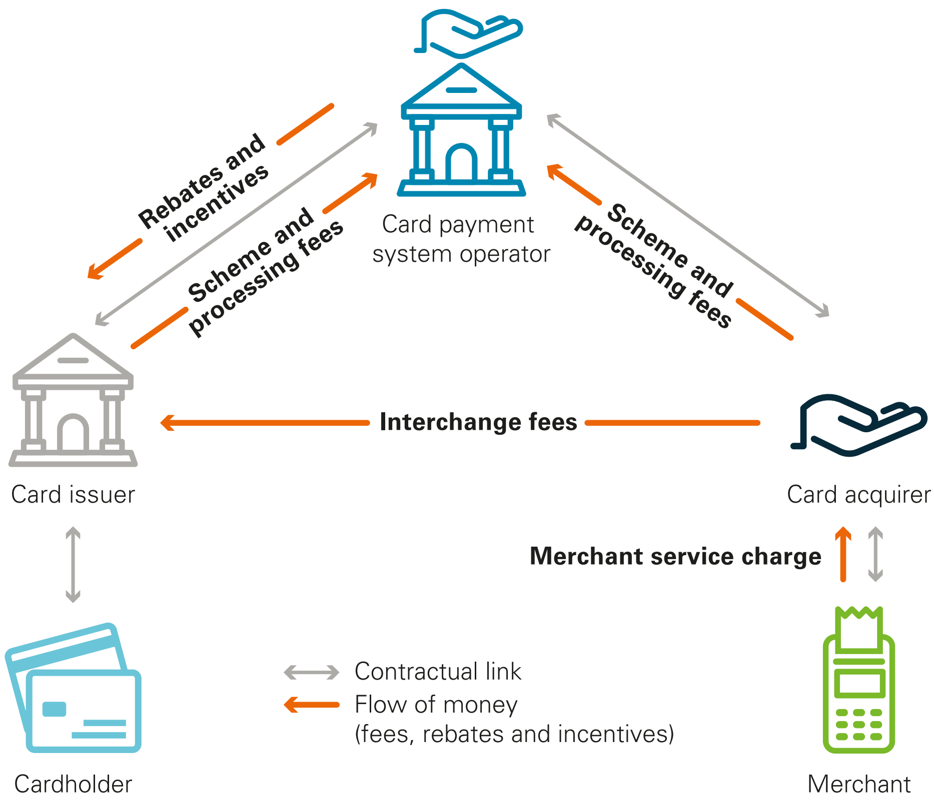
27 We define the different types of digital wallets in Chapter 4, paragraph 4.98.

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**[28] are banks or other organisations licensed by card payment system operators to provide cards to cardholders.

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

- **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.[29]
- **Merchants** are organisations that accept card payments, for which they need card-acquiring services. Merchants can contract with acquirers or payment facilitators[30] 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.[31] 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[32]
- **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.[33]

29 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.

30 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.

31 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.

32 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.

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

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*,[34] merchants, depending on their size, have one or more of the following pricing options for card-acquiring services:[35]

- interchange fee plus (IC+) pricing, whereby for any given transaction an acquirer automatically passes through (at cost) the IF applicable to that transaction
- interchange fee plus plus (IC++) pricing, whereby for any given transaction an acquirer automatically passes through at the time of the transaction (at cost) the IF and other scheme and processing fees applicable to that transaction[36]
- 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.[37] Merchants on IC++ pricing are typically the largest merchants, generally with an annual turnover above £50 million.[38]

Our approach to analysing competition in a four-party card scheme

3.12 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.

3.13 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

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34 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.

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

36 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.

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

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

operator on one side of the network may be affected by the competitive constraints that it faces on the other side.

3.14 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. Moreover, while in two-sided networks competition on one side may constrain pricing on the other side, we have seen no evidence of this being the case for card schemes. In particular, given that most merchants consider it necessary to accept Mastercard and Visa cards (see Chapter 4), further efforts to attract and retain merchants are currently not part of the schemes' competitive offer to issuers.

3.15 For these reasons, it is appropriate to assess separately the competitive constraints that a card scheme operator face on each side, while considering the interactions between the two sides where relevant.[39]

3.16 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.

3.17 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

Product scope

3.18 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

39 See, for example, our analysis of competitive constraints specific to the supply of processing services (Chapter 4, paragraphs 4.131 to 4.150.

3.19 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

3.20 The Interchange Fee Regulation (IFR)[40] 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.

3.21 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.

3.22 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.

3.23 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 those services that acquirers and issuers must purchase in order for their transactions to be processed (i.e., authorisation, clearing and settlement).

3.24 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

3.25 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

40 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.

providers, self-supply, or not use those services at all.[41] Each of these services can be defined as an optional service.

3.26 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.[42,43]

Segmentation based on credit and debit cards

3.27 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 (e.g., 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

3.28 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.

3.29 For these reasons, in this report we do not present separate assessments of competitive constraints for credit and debit cards on the acquiring side.[44]

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41 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.

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

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

44 We have, however, mentioned differences between credit and debit cards when relevant in our competitive assessment.

3.30 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.

Segmentation based on consumer and commercial cards

3.31 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, processing (and interchange) fees.

3.32 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

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

Segmentations based on transaction type

3.34 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 3.37)
- Domestic versus cross-border transactions

3.35 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.[45] 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.[46] Some Mastercard documents also discuss competition specific to particular transaction types.[47]

3.36 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.

45 Examples are presented in Annex 8.

46 See the analysis in Chapter 4.

47 See Annex 1, paragraphs 1.39 to 1.47.

Segmentations based on the types of merchants served

3.37 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 those items of spending that an individual is not committed in advance to making

3.38 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.

3.39 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

3.40 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.

3.41 On the acquiring side, we have considered the alternatives to Mastercard's and Visa's card scheme that could potentially be available to either acquirers or merchants. We have therefore 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.

3.42 On the issuing side, we have focused on competition for card-issuing contracts.[48] 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.[49]

Geographic scope

3.43 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

3.44 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

3.45 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.

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48 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.

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

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

3.47 Our analysis is conducted on a UK basis.

Questions for stakeholders

Question 1

- Do you have any views on how we have described the facts and considerations we have identified in Chapter 3? Do you think there are any other factors we should consider as relevant context to our market review?

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 3.12 to 3.15, 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 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.

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 optional service, but instead focussed on a few which we considered more significant.

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 the 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 3.40 and 3.41 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, or substitute cards with alternative payment methods, either fully or partially. 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 types of competitive constraint.

4.5 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 needs.
- The final section presents our provisional conclusions on the competitive constraints that Mastercard and Visa face on the acquiring side.

Competitive constraints from the availability of alternative payment methods

4.6 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 cards schemes, relying on other payment methods instead. As noted in paragraph 4.5, 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.

Acquirer-level constraints

4.7 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.

4.8 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.[50] 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.[51] 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'.[52]
- Acquirers' lack of choice is also [✂]. An internal document from 2017 comments on the [✂].[53]
- Consistently, 16 out of the 17 acquirers we engaged with offer acquiring services for both card brands (the remaining acquirer is a new entrant working towards offering both).[54]

4.9 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

4.10 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.[55]

4.11 In principle, merchants can respond to increases in the MSC 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

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

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

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

53 [✂].

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

55 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.

4.12 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.

4.13 Our analysis of merchant-level constraints is structured in five 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 considers merchants' ability and incentive to decline or limit card acceptance.
- The fourth 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 provisional conclusions on merchant-level constraints.

What Mastercard told us

4.14 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, BNPL, digital wallets and Open-Banking-enabled credit transfers.[56] Mastercard submitted that card schemes are constrained by merchants, who can choose which payment method to accept and not accept.[57]

4.15 Mastercard also told us about possible future developments which may impact UK payments.[58]

- 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.[59]

4.16 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.[60] For some types of transactions, Mastercard noted that cards

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

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

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

59 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 and 1.53.

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

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).[61] 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.[62]

4.17 Mastercard also 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 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.[63]

What Visa told us

4.18 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 ('A2A') payments, digital wallets (including PayPal, Revolut, Google Pay, Apple Pay and Samsung Pay), and Buy Now Pay Later ('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).[64]

4.19 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 merchants are a constraint on Visa's price setting.[65] 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.[66]

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

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

63 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.

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

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

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

4.20 Visa also told us, in 2022, that dynamic development of the UK payment landscape is expected to intensify.[67]

- Open Banking is forecasted to be used by 60% of the UK population by 2023, with users reportedly increasing by over 100% during 2022, and has already enabled the entry and expansion of many providers. The dynamic development of the UK payment landscape is 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.[68]

Declining or limiting card acceptance

4.21 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 first explain why, in our analysis, we have focused on merchants receiving predominately spontaneous consumer payments
- we then look at whether these merchants would have the incentive to decline or limit card acceptance in response to increases in scheme or processing fees.

<u>Why focusing on spontaneous consumer payments</u>

4.22 As seen in paragraph 4.16 above, Mastercard has stated that the competitive 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.

4.23 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.

4.24 UK Finance's UK Payment Markets report published in 2023 and the accompanying UK Payment Statistics include data on the use of different payment methods in 2022 in the UK across different segments. The report distinguishes between consumer and business payments, and within consumer payments, between spontaneous and regular payments.[69]

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67 Visa response to PSR questions dated 9 November 2022 [✂]; Visa response to PSR Working Paper on Scheme and Processing Fees dated 30 June 2023 [✂].

68 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.

69 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 2023 and UK Payment Statistics 2023.

The data shows that card transactions are concentrated in a small number of segments. In particular:

- Consumer payments accounted for 92% of card transactions by value[70] and around 97% by volume.[71]
- Within consumer payments, spontaneous payments accounted for around 97% of card transaction volumes, with just 3% being made for regular payments.[72]

4.25 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 the business segment[73] and Direct Debit accounted for most of the volume of regular consumer payments,[74] the use of these payment methods for spontaneous consumer payments was minimal.[75] These large differences in the use of payment methods reflect the fact that different payment methods are better suited to different types of payments.[76] 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 ([✂]).[77]

4.26 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 8% of overall card transactions by value[78] and around 2% by volume, while regular payments account for an additional 2.4% by volume.[79]

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70 Based on data from UK Finance, *UK Payment Statistics 2023*, Tables 27.1, 30.1 and 31.1.

71 Based on data from UK Finance, *UK Payment Markets 2023*, pages 13, 15.

72 Based on data from UK Finance, *UK Payment Statistics 2023*, Tables 30.1 and 31.1.

73 For volume data, see UK Finance, *UK Payment Markets 2023*, page 52; for value data, see UK Finance, *UK Payment Statistics 2023*, Tables 27.2 and 28.2, and *UK Payment Markets 2023*, page 15 (data for business payments can be obtained subtracting values for consumer payments from total values).

74 Based on data from UK Finance, *UK Payment Markets 2023*, page 39.

75 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 2023*, pages 36-38.

76 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 [✂].

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

78 Based on data from UK Finance, *UK Payment Statistics 2023*, Tables 27.1, 30.1 and 31.1.

79 Based on data from UK Finance, *UK Payment Markets 2023*, pages 13, and *UK Payment Statistics 2023*, Tables 30.1 and 31.1.

4.27 We also note that internal documents indicate that [✂]. An internal Visa document from 2018 notes that [✂].[80] Consistently, an internal Visa document from 2022 states that [✂].[81,82] Mastercard [✂].[83,84] If Mastercard and Visa can compete in different segments with different services, the competitive constraints faced in one segment would not constrain their fees in other segments.

4.28 For these reasons, we consider that 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 constraints that can apply to spontaneous consumer payments, which constitute the bulk of card transactions in the UK.

<u>Merchants' incentive to decline or limit card acceptance</u>

4.29 According to UK Finance, in 2022 cards accounted for 77% of all spontaneous consumer payments in the UK, with even higher proportions in the retail, travel and entertainment segments.[85] In 2021, Mastercard and Visa respectively accounted for [✂]% and [✂]% of all card transactions by volume (and for [✂]% and [✂]% by value).[86]

4.30 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.

4.31 When compared to the relatively limited impact that an increase in scheme or processing fees has on the overall MSC,[87] 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.

4.32 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.

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80 [✂].

81 [✂].

82 Evidence from Visa's documents related to this point in included in Annex 1, paragraphs 1.245 to 1.248 and 1.324 to 1.328.

83 [✂].

84 Evidence from Mastercard's documents related to this point in included in Annex 1, paragraphs 1.241 to 1.244.

85 See UK Finance, [*UK Payment Markets 2023*](), pages 36, 38.

86 PSR analysis of data submitted by card schemes. As Mastercard won issuing contracts with some large UK issuers in recent years (see Chapter 5), we expect the proportion of transactions accounted for by Mastercard to have increased since 2021, and that of Visa to have decreased by a similar percentage.

87 For more details, see paragraph 4.91.

4.33 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 [✂].[88] The constraint that these merchants impose, however, has an effect only on the level of the fees charged to them, not on what other merchants pay.

4.34 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.[89] 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[90] or personal credit cards.[91] We note, however, that payments to these two merchants fall in the financial segment, where alternatives to cards are widely used,[92] and that one of these merchants is [✂] not subject to competition and may therefore have more freedom over the payment methods it accepts.

4.35 From the above, it is clear that very few UK merchants can be expected to respond to an increase in scheme and processing fees by declining the card brand as a whole. Thus, our provisional 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.

Consumer steering towards alternative payment methods

4.36 As seen in paragraph 4.18, 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.

4.37 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. This is because the availability of an alternative payment method does not in and of itself impose a constraint on the level of scheme and processing fees charged to acquirers. Such a constraint would be present 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.

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

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

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

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

92 According to UK Finance, in 2022 58% of spontaneous financial payments were made through Faster Payments. See UK Finance, [UK Payment Markets 2023](), page 38.

4.38 It follows that, contrary to Mastercard's submission, in the absence of effective steering methods, the mere threat of entry of new payment methods is not in itself sufficient to impose a competitive constraint on card schemes.[93]

4.39 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)

4.40 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

4.41 Consumers use a number of payment methods in the UK. 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[94]

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93 As seen in paragraph 4.18, 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.

94 In this section, we are not considering Direct Debit or cheques among the alternative payment methods we analyse. As seen in paragraph 4.25, 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 2022, only 0.2% of the total number of spontaneous payments made by consumers in the UK (see UK Finance, *UK Payment Markets 2023*, page 33).

4.42 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. We recognise that 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 does not have a direct impact on the fees that Mastercard and Visa can charge to merchants. We have therefore taken the current (or expected) level of adoption of other payment methods among cardholders as given for our analysis of competitive constraints on the acquiring side.

Card schemes

4.43 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.

4.44 The 2023 UK Finance report indicates that, in 2022, 63% of debit cardholders had a single debit card, while 55% of credit card holders had a single credit card.[95] 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.

4.45 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[96] and, if so, may resist steering attempts.

4.46 According to a Visa internal document, [✂].[97] 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.[98]

4.47 Mastercard and Visa are not the only card schemes used to pay at UK merchants; others are American Express, Discover, JCB and UnionPay. 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.[99] 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 [✂].[100] American Express accounted for [✂]% of the overall value in each of the four years.[101]

95 UK Finance, *UK Payment Markets 2023*, page 20.

96 See the discussion in paragraph 4.87.

97 [✂].

98 See Annex 2, paragraphs 2.89 to 2.90.

99 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.

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

101 The data is described in Annex 1, paragraphs 1.303 to 1.306.

4.48 The presence of card schemes other than Mastercard, Visa and American Express is so limited in the UK, that they cannot be considered alternative payment methods that merchants can feasibly steer many of their customers towards.

4.49 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.

4.50 Merchants, however, would have in most cases no incentive to try to steer customers from Mastercard or Visa towards American Express, as the fee levels associated with American Express would be higher. On the merchant side, therefore, the availability of American Express does not impose a competitive constraint on Mastercard or Visa.[102]

4.51 We therefore provisionally 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

4.52 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.[103]

4.53 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.

4.54 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.[104] 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 would represent a weak alternative to Mastercard and Visa. Moreover, we note that the fees PayPal charges merchants are [✂] than the MSC paid on Mastercard and Visa transactions. Merchants, therefore, may have an incentive to

102 We recognise that [✂]. We recognise that [✂]. (see Annex 1, paragraphs 1.309 to 1.315). 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.

103 More details on how digital wallets operate and on the differences between them are provided in paragraphs 4.98 to 4.99 below.

104 More data is provided in paragraph 4.115, below.

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.

4.55 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. The provision of credit 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.[105]

4.56 We therefore provisionally 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.

4.57 As mentioned in paragraph 4.3 above, wallets and BNPL solutions may impose a competitive constraint on Mastercard and Visa through their operators' choices of which payment methods to support and to steer their customers to. These constraints are discussed in paragraphs 4.98 to 4.124 below.[106]

Real-Time Payments and Open Banking

4.58 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[107] and, within consumer payments, in the financial, person-to-person (P2P) and person-to-business (P2B) segments.[108] 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.

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105 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 4.87 to 4.88 below, 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.

106 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.

107 See UK Finance, *UK Payment Markets 2023*, pages 13, 51 and 52.

108 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 2023*, pages 37, 38.

4.59 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,[109] 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.[110] This growth has been accompanied by the entry of a number of Payment Initiation Service Providers (PISPs). No publicly available data exists on the volume and value of transactions initiated by each PISP. Companies mentioned in Visa's internal documents [✂].[111] Companies mentioned in Mastercard's internal documents [✂].[112] 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.

4.60 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.[113] According to one PISP, [✂] is roughly the point at which Open Banking starts becoming better value for merchants.[114,115]

4.61 Both Mastercard and Visa submitted that Open Banking has enabled the entry and expansion of a wide variety of players in the UK.[116,117] This is reflected in Mastercard's documents, [✂]. This is reflected in Visa's documents, [✂].[118]

4.62 Open Banking payments, however, are currently constrained in their ability to provide an effective alternative to most card payments. The report for the Joint Regulatory Oversight Committee (JROC) on The Future Development of Open Banking in the UK, published in February 2023,[119] highlighted several barriers limiting merchants' adoption of Open Banking Payments. These include:[120]

- 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.

109 This proportion is much lower than the 60% indicated by Visa as a forecast for the end of 2023 (see paragraph 4.20).

110 The Open Banking Impact Report, October 2023.

111 [✂]. In a submission, Visa also mentioned [✂] (Visa response to PSR questions dated 12 January 2022 [✂]).

112 [✂].

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

114 Call with stakeholder. [✂].

115 More detailed evidence on this point is included in Annex 1, paragraphs 1.255 to 1.259.

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

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

118 Evidence from Mastercard and Visa is reported in greater detail in Annex 1, paragraphs 1.212 to 1.235.

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

120 See page 34 of the report. A more extensive summary of the considerations made in the report is included in Annex 1, paragraphs 1.273 to 1.283.

4.63 Similar limitations were also mentioned by the PISPs we engaged with. In terms of customer experience, evidence from the PISPs indicates 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, and have provided an alternative to cards in limited niches, such as in payments to high-risk merchants, to financial services or to utility suppliers.[121]

4.64 These limitations are acknowledged also in Mastercard's and Visa's internal documents. For example, a 2022 Mastercard document notes that [✂].[122] Consistently, a 2022 Visa document states that [✂].[123]

4.65 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)[124] is envisaged as a way to make Open Banking payments a viable alternative for a wider range of payments and merchants.

4.66 Mastercard told us that the payment providers using Open Banking are likely to expand their product range as their customer bases grow.[125] This emerges also from Mastercard's internal documents, which note [✂].[126] Visa told us that the impact of Open Banking is expected to intensify,[127] and that the development of payment infrastructure will introduce new payment capabilities which will improve quality and increase choice of payments.[128] This emerges also from Visa's internal documents, which note [✂].[129]

4.67 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.[130] 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.

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121 Further details on PISPs' submissions on these points is presented in Annex 1, paragraphs 1.250 to 1.254 and 1.260 to 1.263.

122 [✂]. For further detail and examples, see Annex 1, paragraphs 1.216 to 1.221.

123 [✂]. For further detail and examples, see Annex 1, paragraph 1.225.

124 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.

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

126 See Annex 1, paragraph 1.219.

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

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

129 [✂]. For further detail and examples, see Annex 1, paragraphs 1.225 to 1.228.

130 For more detail on PISPs' submissions, see Annex 1, paragraphs 1.268 to 1.272.

4.68 The JROC report sets out possible actions to unlock the potential of Open Banking payments, listing them under three timescales:

- short-term – could start immediately and might have a short-term impact, within around 12-18 months
- medium-term – could be dependent on the short-term activity, or more complex in nature to deliver; implementation requires around 18-36 months
- long-term – has external dependencies or implementation will be beyond 36 months.[131]

4.69 In terms of new use cases for Open Banking payments, the only short-term priority identified in the report is to 'evaluate the use of VRPs in low-risk sectors',[132] such as government or utility payments. These are use cases where Direct Debit is currently the most common payment method. The development of 'scalable VRPs schemes' and of an e-commerce scheme (or Account 2 Account Retail Transactions scheme – A2ART) are included in the report among the long-term priorities.[133, 134]

4.70 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 the current timeline for commercial VRP is to have pilots in mid to late 2024 for low-risk use cases. 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.[135] There appears therefore to be a broad consensus among market participants that developing Open Banking solutions that allow for effective competition with cards is going to take time. We note the associated uncertainty as to the degree and timing of that constraint.

4.71 We therefore provisionally consider that merchants have 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 technical innovations and regulatory interventions, we consider that these developments are likely to require more than three years to come to realisation.

Cash

4.72 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.[136] Mastercard submitted that almost 50% of small to medium sized businesses still heavily rely on cash.[137] In particular, merchants in some sectors, such as tradespeople, can choose not to accept cards because they prefer cash.[138] Mastercard told us that, while cash is on average materially more expensive for merchants to accept than

131 JROC report, page 15.
132 JROC report, page 16.
133 JROC report, page 18.
134 Evidence from the JROC report is summarised in greater detail in Annex 1, paragraphs 1.273 to 1.283.
135 Call with stakeholder [✂]. Further submissions from PISPs on the expected evolution of Open Banking payments is included in Annex 1, paragraphs 1.268 to 1.272.
136 Mastercard response to PSR working paper dated 23 February 2023. [✂].
137 Mastercard response to PSR working paper dated 23 February 2023. [✂].
138 Mastercard response to PSR working paper dated 23 February 2023. [✂].

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.[139]

4.73 Visa told us that cash is an alternative payment method to cards for merchants and consumers for many transactions[140] and that merchants can nudge customers towards or away from cash.[141] 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.[142,143]

4.74 We consider that cash is not an effective alternative to cards for online purchases. We note that, in 2021, CNP transactions accounted for [✂]% of the value of Mastercard's and Visa's overall card transactions in the UK.[144] 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.[145,146] This indicates that many in-person purchases are transitioning online, further reducing the cases in which cash is a valid alternative.

4.75 Cash is also an increasingly less effective alternative for in-person purchases. In its 2023 report on the UK payment markets, UK Finance noted that, between 2011 and 2021, the volume of consumer cash transactions fell by more than 70%, with cash largely being replaced by cards. While the volume slightly increased in 2022, UK finance expects that cash use will continue to decline in the future. The report also notes the increasing number of people who do not use cash or do so only very rarely. In 2022, 39% of adults (21.6 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 53% of adults in the UK.[147]

4.76 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.

4.77 We therefore provisionally 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

4.78 Cryptoassets are a digital representation of ownership or contractual rights that can be transferred, stored or traded electronically, and which typically use cryptography, distributed ledger technology (DLT) or similar technology. Among cryptoassets, cryptocurrencies and, especially, stablecoins and central bank digital currency (CBDC) could have the potential to become alternative payment methods.

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139 Mastercard submission, May 2022 [✂].

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

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

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

143 Visa's submissions on this point are presented in greater detail in Annex 1, paragraph 1.323.

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

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

146 Mastercard's submissions on this point are presented in greater detail in Annex 1, paragraph 1.322.

147 UK Finance, UK Payment Markets 2023, page 30.

4.79 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 stablecoins and CBDC, which the Bank of England has consulted on.[148] Visa told us that HM 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.[149]

4.80 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 [✂].[150]

4.81 We consider that most of the existing cryptocurrencies are not a credible payment method. As observed by the Bank of England and HM 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.[151] Even the Mastercard document mentioned above observes that [✂].[152]

4.82 However, 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 stablecoins, in their 2023 consultation paper, the Bank of England and HM 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.[153]
- The consultation response, published in January 2024 by the Bank of England and HM 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 and such a phase would not start earlier than 2025. 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.[154]

4.83 We therefore provisionally 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.

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

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

150 [✂]. For more detail and examples from Mastercard's documents, see Annex 1, paragraphs 1.291 to 1.293.

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

152 [✂].

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

154 Response to the Bank of England and HM 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

4.84 As stated in paragraph 4.37 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.

4.85 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.[155]

4.86 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, doing so creates undesirable frictions in the consumer experience and can lead to abandonment of the transaction.[156] Other acquirers said they are not aware of any such practice.[157] Overall, no acquirer we spoke to said it is easy or common to surcharge based on the location of the issuer.[158] We consider that similar consumer journey frictions are likely to discourage most merchant from introducing surcharges on commercial card payments.[159]

4.87 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.[160] 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.[161] 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.[162] We note, however, that the nature of this merchant implies that consumer journey frictions would not result in abandonment of the transaction.

155 For further detail on merchants' submissions on steering, see Annex 2, paragraphs 2.96 to 2.100.

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

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

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

159 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.

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

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

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

4.88 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.[163] Consistently, another acquirer explained that while some merchants can direct consumers to specific payment mechanisms, generally the choice is driven by the consumer.[164] 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.[165]

4.89 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.

4.90 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.

4.91 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.[166] 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.

4.92 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.

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

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

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

166 Our econometric analysis indicates that, for Mastercard, average fees increased by [✂] %in real terms between 2017 and 2021; for Visa, average fees increased by [✂] %in real terms for Visa between 2019 and 2022 (see Chapter 6, paragraph 6.99). 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.

4.93 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 merchants constituting the bulk of card transactions and, as a result, consumer steering is unlikely to represent an effective competitive constraint on scheme or processing fees.

Our provisional conclusions

4.94 Merchants can in principle constrain Mastercard's and Visa's pricing of scheme and processing services if they can respond effectively 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.

4.95 As set out above, our provisional 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.

4.96 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.

4.97 Finally, consumer steering often has limited impact and can 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.

Wallet-level constraints

4.98 Wallets can be classified as either pass-through wallets or e-money wallets.[167]

- 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.[168] 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

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

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

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.

4.99 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.

4.100 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.[169]

4.101 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.

4.102 A related distinction is the one between the risk of commoditisation and the risk of substitution.[170]

- 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.

4.103 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.[171] When considering wallets that have achieved

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

170 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.

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

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.

4.104 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

4.105 There are a number of pass-through wallets available in the UK, including Apple Pay, Google Pay and Samsung Pay. According to the 2023 UK Finance report on the UK payment markets, in 2022 30% of UK adult population was registered for mobile payment services, 76% of which was using them at least once a month and 54% at least once a week.[172] 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[173], and that [✂].[174]

4.106 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.

4.107 Responding to our information request, Apple told us that [✂].[175] Apple explained that [✂].[176] As a technology provider, [✂].[177] [✂].[178,179]

4.108 Mastercard submitted that [✂].[180] [✂].[181]

4.109 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 [✂].[182]

4.110 Google submitted that [✂].[183]

4.111 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 [✂].

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172 UK Finance, [UK Payment Markets 2023](), page 29.

173 [✂].

174 [✂].

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

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

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

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

179 Additional detail on Apple's submissions is included in Annex 1, paragraphs 1.154 to 1.157.

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

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

182 [✂].

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

E-money wallets and BNPL

4.112 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.[184] 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.

4.113 BNPL has increased in usage in recent years in the UK. According to the 2023 UK Finance report on the UK payment markets, 12% of adults in the UK used BNPL services to purchase something during 2022, of which 36% did so monthly or more than once a month.[185] 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, [✂].[186] 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.[187]

4.114 During this market review, we have sent information requests to PayPal and to [✂] [a BNPL provider], 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.

4.115 Both PayPal and [✂] [the BNPL provider] 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 (i.e. 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).[188]
- [✂] [The BNPL provider] allows its users to fund their purchases using either a debit card, a credit card, Direct Debit or credit transfers.[189] In 2022, non-card payments accounted for [✂] %of the overall transaction value of payments from UK or EEA consumers to UK merchants.[190]

4.116 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.[191] Mastercard submitted that PayPal is an example of back-end competition to cards. The fact that PayPal has implemented

184 Paragraphs 1.162 to 1.169.

185 UK Finance, *UK Payment Markets 2023*, page 23.

186 [✂].

187 UK Finance, *UK Payment Markets 2023*, page 23.

188 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 [✂].

189 [✂].

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

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

Open Banking and developed fraud prevention systems to be able to offer buyer protection means that [✂]. This, Mastercard submitted, [✂].[192]

4.117 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.

4.118 [✂] [The BNPL provider] 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. [✂] [The BNPL provider] told us that it prioritizes the choice of consumers and building long-term relationships with consumers, rather than trying to drive them towards a specific payment method.[193] [✂].[194]

4.119 PayPal told us that [✂].[195] PayPal told us that [✂].[196] As discussed in Annex 1,[197] PayPal has entered into agreements with Mastercard and Visa not to steer customers away from those schemes' cards.

4.120 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 [✂] [the BNPL provider we engaged with] already make several payment methods available to their customers. [✂].[198] [✂].[199] PayPal told us that [✂].[200]

4.121 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.[201] 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 [✂].[202]

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

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

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

195 PayPal's response PSR information request dated 30 August 2023. [✂].

196 PayPal's response PSR information request dated 30 August 2023. [✂].

197 See paragraph 1.133.

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

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

200 PayPal's response PSR information request dated 30 August 2023. [✂].

201 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 4.54, transactions through e-money wallets are more expensive for merchants than most card transactions.

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

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, [✂] payments involving a UK consumer and a UK merchant amounted to a total value of [✂], with an additional [✂].[203] This corresponds to approximately [✂]% of the value of the transactions processed by Mastercard and Visa in 2021.

Our provisional conclusions

4.122 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.

4.123 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.

4.124 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

4.125 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.

4.126 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 4.9), and insufficient at merchant and wallet level (see paragraphs 4.94 to 4.97, and 4.122 to 4.124).

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

4.127 We also consider that the very high pass-through of fees from acquirers to merchants may 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,[204] 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,[205] although possibly with a lag.[206] 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.[207] 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 may 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.[208,209]

4.128 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 provisionally 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.[210] 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.[211] On the other hand, 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.[212,213]

4.129 These views are consistent with other evidence we have received.[214]

- As mentioned in Annex 7, paragraph 7.21, we have found that acquirer incentives and rebates amounted to only [✂] of Mastercard's acquirer gross fee revenue in 2021. A

204 See Chapter 3, paragraph 3.11.

205 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 [✂].

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

207 MR18/1.8, *Market review into the supply of card-acquiring services: final report*, paragraph 5.66.

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

209 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.

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

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

212 Stakeholder response to the working paper on 'Competitive constraints in card payment systems' [✂]; call with stakeholder [✂].

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

214 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.

2022 Mastercard document on acquiring in the UK and Ireland states that [✂],[215] [✂].[216]

- As mentioned in Annex 7, paragraph 7.21, we have found that acquirer incentives and rebates amounted to [✂]% of Visa's acquirer gross fee revenue in 2022. A 2017 Visa document notes that [✂].[217]

Our provisional conclusions

4.130 In view of the evidence outlined above, our provisional 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

4.131 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, 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.[218] Acquirers should, in theory, be able to source processing services from a provider different from the scheme operator.

4.132 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.[219]

4.133 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.

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

216 [✂].

217 [✂].

218 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.

219 [✂].

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

4.134 In the UK, Mastercard processes [✂]; Visa, at present, processes [✂]. In other words, [✂].[220]

4.135 We asked Mastercard and Visa why, in the UK, they do not process any transaction involving the other scheme's cards. Mastercard told us that [✂].[221] Visa told us that [✂].[222]

4.136 We found several Mastercard internal documents discussing its processing business. In particular, a 2022 internal document states that, globally, [✂].[223] [✂],[224] [✂].[225] [✂][226] [✂]. The Visa documents we reviewed did not discuss [✂]. However, a 2020 internal document states that [✂].[227,228]

Barriers to entry of third-party processors

4.137 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.

4.138 Mastercard told us that an important constraining factor on its processing business is the [✂]. Mastercard indicated [✂].[229]

4.139 Mastercard internal documents indicate that, [✂]. One of the reasons [✂].[230] However, [✂].[231]

4.140 As mentioned in paragraph 4.132, 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. [✂].[232]

4.141 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.[233] This implies that moving to an alternative processor for part of the transactions would result in large fee increases on the

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220 Further evidence on this is provided in Annex 3, paragraphs 3.23 to 3.24 and 3.32 to 3.33.
221 Mastercard response to PSR questions dated 19 September 2023. [✂].
222 Visa response to PSR questions dated 19 September 2023. [✂].
223 [✂].
224 [✂].
225 [✂].
226 [✂].
227 [✂].
228 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.
229 Mastercard response to PSR questions dated 9 November 2022. [✂].
230 [✂]. More detail is provided in Annex 8, Box 1.
231 [✂].
232 [✂].
233 Evidence from Mastercard and Visa documents on issuing-side processing fees is analysed in Annex 3, paragraphs 3.59 to 3.65.

remaining part for issuers. This was explicitly mentioned to us by one issuer as a reason for not looking for an alternative processor.[234]

4.142 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,[235] technical challenges,[236] increased complexity,[237] and potentially operational risks[238] – without providing any customer benefits.[239]

4.143 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.[240] 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.[241] 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.[242]

4.144 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 [✂]. [✂] is an issuer processor that is part of a group of companies that includes an acquirer; [✂] operates both as issuer processor and as acquirer.[243] Mastercard had explicitly mentioned [✂] as providers that could potentially start processing transactions in the UK.[244] 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 [✂] ,

234 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 [✂]).

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

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

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

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

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

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

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

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

243 '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.

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

it is very difficult to achieve the scale required to make entry into a new country profitable.[245] [✂] is not currently planning to enter as a processor in any further country.[246]

4.145 We recognise, however, that our evidence base is incomplete. We have noted that [✂].[247] There is therefore the possibility that the lack of entry of alternative processors may be due to processing fees 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 4.146 and 4.147 below) suggests that fees in the UK may be above competitive levels.

Acquirers' bargaining position

4.146 The lack of alternatives is also reflected in acquirers' weak bargaining position with respect to core processing fees. It is very unusual for acquirers to be able to negotiate discounts or rebates on processing fees. In 2018, [✂].[248] However, [✂].[249] 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 house, which places them in a stronger position to negotiate with Mastercard or Visa.[250] They can also obtain better deals by jointly negotiating core processing fees on the issuer and acquirer side.[251]

4.147 We note that [✂]. For example, in 2022 Mastercard [✂].[252]

Our provisional conclusions

4.148 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. 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.

245 Call with stakeholder. [✂].
246 Greater detail on submissions by these companies is provided in Annex 3, paragraphs 3.51 to 3.55.
247 [✂].
248 Visa response to PSR questions dated 9 November 2022. [✂].
249 Visa response to PSR questions dated 19 September 2023. [✂]. For further detail, see Annex 3, paragraphs 3.48 to 3.49.
250 See Annex 2, paragraph 2.17.
251 See Annex 2, paragraph 2.18.
252 [✂].

- We have seen no evidence of potential competitors seeking to enter the provision of core processing services in the UK.

4.149 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.

4.150 We therefore provisionally 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.

Competitive constraints specific to the supply of optional services

4.151 We have seen evidence that optional services account for an increasing proportion of Mastercard's and Visa's net revenue generated in the UK. A Mastercard internal document from 2021 shows that optional services accounted for [✂]% of net revenue in 2016 and the proportion was forecasted to [✂].[253,254] Similarly, the proportion of Visa's UK and Ireland net revenue generated through sales of value-added services (VAS) [✂] from [✂] % in FY2018 to [✂]% in FY2021.[255] These figures indicate the increasing importance of optional services to the schemes. We are conscious, however, that the services classified as optional in the internal documents may not correspond to the optional services based on our definition.

4.152 In addition to using alternatives to Mastercard or Visa cards, which we have discussed in paragraphs 4.6 to 4.124, 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

4.153 Mastercard and Visa offer a large number of optional services; therefore, we focussed 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.

253 See Annex 9, paragraph 2.47.

254 [✂].

255 See Annex 9, paragraph 3.20.

4.154 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.[256] We applied prioritisation criteria to the list which narrowed the number of Mastercard services we analysed to ten.[257]

4.155 Similarly, we asked Visa to provide a list of optional services it supplies and/or the optional fees it charges.[258] 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 individual card transactions.[259,260] We also applied prioritisation criteria to the list which narrowed the number of Visa services we analysed to eight.[261]

4.156 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.

4.157 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.

256 Mastercard response to PSR questions dated 23 November 2022. [✂].

257 More detail on the prioritisation criteria we used can be found in Annex 4, paragraphs 4.18.

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

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

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

261 More detail on the prioritisation criteria we used can be found in Annex 4, paragraphs 4.26 to 4.27.

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[262]
Mastercom	Mastercard	Acquirer
Multi-Currency Settlement	Mastercard	Merchant[263]
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

262 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.

263 Mastercard submitted that the choice of whether to use this service is ultimately made by merchants. However, we have received mixed evidence around 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 4.148.

4.158 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.

Analytical framework

4.159 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 compete 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.

4.160 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.[264]

Evidence collected and limitations of analysis

4.161 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.

4.162 We also issued two Section 81 Notices to acquirers. The first Section 81 Notice to acquirers was sent in February 2023 and considered competition across all of Mastercard and Visa's services.[265] This Section 81 Notice 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.

4.163 The second Section 81 Notice to acquirers was sent in November 2023 and asked more specific questions about the optional services listed in Table 1.[266] 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?

4.164 In addition to the optional services listed in Table 1, we asked acquirers whether Mastercard and Visa provide any optional services which the scheme consider 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,

264 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.

265 We received responses from [✂].

266 We received responses from [✂].

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.

4.165 Finally, we 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.

4.166 We note that there are limitations to the evidence we have collected and analysed. First, we acknowledge that we have not collected evidence from merchants. As mentioned previously, for some of the optional services we have analysed, the decision of whether to use them is made by merchants. We asked acquirers what alternatives are available to merchants for the optional services (to the best of their knowledge) as they are likely to have a good understanding of their merchant customers' needs. However, it may be the case that acquirers do not know all of the choices available to merchants.[267]

4.167 Second, we have not directly asked acquirers or merchants whether the alternatives proposed by Mastercard and Visa in their submissions are adequate substitutes to the optional services they provide. In the second Section 81 Notice to acquirers, we asked about the alternatives available to acquirers and merchants for each of the optional services in our list. When acquirers did not mention the alternatives proposed by the schemes, we consider this to indicate that they do not consider them to be effective alternatives, but we recognise that the evidence would have been stronger had we explicitly asked about the specific alternatives mentioned by the schemes.

Our assessment

4.168 Optional services are ancillary to core scheme and processing services. The acquirers buying optional services already have a commercial relationship with Mastercard and Visa. Sourcing optional services from Mastercard and Visa, therefore, can be more convenient than identifying and contracting with alternative providers. As Mastercard and Visa are the only providers who can offer acquirers a one-stop shop solution for core and optional services, they are in a stronger position vis-à-vis customers who prefers such solution than alternative providers who can only supply certain optional services. Moreover, 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, alternatives available to acquirers and merchants appear to be very limited for some of these services.

267 As mentioned above, our understanding of optional services evolved in the course of the review. This made it difficult for us to collect evidence from merchants. When commencing our analysis of optional services, we did not know which services were used by acquirers and which were used by merchants. Moreover, we did not know which types of merchants were the primary users of each service or whether the schemes targeted each service at specific types of merchants. Asking for information on all the optional services in our list from a common sample of merchants would not only have resulted in a disproportionately long information request, but introduced the risk of contacting the wrong types of merchants, which could have made it difficult to interpret the responses correctly. We therefore adopted what we considered a more proportionate approach, asking acquirers about the alternatives available to merchants for those optional services that merchants can decide whether or not to use. We considered that, as acquirers make those optional services available to merchants, they might have a good understanding of what alternatives are available (or may provide those alternatives themselves).

4.169 We are not arguing, however, 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[268] and 8.[269]

4.170 The evidence we received on each of the services in Table 1 is presented in Annex 4. While the assessment of the competitive constraints that Mastercard and Visa face must be specific to each service, we have identified three categories of optional services according to the evidence on available alternatives and acquirers' countervailing buyer power.

4.171 The first category of optional services is those where the merchant makes the decision about whether to use the service or not (these are listed in Table 1 above). 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. Acquirers also appear to have limited countervailing buyer power. However, acquirers may have imperfect visibility of what alternatives are available to merchants. If so, for at least some of these services, alternatives may be available to merchants for sufficiently many use cases to result in effective competitive constraints on Mastercard and Visa. The evidence we have been able to collect does not, therefore, generally allows us to draw a definitive conclusion. The only exception to this is the Acquirer Authentication Exemption Indicator, where Mastercard did not suggest a specific alternative, rather Mastercard submitted that merchants have a choice as to whether or not they want to make use of the SCA exemptions contained in PSD2.[270] This proposed alternative does not appear capable of imposing a competitive constraint because we do not consider that subjecting all transactions to SCA is a competitive substitute as this would likely require the use of other Mastercard services, such as Identity Check (a service where the evidence also suggests there is limited competitive constraint on Mastercard). In this case, the evidence is indicative of limited competitive constraints.

4.172 The second category we have identified is for services where the acquirer makes the decision about whether to use the service or not, and where the evidence from acquirers is mixed as to the existence of alternatives. The mixed evidence makes it difficult to reach a firm conclusion on the degree of competitive constraints. This is the case for three services in our list: Mastercard's Mastercom and Reports services, and Visa's TC33 Clearing and Settlement Advice and TC33 POS Advice. For these services, the evidence from acquirers indicated that there may be some alternatives which can be either self-supplied or supplied by a third party. However, we also note that [✂].[271] Visa's ability to implement such a price change may suggest the presence of ineffective competitive constraints in the supply of this service. We have also not had the opportunity to assess the third-party alternatives to Mastercom suggested by some acquirers.[272]

268 Paragraph 4.18.

269 Paragraphs 8.76 and 8.120.

270 See Annex 4, paragraph 4.52.

271 See Annex 4, paragraph 4.202.

272 We also note that for Mastercard's Mastercom there may be alternatives available to merchants downstream which could in principle provide a competitive constraint on Mastercard.

4.173 The final category we have identified is for services where the acquirer makes the decision about whether to use the service, and the evidence from acquirers indicates there are a lack of alternatives available and limited countervailing buyer power. Mastercard's Dynamic Currency Matching service, Visa's SMS Raw Data and Reports and Visa Settlement Service Reports fall into this category. In these cases, the evidence is indicative of the absence of effective competitive constraints. However, we note that we have not asked acquirers to assess the specific alternatives suggested by the schemes, making it difficult to reach a firm conclusion.[273]

4.174 In summary, the evidence we have received indicates that Mastercard and Visa are subject to varying degrees of competitive constraints the optional services they supply to acquirers and merchants. Being able to provide a one-stop solution for core and optional services gives Mastercard and Visa a strong position compared to possible alternative providers, while the availability of alternatives appears to vary across optional services. In some cases, there are strong indications that lack of effective alternatives may result in Mastercard and Visa not facing effective competitive constraints.

Provisional conclusions

4.175 In this chapter we have set out our assessment of the 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.

4.176 In relation to core scheme services, we have provisionally 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 provisional 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.

273 We also note that for Mastercard's Dynamic Currency Matching and Multi-Currency Settlement services, there may be alternatives available to merchants downstream which could in principle provide a competitive constraint on Mastercard.

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

4.178 In relation to core processing services, we have provisionally 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 4.176 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 4.176.

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

4.180 In relation to optional services, we have provisionally 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.
- As Mastercard and Visa can provide a one-stop shop solution for core and optional services, they are in a stronger position than alternative providers of optional services.
- Acquirers' and merchant's ability to respond to fee increases for optional changes by decline to accept either Mastercard or Visa, or by steering consumers towards alternative payment methods is limited by the same reasons discussed in paragraph 4.176.

4.181 Therefore, our provisional conclusion is that, on the acquiring side, Mastercard and Visa have various degrees constraint across their optional services, with strong indications that lack of effective alternatives may result in Mastercard and Visa not facing effective competitive constraints in the supply of some of these services.

Questions for stakeholders

Question 2

- Do you have any views on our analysis and provisional finding that Mastercard and Visa are subject to ineffective competitive constraints on the acquiring side?

Question 3

- Do you have any views on our analysis and provisional finding that the constraint that consumer steering can pose 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?

Question 4

- Do you have any views on our analysis and provisional finding that decisions by operators of wallets are unlikely to result in an effective competitive constraint on Mastercard's and Visa's fees?

Question 5

- Do you have any views on our analysis and provisional findings that: (i) 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; and (ii) that no alternative suppliers of core processing services currently operate in the UK?

Question 6

- Do you have any views on our analysis and provisional findings that: (i) acquirers and merchants typically have limited alternatives available to them for Mastercard and Visa's optional services; (ii) acquirers and merchants face significant implications if they do not use these optional services; and (iii) acquirers and merchants have limited countervailing buyer power when negotiating prices for these optional services.

Question 7

- Do you think there are any other competitive constraints on Mastercard and Visa in the supply of optional services which we have not yet considered, but that we should consider? If yes, please describe those constraints and their effect on Mastercard and Visa's ability to set prices of optional services.

Question 8

- Do you have any views on the alternatives to their own optional services suggested by Mastercard and Visa as described in Annex 4? If yes, please explain whether you consider the alternatives to be suitable for all or some purposes and the extent to which they compete with Mastercard and Visa for the supply of a particular optional service (or services).

Question 9

- Do you have any views on the optional services that we have not focussed on in our analysis (in particular those presented in Annex A to Annex 4)? If yes, please explain what these additional optional services are and what competition concerns you have around the supply of these services.

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 3.12 to 3.15, 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, which enable transactions across two or more card payment systems. This means that issuers select one card brand 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,[274] but that it also competes with payment methods other than cards,[275] 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.[276]

5.3 We acknowledge that alternative payment methods can compete with card schemes (see Chapter 4). However, 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

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

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

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

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.[277]

5.4 This chapter presents our analysis of the constraints that Mastercard and Visa face as a result of competition for issuers. While the need to convince cardholders to prefer their cards over other payment methods may impose additional constraints on the card schemes, we have not considered these in detail in the context of this review. 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

5.5 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

5.6 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.[278]

5.7 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.[279]

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277 Card schemes do compete with other payment methods for being used by cardholders. 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, convenience, security, resilience, consumer protection, and marketing. (Mastercard response to PSR questions dated 9 November 2022 [✂]. 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 (Visa response to PSR questions dated 9 November 2022. [✂]). 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. However, in this chapter, we do not assess this form of competition.

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

279 For evidence on this point, see Annex 5, paragraph 5.8. See paragraph 5.32, below, for a discussion of how other card schemes impact competition for co-brand card issuing.

5.8 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.

5.9 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.

5.10 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.

5.11 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.[280]

Barriers to migration

5.12 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.

5.13 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 [✂].[281] Another document describes this [✂].[282, 283]

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

281 [✂].

282 [✂].

283 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.

5.14 In some cases, schemes can overcome these barriers to switching:

- Mastercard documents indicate that [✂].[284]
- Visa documents indicate that [✂].[285]

Trends in shares of supply

5.15 These 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.[286] 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.

5.16 Visa has historically had a much higher volume of debit card payments than Mastercard in the UK.[287] 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.[288] This has resulted in a marked increase in Mastercard's share of debit card spending value, from [✂]% in 2017 to [✂]% in mid-2022, as shown in Annex 6.[289]

5.17 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

5.18 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

5.19 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.[290] As set out in Annex 5, we define the net issuing revenue as the

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

285 For details, see Annex 5, paragraph 5.89.

286 See Annex 5, paragraph 5.83.

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

288 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/

289 See also Annex 6, paragraphs 6.10 to 6.12.

290 See Annex 5, paragraphs 5.42 to 5.56.

gross fees the issuer pays minus the incentives it receives. When expressed in percentage to transaction values, it is referred to as net issuing yield.[291]

5.20 As noted in paragraph 5.16, 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 [✂].[292] Visa's documents indicate that it considers that [✂].[293] Mastercard documents indicate that it considers [✂].[294]

5.21 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. [✂].[295]
- Two Visa documents describe [✂].[296]

5.22 Evidence from internal documents included in Annex 9 also indicates that [✂].[297] [✂]

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

5.24 Mastercard documents indicate that it expected [✂]. On average in the UK and Ireland, issuing incentive ratios [✂].[298]

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

Variation in issuers' bargaining power

5.26 The evidence we have received indicates that different issuers may have varying levels of bargaining power with schemes. This can depend on differences in:

- 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.

5.27 Issuers' size can affect the incentives that they receive from the schemes.

- An internal Mastercard document dated 2020 shows that larger issuers [✂].[299]
- Visa documents show that [✂].[300]

291 Other measures of scheme's profitability are discussed in Annex 5, paragraphs 5.30 to 5.41.
292 For more detail on Mastercard's strategy, see Annex 5, paragraphs 5.90 to 5.97.
293 See Annex 5, paragraph 5.98.
294 See Annex 5, paragraph 5.93.
295 See Annex 5, paragraphs 5.45 to 5.47.
296 See Annex 5, paragraph 5.44.
297 As shown in Annex 9, paragraph 2.21, [✂]. [✂] the evidence in Annex 9, paragraph 3.26, [✂].
298 See Annex 5, paragraph 5.47.
299 [✂]. See Annex 5, paragraph 5.45.
300 See Annex 5, paragraph 5.75.

5.28 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 [✂].[301]

5.29 In general, issuing portfolios which are expected to generate higher revenue on the acquiring side confer greater bargaining power on their respective issuers, allowing them to achieve higher incentives. These include portfolios with higher scheme fees from different transaction types, or higher potential growth in payment values.

5.30 Portfolios with higher average payment values per person lead to higher revenue for the schemes. For example, issuing portfolios targeting affluent cardholders [✂].[302] Moreover, [✂]. For example, a document [✂]. These include [✂]. The document indicates [✂].[303]

5.31 Further Visa documents indicate that fintech issuers [✂].[304] Mastercard documents indicate that fintech issuers have [✂]. Fintechs ask for [✂].[305]

5.32 Co-branded card issuers – and the merchants that co-brand them – also have higher bargaining power.[306] The types of cardholders who use these cards, as well as the co-branded deals themselves, are attractive to more card schemes.

- Mastercard documents describe co-brands [✂].[307]
- Visa's analysis of co-brand deals shows [✂].[308]
- In contrast to standard issuing deals, co-brand contracts do attract competition from American Express, which could also increase the co-branded card merchants' bargaining power.[309]

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

Non-financial dimensions of competition

5.34 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.

301 [✂]. See Annex 5, paragraph 5.52.
302 [✂]. See Annex 5, paragraph 5.76.
303 [✂]. For further examples, see Annex 5, paragraph 5.75.
304 [✂]. See Annex 5, paragraph 5.75.
305 See Annex 5, paragraph 5.81.
306 Co-branded cards are the product of partnership between a merchant and an issuer and bear the merchant's logo.
307 See Annex 5, paragraphs 5.45 and 5.80.
308 Annex 5, paragraph 5.75.
309 See Annex 5, paragraphs 5.76 to 5.78.

5.35 Mastercard told us 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'.[310]

5.36 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 [✂].[311]

5.37 Visa's proposals to issuers [✂]. Visa's documents also discuss [✂].[312]

Provisional conclusions

5.38 We provisionally 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.

5.39 Competition between Mastercard and Visa has resulted in high incentives to issuers, in some cases more than totally offsetting the 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 degree of bargaining power – larger issuers, and those targeting affluent cardholders or cross-border transactions 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.

5.40 Given our provisional 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.

Questions for stakeholders

Question 10

- Do you have any views on our analysis and provisional finding that Mastercard and Visa are subject to competitive constraints on the issuing side?

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

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

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

6 Market outcomes

In assessing the outcomes for customers of Mastercard and Visa scheme and processing services in the UK, we have focused on recent changes in pricing and on the schemes' profitability levels. We have also, where relevant, responded to submissions from the card schemes in relation to other factors that they consider relevant to an assessment of outcomes in the broader payments space, including the 'value' of their services, quality improvements and innovation in the sector.

We have provisionally found that:

- Mastercard and Visa 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 2021 and [✂]% for Visa between 2018 and 2022.
- On the issuing side, scheme and processing fees are [✂] by rebates and incentives that Mastercard and Visa pay to issuers, with the overall effect that revenue from the acquiring side accounts for [✂]% of net scheme and processing fee revenue for both card schemes in the period 2017 to 2021 for Mastercard and 2018 to 2022 for Visa.
- Overall, fees paid by acquirers for core scheme and processing services have risen in recent years – with average fees (as a proportion of transaction value) increasing in real terms by [✂]% for Mastercard between 2017 and 2021 and by [✂]% for Visa between 2019 and 2022, although part of the estimated increase for Mastercard may be due to the increase in the take-up and use of optional services purchased by acquirers in the period.
- Evidence from our analysis of recent material fee increases and from merchant submissions points towards fees increasing with little evidence of direct links to any changes in relevant costs or service quality.
- There is a sizeable gap between the EBIT margins of comparable companies operating in competitive markets (the benchmark comparators), which are in a range of 12%-18% in the period 2018-2022, and the upper end of the margin range derived from Mastercard's financial information. There is a sizeable gap for the margin range derived from Visa's financial information. For Mastercard, this range of EBIT margins was [✂]% (the fully loaded UK P&L accounts) and 53% (the EBIT margins in its global accounts). For Visa, the equivalent range was [✂]% (the fully loaded UK P&L accounts) and 64% (based on the EBIT margins in its global accounts).
- This indicates that Mastercard may be earning margins that are higher than would be expected in competitive markets. It indicates that Visa's margins are higher than would be in expected in competitive markets.

Our evidence base does not allow us to accurately quantify the extent of any harm from prices being above competitive levels, as we cannot say with precision what the level of excess profitability is, given the financial data that we have relied on. However, the evidence that we do have, combined with the clear evidence of a lack of effective competitive constraints on the setting of scheme and processing fees on acquiring side (see Chapter 4), leads to concern that such harm is likely to exist and is likely to be material. In order to more fully understand the extent of any harm to acquirers and merchants from high scheme and processing fees, one of the remedies that we are proposing at this stage is to require Mastercard and Visa to submit regulatory accounts that would give us an accurate understanding of their UK cost base, pricing and profitability levels.

Introduction

6.1 As set out in Chapter 3,[313] cards play a significant role in the UK payments sector, as the most popular method to make retail payments. In 2022, 59% of all payments in the UK were made using cards, while consumer credit and debit cards accounted for 85% of the total value of retail transactions in the UK. Mastercard and Visa together accounted for around 99% of all UK debit and credit card payments, both by volume and value, in 2022.

6.2 As set out in Chapter 4, we provisionally find that 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.[314] In relation to optional services on the acquiring side, alternative providers may provide varying degrees of constraint to Mastercard and Visa. However, as Mastercard and Visa can provide a one-stop shop solution for core and optional services, they are in a stronger position than alternative providers of optional services.[315] On the issuing side, as set out in Chapter 5, we provisionally find that Mastercard and Visa face competitive constraints, with Mastercard and Visa competing against each other to win issuing portfolios.[316]

6.3 In this chapter, we focus on pricing and profitability in our assessment of outcomes, as the concerns we are addressing relate to stakeholder concerns about rising levels of scheme and processing fees that are charged on the acquiring side since 2018 – with adverse impacts on merchants, consumers and the wider economy.[317] This is consistent with the PSR's other work on the costs associated with card transactions. Our remedies from the card-acquiring market review are seeking to strengthen competition between acquirers and to achieve more competitive pricing for merchants in accessing scheme and processing services.[318] Our ongoing market review of cross-border interchange fees recently provisionally found that a price cap would be an appropriate intervention to reduce the level of interchange fees charged to merchants on UK-EEA consumer transactions.[319] A focus on the cost of card acceptance on the acquiring side of card networks is also

313 See paragraph 3.1.

314 See paragraphs 4.176 to 4.179.

315 See paragraphs 4.180 and 4.181.

316 See paragraphs 5.38 and 5.39.

317 See MR22/2.1 *Market review of card scheme and processing fees, Final terms of reference*, October 2022, paragraphs 1.10 and 1.11.

318 PS22/2: *Card-acquiring market remedies: Final decision*, 6 October 2022.

319 MR22/2.6: *Market review of UK-EEA consumer cross-border interchange fees interim report*, 13 December 2023.

consistent with decades of regulatory intervention, competition enforcement and related litigation in relation to interchange fees in the UK and in the European Union.[320]

6.4 We have looked at recent trends in card scheme revenue,[321] analysed a set of the most material specific fee changes,[322] and used econometric analysis to estimate recent changes in average fee levels, while controlling for any changes in transaction value, volume and mix.[323] Even if we were to find that fee levels had not been rising in recent years, 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.

6.5 In coming to a view on the likely harm that may arise from the lack of effective competitive constraints that we have provisionally identified, we have considered the issue of pass-through of prices that are set above competitive levels – from acquirers to merchants and then to consumers.

6.6 As set out in Chapter 4,[324] 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.[325]

6.7 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.[326] 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

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320 For example, Multilateral Interchange Fees (MIFs) have been the subject of a number of decisions by the European Commission, with related appeals to the European courts - for example, the European Commission's decision of 19 December 2007, concerning Mastercard's MIFs set in the EEA, which has been the subject of unsuccessful appeals to the General Court ((Case T-111/08) MasterCard Inc v European Commission [2012] 5 CMLR 5) and to the Court of Justice of the European Union ((Case C-382/12 P) MasterCard Inc v European Commission [2014] 5 CMLR 23)). There is also ongoing, related litigation in the UK, including the Merchant Interchange Fee Umbrella Proceedings

321 See Annex 6.

322 See Annex 8.

323 See Annex 7.

324 See paragraph 4.127.

325 See MR18/1.8, C*ard-Acquiring Market Review: Final report*, (November 2021), paragraph 5.66.

326 See [MR22/2.6: *Market review of UK-EEA consumer cross-border interchange fees interim report*](), (December 2023), paragraphs 6.19 and 6.20.

of reduced margins) and part of it may be passed on to their consumers in the form of higher retail prices.

6.8 As set out in Chapter 5, competition for issuers results in competition between Mastercard and Visa in their setting of scheme and processing fees on the issuing side of the schemes. As such, we would expect to find that net scheme and processing fees fall more heavily on the acquiring side of both schemes. 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.

6.9 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. While an imperfect proxy, looking at profitability should also allow us to control for any material changes in the quality of services provided to customers. Where profitability is high and above levels that would prevail in a competitive market, this indicates 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.

6.10 The rest of this chapter sets out: Mastercard's and Visa's views on outcomes at a high level, including our provisional responses; our evidence and assessment of pricing outcomes on the acquiring side; our evidence and assessment of Mastercard and Visa profitability; and our provisional conclusions on outcomes overall.

Card scheme views on high-level outcomes and our assessment

6.11 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. We set out these high-level views as context below and then set out more specific arguments in relation to pricing outcomes and profitability later in the relevant subsections within our assessment.

Mastercard and Visa views on high-level outcomes for their customers

6.12 Mastercard set out its view that it:[327]

'… generates value by boosting the economy, working for consumers and helping businesses both inside and outside the financial services sector. The value generated can be highlighted by mapping Mastercard's scheme activities against five key drivers of economic growth':

- Improving payment efficiency[328]

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

328 See paragraph 6.46, below.

- Facilitating new entry – giving examples including increasing onboarding speed for new players, and 'empowering the entry of payment facilitators into the acquiring market and encouraging their growth by providing advisory support, substantially increasing the access of smaller merchants to the cards ecosystem.'
- Maintaining security and stability in the payments' ecosystem[329]
- Driving innovation[330]
- Promoting wider benefits – for example, arguing that 'encouraging people who did not (or could not) access electronic payments to use cards is good for Mastercard commercially, but it also benefits the wider society through the reduction of "financial exclusion" and the associated social costs'.

6.13 Visa listed the 'outcomes that matter most to end users' which are the result of its 'trusted and high-quality service'. These included:[331]

- 'Reliable and resilient payments infrastructure'[332]
- 'Rapid and seamless transactions'[333]
- 'Robust payment protections and security: In addition to investments made to help prevent fraud, Visa offers robust protections for merchants and consumers against fraudulent transactions, including chargebacks, refunds, fraud prevention systems, and payment guarantees such as our Zero Liability Guarantee bringing peace of mind to consumers.'
- 'Innovative and dynamic functionality'[334]

Mastercard and Visa views on outcomes across the UK payments landscape

6.14 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.

6.15 Mastercard submitted a report, [✂], which stated that:

- 'The market outcomes that can be observed in the UK payment landscape are consistent with a well-functioning market, characterised by existing players being competitively constrained by other existing players, new entrants and the credible threat of further entry.
- 'Volumes continue to shift from traditional payment methods (e.g. cash and cheque) towards more efficient methods, as players compete to expand. Certain merchant types (e.g. smaller merchants) and segments (e.g. tradespersons) increasingly have options to accept payments via more efficient methods.

329 See paragraph 6.46, below.
330 See paragraphs 6.51 and 6.52, below.
331 Visa response to PSR working paper dated 30 June 2023. [✂].
332 See paragraph 6.47, below.
333 See paragraph 6.47, below.
334 See paragraph 6.53, below.

- '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. Innovation has also been introduced directly by new entrants using new technologies and new propositions. In turn, this has driven existing players to continually develop their own propositions in order to keep a competitive position in the payments landscape. This innovation has delivered, and continues to deliver good outcomes for merchants and consumers.
- 'Furthermore, the changing payment systems landscape has led to both greater choice of payment methods and an increased quality of payment methods. Both consumers and merchants typically have a variety of options for any given payment. Although all payment methods provide a minimum level of service, they vary significantly in their product features (for instance the degree of buyer protection that is offered). This variation in product offering is reflected in the pricing of various payment methods. The credible threat of new entry acts as a source of competitive constraint on the existing pricing of incumbents. We find that the trends observed in terms of volumes, innovation, quality and choice are consistent with the pricing of the services being provided within a well-functioning competitive landscape for UK payments.'[335]

6.16 Mastercard put forward its view on the interaction between competition, regulation and price setting in this context, noting that:

'… Mastercard must compete for both issuer and acquirer customers to be successful. However, the nature of competition in these markets is also affected by regulation. In particular, the IFR, which sets limits on the level of interchange fee that can be paid by acquirers to issuers (which essentially also represents a cap on the monetary compensation for issuers per transaction through the "net compensation" rules). This cap on compensation to issuers affects the nature of competition for issuer business whenever the net compensation cap binds, as it precludes any card scheme making a more financial offer to issuers to secure their business.

'However, this does not mean competition is restricted in such circumstances. Instead, Mastercard looks to make its offering more attractive in other ways, including by improving the quality of its services to the benefit of issuers and cardholders. Competitors to Mastercard naturally do the same, leading to a greater focus [on] "quality and innovation" competition rather than pure price competition in certain customer segments.'[336]

6.17 In relation to competition and outcomes in the UK payments sector more generally, Visa submitted that:

- 'Competition in the UK payments sector is thriving' and that 'the payments ecosystem is complex and evolving fast'[337]
- 'The PSR's review must recognise that competition in payments is not limited to competition between card schemes … Card payments from any scheme accounted for only a small proportion of total payment flows in the UK (approximately 13% in

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

336 Mastercard response to PSR questions dated 23 June 2023 [✂]

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

2021) with payments using a Visa card accounting for an even smaller proportion (approximately 9% in 2021).'[338]

- 'It would not be appropriate for the PSR to assess competition in the UK payments sector with reference only to the fees charged by Visa (and Mastercard) … (i) the UK payments sector is [a] competitive sector with many differentiated payment options, systems and products, with a wide range of players; and (ii) Visa invests significantly and continuously to develop and innovate its payment ecosystem to deliver value and ensure good outcomes for end-users.' [339]
- The PSR's assessment of competition should be 'forward-looking'.[340]

Our assessment

6.18 The context of the UK payments sector is an important part of our assessment. As set out in our Terms of Reference,[341] 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 from stakeholders about rising fee levels in recent years.[342] 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.

6.19 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

6.20 This section sets out our assessment of the card schemes' pricing of scheme and processing services to the acquiring side.

6.21 We have assessed evidence on competition in core scheme and processing services supplied to acquirers (Chapter 4)[343] and to issuers (Chapter 5),[344] as well as competition

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

339 Visa response to PSR working paper dated 30 June 2023. [✂]

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

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

342 MR22/1.2, *Market review of card scheme and processing fees*, Final terms of reference, October 2022, paragraphs 1.10 and 1.11.

343 See paragraphs 4.176 to 4.179.

344 See paragraphs 5.38 and 5.39.

in the supply of optional services to acquirers (Chapter 4).[345] 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.

6.22 Our assessment draws on six main sources of evidence that we have examined in coming to a provisional view on pricing outcomes. In brief, these are:

- Data from Mastercard and Visa on the various scheme and processing fees that they charge to acquirers and to issuers.[346]
- 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.[347]
- Our econometric analysis of the scheme and processing fees paid by acquirers to the schemes over a five-year period, estimating the change in average fee levels, while controlling for changes in transaction value and volume, transaction mix and for acquirer-specific effects.[348]
- 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.[349]
- Evidence and arguments submitted by Mastercard and Visa in the course of our review.[350]
- Evidence from merchants on the fee changes that they have experienced in recent years.[351]

6.23 Our evidence and provisional findings on pricing outcomes are set out in the following subsections. These cover:

- Card scheme views on pricing and our assessment (paragraphs 6.24 to 6.64)
- Trends in scheme and processing revenues (paragraphs 6.65 to 6.71)
- Fees charged to the acquiring and issuing sides (paragraphs 6.72 to 6.81)
- Changes in average fee levels (paragraphs 6.82 to 6.99)
- Drivers of fee changes (paragraphs 6.100 to 6.120)

6.24 These subsections are followed by our provisional findings on pricing outcomes (paragraphs 6.121 to 6.125).

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345 See paragraphs 4.180 and 4.181.

346 See Annex 6.

347 See Annex 8.

348 See Annex 7.

349 See Annex 9.

350 These are set out at paragraphs 6.25 to 6.64, below.

351 See Annex 2.

Card scheme views on pricing and our assessment

6.25 In this subsection, we set out and briefly respond to six arguments that Mastercard and Visa have made over the course of the market review, which relate to our assessment of outcomes. These are:

a. Price levels are competitive and card acceptance costs are low (paragraphs 6.27 to 6.33)

b. Fees are determined by the value to customers (paragraphs 6.34 to 6.44)

c. Customers have benefited from increasing quality of service (paragraphs 6.45 to 6.50)

d. Customers have benefited from innovation (paragraphs 6.51 to 6.58)

e. Visa has been transitioning from a membership model to a commercial model (paragraphs 6.59 to 6.61)

f. Mastercard adjusted the balance between scheme and processing fees in 2017 (paragraphs 6.62 to 6.64)

6.26 Where their submissions related to particular parts of our evidence base, for example, our econometric analysis or our review of recent fee changes, these are referred to below in the relevant subsections and dealt with in detail in the relevant annexes. Where submissions related more to our competitive assessment than to outcomes, these are dealt with in Chapters 4 and 5.

Price levels are competitive and card acceptance costs are low

<u>What the schemes told us</u>

6.27 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.

6.28 Mastercard submitted that: 'the pricing of various payment methods … reflects the variation in product offering … The credible threat of new entry acts as a source of competitive constraint on existing pricing of incumbents. The trends observed in terms of volumes, innovation, quality and choice are consistent with the pricing of the provided services. The average fee per euro transacted paid to Mastercard has not increased significantly since 2017. Specific fees have changed reflecting improved value and service quality through Mastercard's innovation in the main features of the scheme. This results in an overall increase of mandatory acquirer fees of 3.1% p.a., on average.'[352]

6.29 Mastercard also submitted a report, [✂], which included a comparison of the MSCs charged to an average merchant (weighted by transaction value) for different online payment methods, concluding that:

'First, the MSCs for payment cards are similar to those of the payment methods that also offer some form of buyer protection (Revolut Pay, Giropay and Klarna Pay Now, …), all of which have similar or higher MSCs.

'Second, payment methods that do not offer buyer protection have lower MSCs than payment cards.

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

'Third, we estimate that the provision of buyer protection accounts for approximately 40–70 basis points in the MSC of a well-established payment method. If we adjust the MSCs of the payment methods without buyer protection upwards to account for this difference in functionality and service offering (or if we adjust the MSCs of payment methods with buyer protection downwards), the MSCs across the different payment methods are comparable.

'This is consistent with a well-functioning and competitive market where consumers and merchants have a wide range of payment options with different functionalities and services, with MSCs that reflect these differences.'[353]

6.30 Visa submitted that:[354]

- Its 'fees remain a small part of the overall cost of acceptance'
- 'Visa Inc.'s acquisition of Visa Europe in 2016 resulted in a fundamental shift in the commercial focus and operations of the business, … . These changes have driven some fee adjustments and realignments but have enabled our continued ability to adapt to, and invest in, the changing needs and expectations of merchants and consumers and the growing complexity of the payments value chain. For example, our transition to our global payments infrastructure, VisaNet, has allowed us to offer a more open, innovative and dynamic solution to the payments ecosystem. … . This programme has delivered greater security, resilience and innovation and a wider range of product offerings.'
- It is 'mindful of the impact of our fees on merchants. We charge acquirers reflecting the actual use of our services based on the actual transactions that flow to them (e.g, differentiating by various attributes such as F2F vs remote, or domestic vs international) and based on the precise services being utilised. Visa does not control how acquirers (and other participants in the value chain) price their services to merchants, and we do not have full visibility of the merchant pricing models that acquirers use.'
- 'Merchants also have a wide range of options available to them and can choose which payment methods to accept or not to accept. The merchant's ultimate choices will reflect several competitive factors such as the convenience and security of the payment method, as well as the overall cost of acceptance. Merchants can also accept a large range of payment options while actively steering consumer[s] towards the payment methods they prefer.'
- 'We note that for payments made on our network, Visa's fees are a small part of the overall cost of acceptance. In the UK, Visa typically earns between just 1-2p from a domestic £30 transaction. We have also made a number of commitments in recent years to recognise differences in certain transactions via maintaining low fee levels, such as Visa's Everyday Spend Program.'

6.31 Specifically on its scheme and processing fees, Visa submitted that its 'fees represent a small fraction of the overall costs for merchants to accept Visa card payments. … it is important to note that Visa's scheme and processing fees represent a small fraction of the overall cost for merchants to accept Visa card payments. In particular, for an average

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

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

purchase (of £[✂]) across all domestic transactions, a merchant pays only 2 pence in Visa fees compared with an overall estimated acceptance cost of [✂], meaning that our fees make up the smallest component of the cost of acceptance for retailers on average. …. The scheme fees we charge for domestic transactions in the UK are among the lowest in the world, and we have further introduced initiatives in the UK …. As a result of this programme, for domestic consumer transactions with these merchants, Visa's core fee rates have not increased since 2017.' [355]

Our assessment

6.32 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 provisionally conclude that, on the acquiring side, Mastercard and Visa do not face effective competitive constraints in the provision of core scheme or core processing services.[356] As such, our provisional assessment is that such fees on the acquiring side are unlikely to be set as part of an effective competitive process.

6.33 As set out below, our assessment in this section provisionally concludes that, among other things, average fees (as a proportion of transaction value) have been rising in real terms in recent years and that there is some evidence that the card schemes' margin levels are likely to be above competitive levels.

Fees are determined by the value to customers

What the card schemes told us

6.34 The card schemes stated that the value created by their services is an important consideration in their pricing decisions.

6.35 For example, in relation to scheme fees, Mastercard said:[357]

'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.

'We continually invest in the services we offer to ensure the provision and maintenance of a strong, secure, successful payment service. This ensures we remain attractive to cardholders and merchants and therefore to issuers and acquirers.

'Among the most significant and most directly measurable value provided are: …

- 'Mastercard improves payment efficiency in the transactions between consumers and businesses …
- 'The Mastercard scheme provides value through increasing the stability. For example, we guarantee the settlement of Mastercard transactions amongst principal issuers and acquirers. This helps enable global acceptance by providing acquirers and (indirectly) their retailers with assurance that they would receive settlement in the event that a cardholder fails to settle …

355 Visa response to PSR working paper dated 30 June 2023. [✂]. Visa's UK initiatives include its Everyday Spend Programme, which applies a relatively lower rate to Visa's fees on transactions with certain types of merchants.

356 See paragraphs 4.176 to 4.179.

357 Mastercard response to PSR questions dated 12 January 2022. [✂]

- 'The Mastercard scheme creates value by increasing the security in the payment network. Through its range of security solutions, Mastercard continuously protects the network, its transactions and data against fraud and cybercrime …
- 'The Mastercard scheme drives forward innovation, including activities around promoting the adoption of new technology. We foster and accelerate emerging ideas into real solutions that deliver innovative and scalable services …
- 'Merchants and cardholders alike benefit from higher value transactions thanks to direct access to current accounts and credit lines. Merchants therefore directly benefit from the higher profit margins linked to more and higher value transactions.'

6.36 Mastercard also 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, with fee changes generally being considered after changes to scheme services have been embedded and demonstrated to the ecosystem.'[358]

6.37 Visa submitted that it 'maintains a complex and interoperable payments system that can safely, securely, and reliably support payments, which generates high value to our stakeholders, including merchants, across the world'.[359] In the context of fee changes, 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'.[360] It said that its 'central goal' was to continue to 'grow our network and to increase the value and benefits of the services we provide to cardholders, our clients and their merchants'.[361]

Our assessment

6.38 We would not disagree that the schemes' customers find many of their services to be important and useful in conducting their businesses. However, our competitive assessment for core scheme and processing fees has found that there is a lack of effective competitive constraints in the supply of core scheme and processing services.[362] As such, prices are not being set as part of an effective competitive process. Prices set in line with the 'value' that customers derive reflect the customers' willingness to pay, in the context where the customer has little choice of alternative supplier or service, as is the case here. We would expect 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.

6.39 We note that, for some optional services, customers do have alternatives and we note that, for some of the fee changes that we looked at in detail, there was evidence of customers – both issuers and acquirers – opting out.[363]

358 Mastercard response to PSR questions dated 23 June 2023. [✂].
359 Visa Europe response to PSR questions dated 9 November 2022. [✂]
360 Visa Europe response to PSR questions dated 9 November 2022. [✂]
361 Visa Europe response to PSR questions dated 9 November 2022.[✂]
362 See paragraphs 4.176 and 4.179.
363 See Annex 8, paragraph 1.54.

6.40 More generally, in the context of competition-based market assessments, there is no inconsistency between finding that services are beneficial to consumers and are (economically or socially) valuable, while also finding that there are problems in how the market operates.

6.41 Looking at customer engagement – both from our analysis of Mastercard and Visa internal documents and based on the view of merchants – we see very limited evidence of these customers expressing a view that fee increases have reflected the increased value they have received from scheme and processing services in recent years.[364] 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 fee changes, although this was more common among the Mastercard documents than in those from Visa.[365]

6.42 For Mastercard,[366] the value of the service and the goal of retaining a 'fair share' of it for Mastercard are the rationale that we identified most frequently for its fee changes. In most cases, however, the documents do not include a quantitative estimate of this value. 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. Mastercard's engagement with customers in relation to fee changes typically takes place *after* it has already approved a change.[367] [368] As Mastercard explains in its narrative response, 'Mastercard informs customers of the changes through its regular communication channel, Mastercard Connect. All customers will receive this communication before implementation. In addition, Mastercard has dedicated account managers for its main customers who are tasked with managing the relationship with the customer. These account managers are informed of upcoming pricing changes as well and may have raised the changes in question in informal communication.'[369]

6.43 In the relevant Visa documents,[370] in relation to the [✂], there is discussion of setting the fee at a level considered consistent with the value of the service, [✂]. 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. More generally, the internal documents submitted by Visa do not mention seeking direct input from customers before deciding whether to introduce a fee change.[371] In its narrative response, Visa confirmed: '[✂]'.[372]

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364 See paragraphs 6.117 to 6.119.

365 See Annex 8, paragraphs 8.66 to 8.70, and 8.108 to 8.113.

366 See Annex 8, paragraphs 8.71 and 8.74.

367 See Annex 8, paragraphs 8.87.

368 Of course, the introduction of new optional services must be based on Mastercard's understanding of customers' demand for the service and on their willingness to pay.

369 Mastercard response to PSR questions dated 9 November 2022. [✂]. Mastercard has further noted that its account managers provide a customer perspective on proposed fee changes, throughout the process, on the basis of their detailed ongoing engagement with them [✂]

370 See Annex 8, paragraph 8.112.

371 See Annex 8, paragraph 8.123.

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

6.44 As set out below, for both schemes, the acquiring side accounts for [✂] of net revenues from scheme and processing services. [373] As such, the value generated by the system benefits both issuers and acquirers, but is mainly funded by acquirer fees, while [✂]% of the gross fee revenue from issuers is offset by rebates and incentive payments.[374]

Customers have benefitted from increasing quality of service

<u>What the card schemes told us</u>

6.45 The card schemes have stated that the quality of the services that they provide to customer are constantly improving – pointing to increased payments efficiency, system availability, analytical tools, fraud controls, etc.

6.46 Mastercard, in setting out its views on the value that it generates 'for consumers and … businesses both inside and outside the financial services sector' pointed to a number of areas where its quality of service had been improving:[375]

- Improving payment efficiency – giving examples including improving the chargeback process, and 'balancing user convenience and transaction security by introducing the Mastercard Digital Enablement Services (MDES), Mastercard's tokenisation service, which helped to reduce declined transactions in the UK by 58% in 2022.'
- Maintaining security and stability in the payments' ecosystem – for example, 'using the latest AI technology and working alongside issuers to identify suspicious activity and provide targeted information on real-time risks' and 'investing in the latest technology (e.g. Safety Net and Cyber Secure) to protect Mastercard against cyber-attacks' resulting in 'a significant fall in UK Account Data Compromise events, from 119 cases in 2016 to 37 in 2021.'

6.47 Visa listed the 'outcomes that matter most to end users' which are the result of its 'trusted and high-quality service' – pointing to:[376]

- **'Reliable and resilient payments infrastructure**: Visa's payment infrastructure is highly reliable, with 99.999% processing quality. We invest significantly to achieve and maintain this level/quality of service, which ensures that transactions between merchants and cardholders are processed seamlessly. We provide 27 different ways to route transactions across our network, which combines our triple redundant global data centres with our double-redundant data networks and access servers.'
- **'Rapid and seamless transactions**: Visa card payments offer consumers speed and convenience when making payments both in person and online, with near-instantaneous authorisation of transactions giving merchants the confidence that transactions will be successful. This speed and accuracy is supported by the significant investments we have made in advanced fraud-detection technology without which digital payments would be marred by repeat credential checking and false declines. Our Advanced Authorisation services use artificial intelligence to test the likely authenticity of transactions (500+ unique attributes are evaluated per transaction in about a millisecond). Globally, the Visa group has invested over

373 See paragraphs 6.72 to 6.81 on the balance between revenues from the issuing and acquiring sides.
374 See paragraph 6.74, below.
375 Mastercard response to PSR working paper dated 23 February 2023. [✂].
376 Visa response to PSR working paper dated 30 June 2023. [✂].

$10 billion in technology over the last five years, including to reduce fraud and enhance network security. This has helped prevent an estimated $25 billion in global fraud each year and has meant that incidents of fraud occur in less than 0.3% of Visa transactions for UK issuers.'

Our assessment

6.48 As the card schemes have stated, across some measures, such as security and reliability of service, there have been improvements over time. Responses from customers on the acquiring side of the schemes, in many cases, do not tend to support a view that quality of service has been rising in step with fee increases. Merchant views are summarised below,[377] while Chapter 7 sets out a number of areas where the quality of service is leading to poor outcomes for acquirers and merchants, for example, transparency of billing information in relation to mandatory versus optional fees, and triggers of behavioural fees.

6.49 The evidence that we have seen points to the introduction of new or improved services being accompanied by new or increased fees. It is not clear, therefore, that quality is rising in line with the level of fees being charged to customers.

6.50 Quality and innovation benefits that flow to issuers are not relevant (or, at least, are less relevant) to pricing on the acquiring side of the schemes.

Customers have benefited from innovation

What the card schemes told us

6.51 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'.[378]

6.52 Mastercard pointed to its role in driving innovation in the sector, for example, working 'with others to promote the adoption of new technologies and protocols such as Strong Customer Authentication (SCA)'. Mastercard also noted that its 'innovation requires substantial investment and comes with considerable risks. For example, contactless was a significant investment and commercial risk, but has driven significant benefit.'[379]

6.53 Visa listed the 'outcomes that matter most to end users' which are the result of its 'trusted and high-quality service'. These included 'innovative and dynamic functionality: Visa is responsive to consumer and merchant demands for increasing flexibility and innovative service offerings, and 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. For instance, we partnered with Lloyds Bank to launch a subscription management service that allows consumers to manage and cancel regular payments in a few simple clicks. This tool facilitated over 1.2 million subscription payment cancellations between summer 2021 and April 2022, bringing significant financial benefit to consumers.'[380]

377 See paragraphs 6.96 to 6.97 and 6.117 to 6.119, below.

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

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

380 Visa response to PSR working paper dated 30 June 2023. [✂].

Our assessment

6.54 As set out in a number of submissions from the card schemes, the payment sector has seen a lot of innovation in recent years – including from Mastercard and Visa, as well as innovation by other firms facilitated by the card schemes. Much of this innovation has been to the benefit of both the issuing and acquiring sides, including to the benefit of merchants and consumers. However, the evidence we have seen does not show such strong constraints from card schemes' incentives to innovate that we are then unconcerned about the pricing of scheme and processing services.

6.55 First, as set out in Chapter 4, while innovation is an important part of competition in the broader payments space, our provisional view is that the threat of innovation from new payment methods is not constraining Mastercard and Visa in their pricing of core scheme and processing services to acquirers and merchants.[381]

6.56 Second, there is some evidence that innovation – whether in new services or improvements in existing ones – tends to be accompanied by new or increased fees. As set out in Annex 8, in assessing the most material fee changes that Mastercard and Visa had introduced in the period 2017 to 2021, we found that:

- For Mastercard,[382] in most cases, changes to mandatory fees were not always associated with any specific service and were not usually directly associated with the introduction of new services, although Mastercard told us that the underlying services have undergone continued improvements. A small number of the increases of mandatory fees, however, were associated with the launch of new versions of services for cyber security and fraud detection.[383] Increases in optional fees were more likely to accompany the introduction of new services. Mastercard told us that the underlying services are constantly improved.
- For Visa,[384] while none the increases in mandatory fees in our selection was in response to the introduction of new services, Visa explained that the underlying services have undergone continued improvements. For optional services, increases to opt-in or opt-out fees often followed the introduction of new services or significant improvements to existing ones.

6.57 Third, as set out at paragraphs 6.72 to 6.81, below, the acquiring side accounts for the large majority of net revenue from scheme and processing services for both schemes. To the extent that much of the innovation delivered by the card schemes benefits the system as a whole – including issuers – even a situation where innovation is also benefiting merchants and consumers on the acquiring side could still lead to concerns about price-setting and competitive outcomes for some customers of the card schemes.

381 See paragraph 4.38.

382 See Annex 8, paragraph 8.66.

383 See Annex 8, paragraph 8.51.

384 See Annex 8, paragraph 8.108.

6.58 Fourth, Mastercard has stated that innovation can carry substantial costs and risks.[385] As set out below, our profitability assessment points to level of EBIT margin that could be above those that would be expected in a competitive market,[386] rather than supporting a finding that both schemes invest heavily in risky innovation.

Visa's transition from a membership model to a commercial model

<u>What Visa told us</u>

6.59 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. It submitted that:[387]

'… the acquisition of Visa by Visa Inc. in June 2016 started the transformation of Visa from being a member-owned association to a fully commercial entity – broadly speaking, away from a closed "partnership" *of financial institutions and towards an open and independent commercial network. As part of this multi-year transition, Visa made several important structural changes to its core fees. Many of these changes were necessary to reflect the new commercial positioning of Visa and the competitive market in which Visa was now operating. …*

'Critically, the new commercial environment created a set of enhanced demands on Visa:

'(1) First, as a commercial business, our clients' (and their clients) expectations increased with regards to the resilience of our network. We have invested heavily in resilience to support our services, for example through the introduction of our global VisaNet network … Globally, VisaNet has a high reliability level, with more than 99.9995% of transactions being processed properly over the past decade.

'(2) Second, and in a similar way, our clients' (and their clients) expectations have increased with regards to the security and functionality of our network. ... In this context, as a commercial entity operating in a competitive environment, Visa has had to invest to provide a safe and secure payment infrastructure with low fraud risk that meets the changing needs of its clients and end-users.

'(3) Third, 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, services, and user experiences. This includes investing in three global data centres … and four global centres of innovation ...

'(4) Fourth, since the acquisition, Visa has had to invest heavily to enhance its channels of communication with clients. This includes among other things establishing a client facing division, [✂],[388] who work with clients on a range of issues that help enhance and drive client performance and business growth.

'Overall, the fundamental transformation of Visa Europe from a not-for-profit member-owned association to a commercial organisation post-acquisition has resulted in major benefits to our clients, including greater access to the global scale and resources of Visa's new parent company and the benefits of Visa Inc.'s global investment programme.'

385 See paragraph 6.52, above.

386 Our profitability assessment is at paragraphs 6.126 to 6.149, below.

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

388 See also [✂].

Our assessment

6.60 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 2022), 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. As such, this could be consistent with Visa fee levels 'catching up' to Mastercard levels. However, 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.

6.61 Our profitability assessment seeks to estimate Visa's level of profitability in recent years and to compare this to appropriate competitive benchmarks, as set out below.[389] The evidence we have seen – on pricing, profitability and on competitive constraints – shows that this 'commercialisation' of Visa pricing was not effectively constrained by competition, with evidence that profitability is likely to be above the level that we would expect to observe in a competitive market.

Mastercard adjustment of scheme and processing fees in 2017

What Mastercard told us

6.62 As set out in Annex 8, the composition of Mastercard's fees changed substantially in [✂].[390] [✂].

Our assessment

6.63 While the adjustment can be seen in the light of potential introduction of more competition for processing services, as set out in the Chapter 4, we provisionally found that the 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 and that we have seen no evidence of potential competitors seeking to enter the provision of core processing services in the UK.[391] As set out in our assessment of the competitive constraints on the card schemes' core processing services, it is possible that the lack of entry to the UK of alternative processors may be due to processing fees being already at or close to competitive levels.[392] Without evidence on the costs of core processing services for Mastercard and Visa, this possibility cannot be fully excluded, although the evidence of discounts for on-us transactions and of individual negotiations with acquirers in countries where alternative processors operate suggests that fees in the UK may be above competitive levels.[393]

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

389 See paragraphs 6.126 to 6.149.

390 See Annex 8, paragraph 8.44, Box 1 and Figure 1.

391 See paragraphs 4.148 to 4.150.

392 See paragraph 4.145.

393 See paragraphs 4.146 to 4.147.

Trends in scheme and processing revenues

6.65 In assessing the evidence on overall trends in the revenue that Mastercard and Visa generate from scheme and processing fees, we have looked at evidence on:

- Our analysis of the schemes' data on fee revenues, rebates and incentive payments
- Mastercard and Visa internal documents that relate to the revenue generated from scheme and processing by their UK businesses

PSR analysis of fee data

6.66 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.[394] As context to our pricing assessment, we set out five main points that emerge from this analysis of overall revenues. First, the total amount of gross revenue from both issuers and acquirers for scheme and processing services has increased over the five-year period that we looked at. For Mastercard, overall gross revenue from scheme and processing fees increased from [✂] in 2017 to [✂] in 2021.[395] For Visa, gross fee revenue rose from [✂] in 2018 to [✂] in 2022, [✂].[396] Transaction value increased from [✂] in 2018 to [✂] in 2021 for Mastercard and from [✂] in 2018 to in 2021 for Visa. Transaction volume increased in 2018 to [✂] in 2021 for Mastercard and from [✂] in 2018 to [✂] in 2021 for Visa.

6.67 Second, looking at average scheme and processing fees as a proportion of transaction value, for both schemes these increased in recent years – both in gross terms and in net terms, after adjusting for rebates and incentive payments to customers.[397] For Mastercard, average net fees that it received, as a proportion of transaction value, increased [✂]. For Visa, the net scheme and processing fees that it received, increased [✂].

6.68 Third, 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 [✂].[398] For Visa, the levels of gross scheme and processing fees were [✂].[399]

6.69 Fourth, focusing on the acquirer side, the total amount of gross fees paid by acquirers for scheme and processing services has [✂] over the past five years, with Mastercard's increasing from [✂] in 2017 to [✂] in 2021,[400] while for Visa gross fees [✂] from [✂] in 2018 to [✂] in 2022.[401] Transaction volumes and values also [✂] in this period, as set out above.

6.70 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 rising 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

394 Annex 6
395 Annex 6, paragraph 6.18 and Figure 10.
396 Annex 6, paragraph 6.18 and Figure 11.
397 Annex 6, paragraph 6.83, Figures 26 and 27.
398 PSR analysis of Mastercard data.
399 PSR analysis of Visa data.
400 Annex 6, Figure 21.
401 Annex 6, Figure 24.

2021. For Visa, the equivalent share is much lower, although also increasing over time – from [✂]% in 2018 to [✂]% in 2022.[402]

Our provisional finding

6.71 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 2021, and by [✂]% for Visa between 2018 and 2022. While both Mastercard and Visa have seen [✂] 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.

Fees charged to the acquiring and issuing sides

6.72 In assessing the evidence on the balance between the acquiring and issuing sides of the schemes – in terms of fee revenue, rebates and incentive payments – from scheme and processing services, we have looked at evidence from:

- Our analysis of the schemes' data on fee revenues, rebates and incentive payments
- Mastercard and Visa internal documents that relate to the revenue generated from scheme and processing services by their UK businesses

PSR analysis of fee data

6.73 Looking at incentive and rebate payments made to issuers, acquirers and merchants, we found that, where the card schemes were able to allocate these to a specific activity,[403] 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 2021,[404] while for Visa the equivalent share was [✂]% in the period 2018 to 2022.[405] 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.

6.74 As set out in Annex 6, we looked at issuer and acquirer fees as a proportion of transaction values and found that:[406]

- Issuer fees are [✂] by incentives and rebates payments. For [✂] of total issuer fees paid to the schemes were offset by incentive and rebate payments for Mastercard (over the period 2017 to 2021) and for Visa (between 2018 and 2022).
- Acquirers [✂] on a net basis. Mastercard and Visa attributed an average proportion of [✂]% and [✂]% of total annual net fees to acquirer fees across all years respectively.
- The relative amounts that acquirers pay over issuers have increased over time. The proportion of net fees attributed to acquirers grew from [✂]% in 2018 to [✂]% in

402 Annex 6, paragraph 6.67 and Figure 21; paragraph 6.75 and Figure 24.

403 As set out in Annex 6, in relation to some of these payments in some years, Visa could not trace these to either the issuing or acquiring side of a client's business. For 2019 Visa was unable to allocate any such payments to the acquiring and issuing side of its client base. See paragraph 6.51 and Figure 18 of Annex 6.

404 Annex 6, Figure 17.

405 Annex 6, Figure 18.

406 Annex 6, paragraph 6.87, Figures 28 and 29.

2022 for Visa, with [✂]% in 2020. The same proportion for Mastercard grew from [✂]% in 2017 to [✂]% in 2021, with [✂]% in 2019.

Recent fee changes

6.75 As set out in Annex 8 and at paragraphs 6.101 to 6.113, 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.[407]

6.76 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 [✂].[408]

6.77 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 [✂].[409]

Mastercard and Visa internal documents on revenue generation

6.78 Our review of Mastercard's internal documents also found that net revenue generated from the acquirer side was [✂]. Our review of Visa's internal documents also found that net revenue generated from the acquirer side was [✂].

6.79 For Mastercard, we found that, in the UK, its core issuing business generated [✂].[410] One document forecast that in the UK in 2022 [✂], leading Mastercard's core business [✂].[411] 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, [✂].[412, 413]

6.80 For Visa, we found that its net revenue in the UK (and Ireland) was also [✂].[414]

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407 Annex 8, paragraphs 8.8 to 8.41.

408 See Annex 8, paragraphs 8.62, 8.63 and Figure 3.

409 See Annex 8, paragraphs 8.103 to 8.105, and Figure 7.

410 Annex 9, paragraph 2.51.

411 Annex 9, paragraph 2.51.

412 Annex 9, paragraph 2.52.

413 We understand these documents to 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.

414 Annex 9, paragraph 3.24 and Figure 17.

Our provisional conclusions

6.81 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 [✂]% of net scheme and processing fee revenue for Mastercard and Visa in the periods from 2017 to 2021 and 2018 to 2022 respectively. This pattern is consistent across the data that we have analysed for the period 2017 to 2022, as well as in our assessment of both schemes' internal documents on revenue generation and when focussing on the impact on acquirers and issuing 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

6.82 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
- Merchant submissions

PSR analysis of fee data

6.83 We looked at data on changes in revenue generated from individual fee categories on the acquiring side over the past five years. 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[415] and the proportion of card scheme acquirer fee revenue accounted for by these fee categories.

6.84 For Mastercard, its 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.[416] 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.

6.85 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, [✂].[417]

PSR econometric analysis

6.86 As set out above, our descriptive data analysis on the evolution of scheme and processing fees over the last five years suggests that the average acquirer fees increased significantly for Mastercard (between 2017 and 2021) and for Visa (between 2018 and 2022). 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,[418]

415 Again, this was 2017 to 2021 for Mastercard and 2018 to 2022 for Visa.

416 Annex 6, paragraph 6.93 and Figure 30.

417 Annex 6, paragraphs 6.96 and Figure 31.

418 Annex 7.

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. For Visa, we also look at whether acquirer fees have increased for mandatory (that is non-optional) services in our sensitivities. For Mastercard, the data it provided on fee revenue from its acquirers included a breakdown between mandatory and optional services for a subset of its acquirers, so the sample size was not sufficient to accurately estimate the average fee change for mandatory services only.[419] We did not undertake further disaggregated analysis for different fee categories, as the focus of this analysis was to examine cumulative changes in average acquirer fees *for all acquirers* as opposed to changes in individual service prices.

6.87 We also examined changes in scheme and processing fees charged on the acquiring side as part of the Card Acquiring Market Review.[420] 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.

6.88 Using regression analysis to control for the main transaction characteristics affecting Mastercard's and Visa's acquirer fees, we find that:

- Average fees increased by around [✂]% in real terms for Mastercard between 2017 and 2021. However, given that services that Mastercard identified as being optional account for [✂]% to [✂]% of Mastercard's total annual acquirer revenues and this share has been rising over time, we note that some of this estimated increase in Mastercard acquirer fees found in this analysis may be attributed to an increase in the take-up and use of optional services purchased by acquirers.
- Average fees increased by around [✂]% in real terms for Visa between 2019 and 2022. We looked at data from 2018 to 2022, [✂].[421] When estimating the regression analysis for mandatory fees only, we found [✂]% between 2019 and 2022. As such, we consider that the increase in Visa acquirer fees is unlikely to be explained by changes in optional services purchased by acquirers.

6.89 Based on these econometric estimates, the total scheme and processing fees that acquirers and merchants pay annually is at least £250 million [✂] higher due to these increases compared to the levels in 2017 (for Mastercard) and 2018 (for Visa).[422]

6.90 In response to our sharing a draft of our econometric analysis, 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.

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419 See Annex 7, paragraph 7.56.

420 See final report on the Card Acquiring Market Review, Annex 4, 3 November 2021.

421 As set out in Annex 7, at paragraph 7.40 (b), the data that we received from Visa [✂].

422 This calculation is based on: applying a [✂]% and a [✂]% increase to Mastercard's 2017 scheme and processing revenues of £[✂]; a [✂]% and [✂]% increase to Visa's 2018 scheme and processing revenues of £[✂].

6.91 Mastercard stated that:

a. Our estimates were based on too small a sample of acquirers, which may not account sufficiently for outliers. We disagree and consider our sample is sufficiently large to estimate an increase in average fee revenues after controlling for transaction mix for the population of all acquirers, as set out in Annex 7, paragraph 7.15b.

b. We had not run a coherent process to decide which variables to include in order to control for transaction mix when modelling fee changes. We have set out in more detail how we control for the main transaction characteristics of acquirers and how we appropriately account for the statistical significance of individual variables in our model, as set out in Annex 7, paragraph 7.49a.

c. We had not placed sufficient weight on our estimates of average gross fee revenue increases which were based on a sample of the largest acquirers for which we were able to look at mandatory scheme and processing fees only (and not revenue from optional services). We recognise that these estimates did not indicate that mandatory fees had increased for that sample of the largest acquirers. However, we note that such a sample is not large enough to produce reliably accurate estimates, as set out in Annex 7, paragraph 7.49c.

6.92 Visa stated that:

a. The modelling approach is not consistent with commercial realities. Visa stated that, for instance, the dependent variable does not reflect the complexity of the underlying fees, their different drivers, development of services and introduction of fees over time, or the optionality and avoidability of non-mandatory fees. We disagree and consider our analysis sufficiently controls for the main transaction characteristics of acquirers, finding an increase in [✂], as set out in Annex 7, paragraph 7.67c.

b. Our approach did not provide a reliable estimate of the coefficient on the 2022 dummy variable (the key variable of interest). In particular, due to a lack of joint and individual significance on our control variables; and a modest increase in an already high level of adjusted R-squared, consistent with overfitting in our specifications. As stated above for Mastercard, we have now set out in more detail how we selected variables for inclusion in our model and how we appropriately account for the statistical significance of individual variables, as set out in Annex 7, paragraph 7.67a.

c. Our results could not be reconciled actual fee changes identified by Visa, which Visa suggested was an indication that there were significant flaws in our underlying assumptions. While we acknowledge our estimates may not be sufficiently precise to identify fee changes from year to year, we consider they are sufficiently robust to conclude that there was a [✂], as set out in Annex 7, paragraph 7.67b.

Mastercard and Visa internal documents on revenue generation

6.93 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 [✂].

6.94 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 [✂].[423]

6.95 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,[424] 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'.[425]

6.96 Visa's internal documents show that [✂], with documents referring to [✂], made after the acquisition of Visa Europe by Visa Inc. in 2016.[426] These documents also include statements indicating that Visa [✂], with documents referring to Visa being [✂] and that it may [✂].[427] However, more recent documents indicate that [✂]. For example, [✂].[428]

Merchant submissions

6.97 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.[429] Nine merchants responded to our questionnaire, as well as [✂].[430] 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.[431] Two merchants said that they did receive a breakdown of fees but consider information provided about the fee levels for services as ambiguous and not sufficiently granular.[432]

6.98 Eight merchants told us that scheme and processing fees levied by Mastercard and Visa had increased in recent years:[433]

- Three merchants told us that overall scheme and processing fees have 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).

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423 Annex 9, paragraph 2.30.
424 Annex 9, paragraph 2.32.
425 Annex 9, paragraph 2.35.
426 Annex 9, paragraph 3.14.
427 Annex 9, paragraph 3.14.
428 Annex 9, paragraph 3.15.
429 See Annex 2, paragraphs 2.103 to 2.111.
430 See Annex 2, paragraph 2.103.
431 See Annex 2, paragraph 2.104.
432 See Annex 2, paragraph 2.104.
433 See Annex 2, paragraph 2.105.

- Three other merchants told us that both Mastercard's and Visa's scheme and processing fees had increased as a percentage of sales revenue:[434]
  - One told us that Mastercard fees increased by 40% and Visa fees increased by 33% since 2017.
  - [✂].[435]
  - 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 [✂].
- 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.[436]

Our provisional views

6.99 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 provisionally found that average fees [✂] in recent years in real terms, with average fees (as a proportion of transaction value) increasing [✂]% for Mastercard between 2017 and 2021 and by [✂]% for Visa between 2019 and 2022,[437] although some of the estimated [✂] for Mastercard may in part be due to an increase in the take-up and use of optional services purchased by acquirers in the period. 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

6.100 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

434 See Annex 2, paragraph 2.105.

435 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.

436 See Annex 2, paragraph 2.105.

437 See Annex 7, paragraphs 7.3 and 7.5.

Recent fee changes

6.101 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.[438] 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.

6.102 Visa and Mastercard introduced a large number of fee changes between 2017 and 2021.[439] 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.

6.103 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).[440] Our selection of Visa fee changes included two changes to processing fees and 15 changes to scheme fees.[441]

6.104 As set out in Annex 8, there are, however, some limitations to our analysis.[442] 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. [✂]. 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.[443] Mastercard told us that 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'.[444] 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.

6.105 Moreover, 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, in the presence of competitive constraints, 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.

6.106 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.

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438 Annex 8, paragraphs 8.8 to 8.41.

439 Annex 8, paragraph 8.11.

440 Annex 8, paragraph 8.14.

441 Annex 8, paragraph 8.22.

442 See Annex 8, paragraphs 8.130 and 8.131.

443 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 [✂].

444 [✂].

6.107 First, the rationale most commonly mentioned in the documents is 'reflecting the value of the service'. This is the case for 23 of the changes included in our selection across both Mastercard and Visa. It is particularly true for fee changes associated with a specific service, as opposed to fees for participation in the scheme. In most cases, however, 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.

6.108 Mastercard told us that: (i) [✂] 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'.[445]

6.109 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.[446] 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.[447]

6.110 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.[448]
- Mastercard's 2017 rebalancing of processing fees in preparation for the separation between the scheme and processing sides of the businesses in 2017. [✂].[449] We note, however, that competition has not materialised in the UK.

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445 Mastercard response to PSR working paper dated 30 June 2023 [✂].

446 [✂][✂]. 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 [✂].

447 [✂]

448 See Annex 8, paragraph 8.144.

449 [✂]

6.111 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 [✂].[450] The relevant internal document states that [✂][451] [✂].

6.112 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.

6.113 The documents suggest a high profitability target for new optional services, with some Mastercard documents showing expected gross margins between [✂] and [✂]%, [✂],[452] while one Visa document [✂].[453] 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.[454] Second, it is not uncommon in commercial organisations for management to be over-optimistic when estimating the expected profitability of new projects.[455]

Mastercard and Visa internal documents on revenue generation

6.114 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.

6.115 Mastercard's internal documents pointed to its UK business [✂] in more recent years, which was driven [✂]. The same documents indicate that the [✂].[456] We note that the UK [✂].[457]

6.116 In contrast, Visa's internal documents which we have reviewed pointed to the UK being [✂],[458] with the UK representing [✂].[459] An internal document from 2021 [✂].[460] [✂].[461]

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450 See Annex 8, paragraph 8.79. The relevant internal document identifies two reasons justifying the CNP fees charged in Europe, with one being that [✂].

451 [✂]

452 See Annex 8, paragraph 8.147.

453 See Annex 8, paragraph 8.121.

454 See Annex 8, paragraph 8.147.

455 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.

456 See Annex 9, paragraphs 2.3 to 2.17, [✂].

457 See Annex 9, paragraph 2.6.

458 See Annex 9, paragraphs 3.3 and 3.4.

459 See Annex 9, paragraph 3.3.

460 See Annex 9, paragraph 3.5 and Figure 14.

461 See Annex 9, paragraph 3.5.

Merchant submissions

6.117 As set out in Annex 2,[462] we received evidence from nine merchants in response to our questionnaire, as well as from [✂].[463] 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.[464] Four merchants told us that increases to fees could not be explained by changes to the type of transaction made.[465]

6.118 Five merchants commented on whether there had been innovation which could have benefited them:[466]

- 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 said that there have been very few useful innovations – with the Account Updater being noted as among the most useful.
- One said that Strong Customer Authentication (3D Secure) is an innovation that was brought in by schemes at a cost of between £0.02 and £0.15 per transaction.

6.119 Some merchants commented on whether behavioural fees could explain the fee increases:[467]

- 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 provisional finding

6.120 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 document of competition playing a role in constraining decisions on fees and fee changes on the acquiring side. Submissions from merchants also point to rising fee levels, with little evidence that they are, in merchants' experiences, associated with commensurate improvements in service quality or increases in the value that they receive from the card schemes' services.

462 See Annex 2, paragraphs 2.103 to 2.111.
463 See Annex 2, paragraph 2.103.
464 See Annex 2, paragraphs 2.107 and 2.108.
465 See Annex 2, paragraph 2.109.
466 See Annex 2, paragraph 2.110.
467 See Annex 2, paragraph 2.111.

Provisional conclusion on pricing outcomes

6.121 In relation to the card schemes' scheme and processing services, we have assessed evidence on pricing outcomes, in the context of our provisional finding of a lack of effective competition for core scheme and processing services on the acquiring side.[468] Our provisional conclusion is made up of the following four elements.

6.122 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 substantially – by [✂]% for Mastercard between 2017 and 2021 and by [✂]% for Visa between 2018 and 2022 – although both schemes' value and volume of transactions have risen substantially in this period.[469]

6.123 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 [✂]% of net scheme and processing fee revenue for Mastercard (in the period between 2017 and 2021) and for Visa (between 2018 to 2022).[470]

6.124 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 fees increased [✂] in recent years in real terms. Average fees (as a proportion of transaction value) increased by [✂]% for Mastercard between 2017 and 2021, and by [✂]% for Visa between 2019 and 2022.[471] Some of the estimated increase for Mastercard may in part be due to the increase in the take-up and use of optional services purchased by acquirers in the period; the econometric analysis did not control for this. 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, and with merchant views.

6.125 Fourth, looking at determinants of fee changes, our analysis of a set of specific fee changes finds very limited evidence that new fees were cost-reflective nor that pricing changes are driven by relevant cost changes. Consistent with our assessment of competitive constraints, we find little evidence that competition played a role in constraining these fee changes, especially as they impacted the acquiring side. Submissions from merchants also point to rising fee levels, with little evidence that they are, in merchants' experience, associated with commensurate improvements in service quality or with increases in the value that merchants receive from the card schemes' services.

468 See paragraphs 4.177 and 4.179.

469 See Annex 6, Figures 21 and 24.

470 See Annex 6, paragraph 6.87 (b).

471 See Annex 7, paragraphs 7.3 and 7.5.

Profitability

6.126 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).[472] This is to assess whether profits (or fees) are higher than would be the case in competitive markets.

6.127 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 around [✂]% net revenues for both card schemes, due to rebates [✂] scheme and processing fees paid by issuers. (see paragraphs 6.72 to 6.81).

6.128 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.

6.129 We explain our approach in more detail in Annex 10.

Card scheme EBIT margins

6.130 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.

6.131 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).

6.132 There is a significant difference in the EBIT margins for Europe[473] 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. [✂]% ([✂]) and 53% (the global accounts) for Mastercard on average over the period of 2018-2022.[474]

b. [✂]% ([✂]) and 64% (based on the global accounts) for Visa on average over the period of 2018-2022.[475]

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472 We have also considered whether to undertake a ROCE analysis, but have decided to prioritise our existing evidence gathering and analysis on the margin-based approach. This was because we have not currently considered it proportionate to extend our analysis (and likely the timelines for this review) in order to supplement the benchmark margin analysis with a ROCE analysis, when taking into account the purpose of and weight we are placing on the profitability analysis in this market review.

473 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, paragraph 4.3-4.9.

474 The fully loaded UK P&L accounts from Mastercard covered the period of 2019-2022, i.e. the lower end of the range is based on a four-year average.

475 Visa has submitted that [✂]. 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	Average
Mastercard fully loaded UK P&L accounts	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
MES – adjusted for intercompany transfers to MESL[476]	29.2	50.9	46.8	49.4	54.9	**46.2**
Mastercard Global	48.7	57.2	52.8	53.4	55.2	**53.5**
Visa fully loaded UK P&L accounts	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Visa Europe	57.5	60.7	53.6	60.2	67.0	**59.8**
Visa Global	62.9	65.3	64.5	65.6	64.2	**64.5**

6.133 The table indicates that:

a. Mastercard and Visa's global and European[477] operations are highly profitable, and the EBIT margins are relatively stable over the period of 2018-2022.

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 their global and European businesses, [✂].

   2. Visa's business in the UK is less profitable than the average for their global and European businesses, [✂].

6.134 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 (i.e., 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 are currently not persuaded that the cost allocation choices by Mastercard best reflect the economic benefits that Mastercard receives from its UK operations.[478] Mastercard's internal documents indicate that the margins

476 Mastercard submitted that: (i) the vast majority of revenues relevant to the UK operations are contained in the Mastercard Europe SA audited accounts (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).

477 For Mastercard we have looked at reported European EBIT margins, partially adjusted for intercompany profits for which information was publicly available.

478 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.

in the fully loaded UK P&L accounts [✂].[479] We consider that these costs could be considered temporary (e.g. they may reduce again as a proportion of revenues once [✂]). Whilst Mastercard pointed out that the level of rebates and incentives during [✂] and can therefore not be considered to be temporary, we note, for example, that Mastercard's internal documents, that we have reviewed, show that [✂]. In addition, or in the alternative, the way the [✂] 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 [✂].[480]

b. For Visa, this is primarily because the fully loaded UK P&L accounts include [✂].[481] 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

6.135 Mastercard said foreign exchange conversion revenue are out of scope of our market review. 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.

6.136 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. 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. For example, in [✂].[482] [483] We note that this is based on the assumption (which is strongly contested by Mastercard) that the costs 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.

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, [✂].[484]

6.137 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.

479 Mastercard said that most issuer support contracts were signed in 2020, with accounting effects from 2022 onwards.

480 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.

481 Visa has also only partially included FX conversion income in the fully loaded UK P&Ls in 2021 and 2022.

482 [✂]

483 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%.

484 [✂]

6.138 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. We also note that EBIT margins at the upper end of the range appear to be very high.

6.139 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 2022. These do not suggest that margins in the UK are expected to decline significantly in the near future. We have also reviewed internal documents, which [✂].[485] We set out in Chapter 4 that significant new market entry is unlikely in the near to medium term that would effectively constrain Mastercard and Visa on the acquiring side. [486]

6.140 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 provisionally 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. We have not found it necessary to conclude precisely on the *extent* to which this is the case at this stage.

Benchmark comparators

6.141 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. This is mainly because of the large combined market share of the schemes in the UK.

6.142 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.

6.143 Table 3 shows that their EBIT margins are in a range of 12-18% on average over the period of 2018-2022.

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%	**15%**	17%
OFX	13%	**18%**	21%

485 For example, [✂]

486 [✂].

6.144 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.

6.145 We currently consider that the comparators we have identified are the best available comparators, i.e., they have the closest similarities with Mastercard's relevant UK operations in that they most reflect the features set out in paragraph .[487] 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. In our view a comparator should not be deemed inappropriate just because it does not offer the same services as Mastercard and Visa.[488] [489]

6.146 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.

Our interpretation of the results

6.147 We have compared the schemes' EBIT margins to those of the benchmark comparators. We provisionally 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 53%) 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%-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.

487 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.

488 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.

489 We have not considered it necessary to undertake a fuller assessment at this stage 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 profitability assessment.

6.148 We consider that this evidence would 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 competitive constraints, 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. However, we have not been able to obtain, as part of our analysis thus far, a sufficiently narrow estimate of the level of economic profits, noting the wide range of possible margins set out above.

6.149 Our provisional view is that a robust estimate of the level of economic profits would require the collection of more suitable data that would also provide an enduring basis on which to monitor the schemes' profitability (and if appropriate to assess the effectiveness and proportionality of any regulatory intervention).

Provisional conclusion on outcomes

6.150 As set out above, in relation to pricing and profitability, we have provisionally found that:

- Mastercard and Visa 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 2021 and [✂]% for Visa between 2018 and 2022 – partly as a result of rising transaction volumes. (see paragraphs 6.65 to 6.71).
- On the issuing side, scheme and processing fees are [✂] by rebates and incentives that Mastercard and Visa pay to issuers, with the overall effect that revenue from the acquiring side accounts for [✂]% of net scheme and processing fee revenue for both card schemes in the period 2017 to 2022 (see paragraphs 6.72 to 6.81).
- Overall, fees paid by acquirers for core scheme and processing services have risen in recent years – with average fees (as a proportion of transaction value) increasing in real terms by [✂]% for Mastercard between 2017 and 2021 and by [✂]% for Visa between 2019 and 2022, although part of estimated increase for Mastercard may be due to the increase in the take-up and use of optional services purchased by acquirers in the period (see paragraphs 6.82 to 6.99).
- Evidence from our analysis of recent material fee increases and from merchant submissions pointing towards fees increasing with little evidence of direct links to any changes in relevant costs or service quality (see paragraphs 6.100 to 6.125).
- 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 2022, 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 53% (the EBIT margins in its global accounts). For Visa, the equivalent range was [✂]% to 64% (see paragraphs 6.126 to 6.149). We consider that this evidence is consistent with a finding that Mastercard and Visa's margins are higher than would be expected in competitive markets, and consistent with our provisional findings on the lack of competitive constraints on Mastercard and Visa in

the supply of core scheme and processing services, and some optional services, to the acquiring side.[490]

6.151 This is particularly concerning in the context of the provisional findings set out in Chapter 4 that there is a lack of effective competitive constraints on Mastercard and Visa in the supply of core scheme services to the acquiring side of the card schemes, and that it is likely that Mastercard and Visa are subject to ineffective competitive constraints in the supply of processing services, to acquirers and merchants in the UK. In relation to optional services on the acquiring side, alternative providers may provide varying degrees of constraint to Mastercard and Visa, with strong indications that lack of effective alternatives may result in Mastercard and Visa not facing effective competitive constraints in the supply of some of these services. Moreover, as Mastercard and Visa can provide a one-stop shop solution for core and optional services, they are in a stronger position than alternative providers of optional services.

6.152 While we recognise the limitations of our analysis on profitability and understanding of pricing, which prevents us from reaching a firm conclusion on the existence of unduly high prices or excessive profits (and to the level of any harm arising from it), we consider that our provisional findings set out above would be consistent with a finding of a lack of competitive constraints, with harm to customers on the acquiring side of both schemes.

6.153 As set out at paragraph 6.6,[491] most scheme and processing fee increases tend to be passed through to merchants. Merchants on IC++ pricing contracts, which account for the largest proportion of transactions by value, see these fees increase automatically, while, even under other contract types, most fee increases are passed on to merchants, 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.[492] As set out at paragraph 6.7,[493] we consider that, over time, merchant cost changes will be passed through, at least to some extent, to consumer prices. 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. We expect that any supra-competitive pricing would be to some material extent shared between UK merchants (in the form of reduced margins) and their consumers (passed on in the form of higher retail prices).

6.154 As set out in Chapter 5, competition for issuers results in competition between Mastercard and Visa in the supply of scheme and processing services on the issuing side, resulting in high rebates and incentive payments to issuers, in some cases more than totally offsetting the fees charged to issuers.[494] 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 provisionally 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 provisional finding of a lack of competition and potential harm to customers on the acquiring side is consistent with the

490 See Chapter 4, paragraphs 4.176 to 4.179.

491 See also paragraph 4.127.

492 See MR18/1.8, *Card-Acquiring Market Review: Final report*, paragraph 5.66.

493 See also MR22/2.6: *Market review of UK-EEA consumer cross-border interchange fees interim report*, 13 December 2023, paragraphs 6.19 and 6.20.

494 See Chapter 5, paragraphs 5.38 and 5.39.

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,[495] our ongoing market review of cross-border interchange fees charged to merchants on UK-EEA consumer transactions,[496] 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.

Questions for stakeholders

Question 11

- Do you have any views on our analysis and provisional finding that the revenue from the acquiring side accounts for the large majority of net scheme and processing fee revenue for both card schemes in recent years?

Question 12

- Do you have any views on our analysis and provisional finding that the average scheme and processing fees (as a proportion of transaction value) paid to Mastercard and Visa by acquirers have increased substantially in real terms in recent years?

Question 13

- Do you have any views on the extent to which changes in average fees levels in recent years have been accompanied by commensurate changes in:
    - The value to customers of the services provided by Mastercard and Visa?
    - The quality of service provided by Mastercard and Visa?
    - Innovation by Mastercard and Visa?
    - Aspects of the transaction mix or characteristics of acquirers or merchants that we may not have fully captured in our econometric analysis (see Annex 7)?

Question 14

- Do you have any views on our analysis and provisional findings in our profitability analysis? In particular:
    - Are there any factors that we have not covered in our report that may provide information on the relative profitability of Mastercard's and Visa's UK operations compared to their global and European operations?
    - Are there any other comparators that have greater similarity to Mastercard's and Visa's UK operations than those that we have identified in our report?

495 PS22/2: *Card-acquiring market remedies: Final decision*, 6 October 2022.

496 MR22/2.6: *Market review of UK-EEA consumer cross-border interchange fees interim report*, 13 December 2023.

7 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 materiality and impact and outline our intended next steps and suggested interventions.

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 followed up on some of the issues acquirers raised, to better understand the impact of these issues.

7.3 We also requested internal documents and information from Mastercard and Visa to help us understand their approach.

7.4 We have assessed this evidence in the round, looking at issuers' and acquirers' ability and willingness to access, assess, and act on information on the services they purchase from Mastercard and Visa.

7.5 In this chapter, we summarise the evidence from the schemes about the different ways in which issuers and acquirers can obtain information about fees, focusing on acquirers' experiences in practice.

Information from the schemes

7.6 Mastercard and Visa provided us with detailed information about the ways issuers and acquirers can obtain information about fees. We found that the primary options are to use the schemes' online portals, or contact the designated account handler.

Portals

7.7 Both schemes provide a business-to-business online platform which facilitates communication with their customers. Issuers and acquirers can access and download information from these online portals such as technical documents, billing information, pricing manuals and updates or 'bulletins'. These include information on services, fees and rule changes.

Mastercard Connect

7.8 Mastercard said that its portal, Mastercard Connect, gives all acquirers access to features, such as:[497]

- A resource centre offering self-service access to a consolidated billing system in near real time
- A separate 'technical' resource centre, used to communicate price changes to customers
- A chat function, which allows customers to interact in real time with customer support
- A help desk area from which queries are routed to the team best placed to resolve them

7.9 Mastercard said that Mastercard Connect averages [✂] logins every day[498], and that guidance is available for ease of use.

7.10 Mastercard also said that in 2022, the majority of queries raised through Mastercard Connect related to [✂].[499]

Visa Online

7.11 Visa told us that its portal, Visa Online (VOL), is a searchable database of material on all client-related matters such as articles, core rules and full fee schedules. It also provides tools and services that their customers can access at all times.[500] These include:

- Tools such as an analytics platform, a risk manager, and Visa Resolve, which helps resolve disputes and compliance cases
- An integrated Support Hub which allows customers to create cases and track responses, along with an online chat function
- Further help functions such as tutorials, webinars, FAQs, and an acronym glossary

Account managers and executives

7.12 As well as access to online portals, issuers and acquirers can contact specific staff at Mastercard and Visa for help. While there are several dedicated customer-facing roles, we focus on the role of account managers and executives.

7.13 Mastercard said that its 'account managers play a crucial role in overseeing relationships' and that they are in regular contact with acquirers, typically at least once every day.[501] It told us that the 'vast majority' of staff employed by Mastercard UK are in account management roles, ensuring customers have access to the information they need.[502]

7.14 Mastercard explained that account managers receive a [✂]. This allows account managers to [✂].[503]

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497 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].

498 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].

499 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].

500 Visa's response to the PSR's letter dated 22 June 2023 [✂].

501 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].

502 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].

503 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].

7.15 Visa told us that client relationships are 'one of the most important dimensions of its business'. Visa account executives are dedicated client relationship managers and the main point of contact for its clients.[504]

7.16 Visa explained that its account executives support customers with a wide range of issues. These include helping them to understand Visa's rules and regulations and any changes to services and fees. Visa said its account executives reach out to clients to discuss announced changes and answer any questions about them.[505]

Customer satisfaction surveys and improvements to service

7.17 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. This information is summarised below.

Mastercard

7.18 Mastercard told us that it uses its annual 'Voice of the Consumer' (VOC) survey to understand its customers' needs and gather feedback. It said that results from this survey received from acquirers include that:

- [✂].
- [✂].[506]

7.19 Mastercard provided some summary results from its VOC surveys ('VOC survey results').[507] The UK-specific results show that a majority of respondents in each year were issuers, which made up [✂]% and [✂]% of respondents in 2020 and 2021 respectively.[508, 509] We consider that this suggests that the overall VOC results gathered by Mastercard may be biased towards the views of issuers.

7.20 The VOC survey results also indicate that Mastercard uses the survey to track respondents' views on its performance against various key performance indicators such as strategy, innovation, account team, ease of doing business, and overall relationship.[510]

7.21 In addition to the VOC survey results, we also received other Mastercard internal documents which relate to the provision of information to Mastercard's customers. For example:

- One internal document sets [✂]. [✂].[511]
- Another internal document indicates that Mastercard [✂]. The slide states that [✂]. The slide also states that the [✂].[512]

504 Visa's response to the PSR's letter dated 22 June 2023 [✂].

505 Visa's response to the PSR's letter dated 22 June 2023 [✂].

506 [✂]. Mastercard's response to the PSR's letter dated 22 June 2023 [✂].

507 Survey results were provided for 2020 and 2021 for the UK and Ireland and for 2020, 2021 and 2022 for Europe in aggregate.

508 [✂].

509 The other respondent types considered are: Acquirer; Merchant; Digital Partner; and Government.

510 [✂].

511 [✂]511

512 [✂].

Visa

7.22 Visa told us that the Net Promoter Score is a widely used business metric[513] to assess customer satisfaction.[514] It told us that for its most recent survey (for financial year ending 2023) in relation to its UK and Ireland division:

- It received an overall score of [✂] (which is considered 'Great'), and the score calculated among acquirers with a focus on UK activity[515] was "high at [✂]".
- Overall, [✂]% of respondents submitted a score of 9 or 10 (out of 10).
- Overall, only [✂]% of respondents scored Visa less than 7.
- Overall, this score was an increase of [✂]% on the previous year.[516]

7.23 We reviewed a range of Visa internal documents that included information on customer views, including its Net Promoter Score. These indicated that:

- In the recent past, Visa has received [✂] net promoter scores from acquirers/merchants, as compared to other relevant stakeholders. For example:
  - An internal document dated September 2018 considers NPS scores [✂].[517]
  - An internal document dated 22 February 2022 states that [✂].[518]
  - An internal document dated 11 July 2022 sets out merchant and acquirer net promoter scores [✂].[519, 520]
- Visa's UK NPS has previously been [✂].[521] [✂],[522] [✂].[523] We note that Visa also submitted that [✂].[524]
- [✂]. For example:
  - [✂]. The email indicates ✂.[525]
  - A separate internal email chain dated March 2021 [✂].[526]

Improvements to service

7.24 Both schemes told us they continually seek to improve the experience of their customers.

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513 [✂].

514 For more information on Net Promoter Scores, see Net Promoter Score (NPS) & System | Bain & Company.

515 Visa said that [✂] acquirers fit this description.

516 Visa's response to the PSR's letter dated 22 June 2023 [✂].

517 [✂].

518 [✂].

519 [✂].

520 [✂].

521 A footnote in the document specifies that [✂].

522 [✂].

523 [✂].

524 Visa's response to the PSR's letter dated 22 June 2023 [✂].

525 [✂].

526 [✂].

7.25 Mastercard told us it is committed to 'being responsive to customer needs and preferences'.[527] It said that [✂].[528]

7.26 Visa told us that its approach to client engagement is 'fundamentally people focused' and it provides dedicated support.[529] It is proud of its recent customer satisfaction scores and considers that it has developed high levels of trust across its client base.[530] Visa also told us that it is committed to improving year on year and has made improvements and investments following client feedback.[531] Some examples of this include[532]:

- [✂].
- Introducing a self-service function to its support hub, as well as a 'testing portal' for customers to carry out their own testing on their own systems before implementing changes from Visa
- Increasing the number of dedicated account executives and client services staff available to provide help to customers

Issuers' experiences

7.27 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.

7.28 Issuers indicated that the schemes generally provide a broad overview only of the rationale for fee changes, but they do offer more information on request.[533] We were told of some instances where the card schemes may provide further assistance such as sharing data, analysis or impact assessments.[534]

7.29 Issuers told us that behavioural fees had influenced their behaviour.[535] Some believed that the change benefited the payment ecosystem.[536]

7.30 The majority of issuers could assess the impact of fee changes if they attempted to do so.[537]

7.31 However, for some issuers offsetting payments may be relevant to their response to a fee change. Issuers' incentives to assess the impact of fee changes will be reduced due to the rebates they receive from the schemes. For example, three issuers told us they may not assess the impact of a fee change or challenge it where they know rebates will mitigate it.[538]

527 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].
528 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].
529 Visa's response to the PSR's letter dated 22 June 2023 [✂].
530 Visa's response to the PSR's letter dated 22 June 2023 [✂].
531 Visa's response to the PSR's letter dated 22 June 2023 [✂].
532 Visa's response to the PSR's letter dated 22 June 2023 [✂].
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535 [✂].
536 [✂].
537 [✂].
538 [✂]. Rebates are discussed further in Chapter 5 and Annex 5.

7.32 Notwithstanding the generally positive experiences of issuers, a couple of issuers raised limited concerns in their submissions regarding the information they are provided relating to scheme and processing fees.[539] For example, one issuer said that fees are overly complex and the support received from the schemes is limited.[540]

7.33 However, we are satisfied that these concerns are not material and do not offset issuers' generally positive experience of interacting with the schemes.

7.34 We do not propose looking at customer experiences on the issuing side in any further detail.

Acquirers' experiences

7.35 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.

7.36 In relation to the issues described by acquirers, we have considered both the type and scale of impact on the acquirer, their merchants, and the market more broadly.

Materiality of issues

7.37 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 currently 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.
- **The proportion of the total acquiring market affected by the issue:**[541] 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.

539 [✂].

540 [✂].

541 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.

- **Acquirers' own estimates of the financial cost of the issue:**[542] Greater financial costs potentially indicate an issue is more material. However, we have approached these figures taking account of the apparent limitations of them, including those listed below. Some of these factors would suggest the figures quoted are underestimates of the real impact, while for others the impact is overestimated or unclear. The factors 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.
- **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.

7.38 We have used these factors to assess the submissions we received relating to acquirers' experiences of:[543]

- The quality of the information they receive on behavioural fees, and scheme and processing fees, (both mandatory and optional)
- Asking scheme staff to clarify the information they received
- Using the schemes' portals[544]
- Being charged behavioural fees that they/ their merchants did not trigger.

7.39 We note that the analysis set out below does not currently consider whether particular services and the fees charged for them are justified.

542 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 Bank of England | Database.

543 As set out in paragraph 7.4 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.

544 In this subsection we consider submissions relating to the format and functionality of the portals, rather than the quality of information provided.

Quality of information received: behavioural fees

7.40 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.[545] 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.

7.41 Acquirers described various issues related to understanding behavioural fees, including:

- Difficulty understanding the drivers and triggers of behavioural fees
- Having to purchase optional data or reporting to understand the drivers and triggers of behavioural fees
- Difficulty preparing for new or altered behavioural fees

Difficulty understanding the triggers and drivers of behavioural fees

7.42 Several acquirers told us that they struggle to understand the triggers and drivers of behavioural fees.

7.43 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.[546,547] Table 4 details some examples.

Table 4: Acquirer ability to understand triggers for behavioural fees

Scheme	Acquirer experience
Mastercard	One acquirer told us it had incurred over £85,000 of behavioural fees but could not understand how it had triggered them. It requested details of sample transactions that incurred the fees, but Mastercard indicated this would only be provided if the acquirer purchased a report at an additional cost. The acquirer explained that it ultimately chose not to do this, as the report did not explain what changes it would need to make to avoid the fees in future. The acquirer instead undertook a month of internal review and experimentation with potential solutions before understanding how to avoid the fees. The acquirer told us that the resource cost of this review meant that it could not pursue other projects.[548]
	Another acquirer said that [✂]. [549]

545 [✂].

546 In relation to Mastercard: [✂].

547 In relation to Visa: [✂].

548 [✂].

549 [✂].

Scheme	Acquirer experience
Visa	One acquirer noted a couple of recent behavioural fees for which it felt it had received inadequate technical detailed explanations. The acquirer described the time needed to follow up with Visa regarding such issues as an 'embedded overhead' in its business, which could lead to delays in communications to its merchants. Despite this, the acquirer also said in some cases that Visa provides supplementary information to support passing fees onto its merchants.[550]

7.44 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.[551] When they cannot pass on fees, acquirers told us that they absorb them,[552] or must include them in their blended pricing rather than passing on the fee specifically.[553] Table 5 details examples.

Table 5: Acquirer ability to pass on behavioural fees

Scheme	Acquirer experience
Mastercard	One acquirer said that for 'some specific fees Mastercard has even admitted that an acquirer simply cannot determine' if they are applied to a transaction, because Mastercard does not supply the necessary data. The acquirer indicated that it is therefore unable to identify transactions that incur fees.[554]
	Another acquirer said that although its account manager shares a monthly report on its performance, this does not allow it to identify a merchant triggering a behavioural fee. The acquirer requested that this information be included in the report, but Mastercard said that this would not be feasible as the report includes European-level data and was already large. The acquirer said that the fee cost it a total of over £360,000 up to February 2023. The acquirer said that given the level of information provided, it "makes it difficult for [the acquirer] to work with [its] customers to resolve the cause and pass on the fine to the relevant merchants". However, the acquirer also said that it has worked with its merchants to improve compliance.[555]

550 [✂].
551 [✂].
552 [✂].
553 [✂].
554 [✂].
555 [✂].

Scheme	Acquirer experience
Visa	One acquirer said that it 'often' has to ask for detailed data to understand behavioural fees. This can lead to additional costs and delay decisions regarding its response to behavioural fees. The acquirer said that it had passed no fees or fines to its merchants in the last calendar year. We note that the acquirer also described an instance of Visa providing detailed data 'on a goodwill basis', as the acquirer could not access the detailed report on the Visa platform because it had not completed the required 'build-out/investment'.[556] The acquirer said that regarding the need for additional data this was a one-off approach in order to allow the delivery of a change whilst system updates took place.
	Another acquirer described having difficulty identifying the trigger point of a behavioural fee. The acquirer said it was therefore unable to accurately model the fee for more than a year and decided during this time to underbill its merchants, at an estimated cost of 'millions globally'.[557]

Having to purchase optional services to understand behavioural fees

7.45 Several of the acquirers we contacted indicated in their responses that they have to purchase optional services (such as data or reporting) from Mastercard[558] or Visa[559] to understand behavioural fees. Unless they do this, they cannot correctly attribute them to the merchants responsible for triggering them.

7.46 Similarly, some acquirers described being encouraged to purchase optional services to better understand behavioural fees, when they contacted the schemes with related queries.[560]

7.47 Some acquirers provided information on the costs of the optional reporting they described. One acquirer originally reported an annual cost of [✂] [£750,000 to £1 million] for reporting from Mastercard on behavioural fees but has secured a waiver for said fee since.[561] Costs ranged between roughly £1,000 per month for a Visa report used to pass behavioural fees on to merchants,[562] to over [✂] per month globally.[563]

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Difficulty preparing for new behavioural fees

7.48 Several acquirers explained that they can face difficulties preparing for new or modified behavioural fees within the implementation periods Mastercard and Visa set.

7.49 Some of these acquirers told us that the schemes do not provide a sufficient notice period, and acquirers therefore cannot make the required changes in time.[564] A couple of these acquirers told us that they have received temporary waivers from the schemes under these circumstances, allowing them time to make the required changes.[565] We set out some examples in Table 6 below.

Table 6: Acquirer difficulties in preparing for new and altered behavioural fees

Scheme	Acquirer experience
Both	One acquirer said that it had experienced fees being applied 'retrospectively or based on previous performance', which it estimated had cost its business £50,000 to £100,000 per month. However, the acquirer also noted that in some instances it had received waivers from both schemes for a limited time period to allow it to make the technical changes required.[566]
Mastercard	One acquirer said that the average notice period is roughly six months, which is not enough to 'assess, design the specification and implement' the changes within its charging process. The acquirer told us that it had only a week's notice of a 'new threshold and fee billing event' for one fee, which was insufficient to analyse its financial impact. As a result, the acquirer is unable to recover the fees from merchants due to the complexity of making changes to billing mechanisms, especially considering the volumes of the fee changes.[567]

7.50 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.[568] Some acquirers indicate that this raises the cost they incur as a result of these changes.

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568 [✂].

Table 7: Acquirer experiences of querying new or altered behavioural fees

Scheme	Acquirer experience
Both	An acquirer said that when it queries changes to behavioural fees it is 'clear' that its scheme contact 'is no more aware of the changes' than the acquirer itself, and 'does not have any specific knowledge to facilitate a timely and effective implementation'. The acquirer told us that the resulting uncertainty must be factored into its margin, and ultimately raises prices to merchants. It also told us that where new behavioural fees are introduced unexpectedly, it may have to reprice its merchants that are charged using its blended pricing, which creates uncertainty for merchants.[569]
Mastercard	One acquirer said it could not complete the required changes to several behavioural fees within the notice period because its questions to Mastercard were not answered 'in a timely fashion'. The acquirer told us that when behavioural fees are unclear it cannot to pass them on the merchants, with the impact estimated to be 'in the range of hundreds of thousands of Euros'.[570]
Visa	One acquirer said that Visa typically gives six months' notice when introducing a new behavioural fee, which it considered insufficient to adequately prepare. The acquirer also gave the example of one fee which was introduced with six months' notice, subsequently deferred, and then further amended. It told us that the multiple changes made to the fee negatively impacted its ability to respond to the new fee. The acquirer also told us that it had sent Visa 22 emails over an 11-month period requesting *ad hoc* reporting to identify merchants incurring the fee, so that it could pass it on correctly. The issue was still unresolved at the time the acquirer submitted its response.[571] The acquirer said that [✂].[572]

Mastercard's response

7.51 Mastercard told us that it uses behavioural fees to 'ensure that acquirers (and issuers) invest in and adopt measures that keep pace with the evolving risks in the payment ecosystem', and that the 'predictability and functioning of the Mastercard payment network is highly dependent on users displaying good standards of behaviour.'[573]

7.52 Mastercard also told us that it works closely with acquirers to ensure they can understand and comply with behavioural fees. Mastercard said that behavioural fees are avoidable and are not charged when an acquirer displays 'good practice behaviour'. Mastercard also said that it takes a 'pragmatic approach in instances where acquirers highlight difficulty in adhering to the practices that would allow them to avoid paying behavioural fees.'[574]

569 [✂].
570 [✂].
571 25 July 2023.
572 [✂].
573 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].
574 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].

7.53 Mastercard explained that it gives acquirers [✂] to implement fee changes, and that it can extend this period in some cases. It stated that this notice period allows acquirers to understand the impact of fee changes and make any necessary operational changes.[575]

7.54 Mastercard said that it considers a 'number of factors' when assessing the impact and viability of imposing new behavioural fees. Mastercard stated that part of its considerations include assessing its customers' ability to make the associated changes within their organisation. It also said that acquirers' varying ability to implement new behavioural fees (due, for example, to older systems or underlying merchant behaviour) forms part of its consideration as to whether to impose a new fee. It also said that it does not implement new behavioural fees 'without a number of acquirers demonstrating the best-in-class behaviour prior to introduction', so that 'existing acquirer performance is the benchmark used for setting a behavioural fee'.[576]

7.55 In response to acquirer submissions that described having to purchase optional data, reporting or consulting to understand 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.[577]

Visa's response

7.56 Visa told us that in general acquirers are [✂].[578, 579]

7.57 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.[580] Visa explained that behavioural fees can tend to zero if issuers and acquirers choose to make those investments.[581]

7.58 Visa said that it reviews new and modified behavioural fees periodically to assess, for example, whether they are 'encouraging the behaviour change intended and if they reflect changing ecosystem conditions'.[582] Visa also said that its expectation is that for any given behavioural fee, the associated revenues will decline over time, as clients change their behaviours.[583]

575 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].
576 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].
577 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].
578 Visa's response to the PSR's letter dated 22 June 2023 [✂].
579 We consider that Visa's comments in this regard apply throughout this chapter, rather than to the topic of behavioural fees specifically.
580 Visa's response to the PSR's letter dated 22 June 2023 [✂].
581 Visa's response to the PSR's information request dated 12 January 2022 [✂].
582 Visa's response to the PSR's letter dated 22 June 2023 [✂].
583 Visa's response to the PSR's information request dated 12 January 2022 [✂].

7.59 Visa told us that it uses the [✂].[584] It said that following feedback from clients, it now aims: [✂].[585] Visa uses Visa Business News articles (VBNs) to give its clients advanced notice of changes to Visa's systems, scheme rules or fees.[586]

7.60 Visa uses its 'Business Enhancement Release' (BER) process to inform its clients on how to technically code for changes in their systems. BERs are a biannual process. Visa explained that the process covers [✂].[587]

7.61 Visa explained that [✂] before changes go live, to give clients time to understand the change, ask questions, [✂]. Visa said that it releases [✂] ahead of implementation. Table 8 below summarises the respective timings.[588]

Table 8: Visa's BER process structure

Version number	Publication date	Content
Version 1	[✂]	[✂]
Version 2	[✂]	[✂]
Version 3	[✂]	[✂]

7.62 Visa told us that it provides its clients with 'end-to-end' support for the changes set out in BER documents. This includes [✂].[589]

7.63 Visa said it had responded to feedback [✂].[590]

7.64 Visa said that the absolute number of queries it receives from acquirers during the implementation periods for fee changes is low. Visa also explained that any queries that are raised are 'generally resolved quickly'.[591] It also said that it collects client feedback specifically on its BER process and its April 2023 release received a Net Promoter Score of [✂]% and customer satisfaction score of [✂]%.[592]

7.65 We asked Visa to respond to input we received from acquirers regarding concerns around having to purchase optional data, reporting or consulting to understand fees. It said that 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'. Instead, Visa 'communicate[s] with clients about upcoming fees, including sharing technical documents to inform of any required system changes' with dedicated client teams being 'on hand to respond to any queries'. Visa said that these services are provided in the ordinary course of

584 Visa's response to the PSR's letter dated 22 June 2023 [✂].
585 Visa's response to the PSR's letter dated 22 June 2023 [✂].
586 Visa's response to the PSR's letter dated 22 June 2023 [✂].
587 Visa's response to the PSR's letter dated 22 June 2023 [✂].
588 Visa's response to the PSR's letter dated 22 June 2023 [✂].
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590 Visa's response to the PSR's letter dated 22 June 2023 [✂].
591 Visa's response to the PSR's letter dated 22 June 2023 [✂].
592 Visa's response to the PSR's letter dated 22 June 2023 [✂].

business.[593] It added that its consultancy services are 'wholly optional' and compete with other data and analysis services provided in the market.[594]

Our assessment

7.66 Mastercard and Visa's submissions outlined the support they offer acquirers and the process they use when introducing new behavioural fees. We think these submissions show that both schemes carefully consider how best to use behavioural fees to incentivise desirable behaviour. This is consistent with submissions from various acquirers describing the support they received from one or both schemes. However, a large proportion of the acquiring market continues to experience difficulties understanding behavioural fees, despite Mastercard and Visa's efforts.

7.67 We think the evidence gathered from acquirers indicates that the quality of information acquirers receive from the schemes often causes them difficulties understanding behavioural fees. The submissions also indicate that these difficulties can have different effects on the acquirers and the wider market.

7.68 Acquirers' submissions show that difficulty accessing and assessing the necessary information can raise their costs (see paragraphs 7.44, 7.46, 7.50 above). 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.

7.69 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 (see paragraph 7.44 above). 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.

7.70 We also note that evidence from acquirers sometimes conflicted with statements from the schemes. For example, while acquirers consistently described having to purchase 'optional' reporting to understand behavioural fees, Visa did not recognise the practice of acquirers 'having' to purchase 'optional' reporting to understand behavioural its fees (see paragraph 7.65) and sought further details about which events the PSR was referring to. As outlined in paragraph 7.55, 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. One acquirer also said that the schemes have implemented fees using notice periods shorter than those the schemes themselves describe (see Table 7). This difference in understanding seems likely to lead to undesirable outcomes for service users.

7.71 The large majority of acquirers we contacted, accounting for over 90% of the overall acquiring market, told us they experience difficulties understanding behavioural fees.[595] This suggests a significant scale of impact.

593 Visa's response to the PSR's letter dated 22 June 2023 [✂].

594 Visa's response to the PSR's letter dated 22 June 2023 [✂].

595 Market shares calculated on the basis of total Mastercard and Visa 2021 UK transaction value.

7.72 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,[596] with two acquirers indicating that these issues had persisted for over a year.[597]

7.73 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.[598] However, some acquirers told us that the financial costs of these issues were minimal or non-existent.

7.74 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.

7.75 Finally, acquirers also indicated that these issues also have impacts on merchants: reducing their ability to plan,[599] creating confusion around the scheme and processing fees that they are charged,[600] and increasing their costs.[601]

7.76 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.

Quality of information received: mandatory and optional fees

7.77 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.

7.78 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.[602]

596 [✂].

597 [✂].

598 As described at paragraph 7.37, 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.

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601 [✂].

602 [✂].

7.79 We can summarise the consequences acquirers described as follows:

- Increased costs due to pursuing those investigations[603]
- Inability to pass fees onto their merchants[604]
- Difficulty in conducting impact assessments[605]
- Potentially misbilling their merchants[606]

7.80 For example, one acquirer said that the complexity and number of fees charged by Mastercard makes it difficult to understand which fees relate to mandatory services, and which to optional ones. The acquirer told us that its Mastercard account manager provides 'little help clarifying' and that an intensive internal review had concluded it had purchased over £520,000 worth of optional services that it had previously thought to be mandatory. The acquirer told us that if it had understood that these services were optional, it would not have purchased them.[607]

7.81 Other acquirers told us that Mastercard[608] and Visa's[609] pricing bulletins do not always provide all the information they need to understand scheme and processing fees. This necessitates further engagement, or causes errors.

- One acquirer said 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. In the UK, this led to billing issues, [✀] £3 million and underbilling them over £1.2 million.[610]
- Two acquirers also said that Mastercard and Visa do not always provide enough notice for them to prepare for new fees.[611] One of these acquirers said that this can cause difficulty when Mastercard introduces mandatory new services, with 'very little time' to implement the acquirer's own product, where this is offered as an alternative.[612]

7.82 Some acquirers also noted that errors such as misbilling by one or both schemes[613,614] have led to retrospective billing or reimbursement. For example, one acquirer said that Mastercard had requested to 'claw back fees for several years' due to an error on its own side.[615] Another said that it 'regularly' has issues with both Mastercard and Visa where errors on the schemes' sides can lead the scheme to 'claw back' the money. This leaves the acquirer unable to appropriately charge their merchants for these fees.[616]

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616 [✀].

7.83 Some acquirers indicated in their responses that they have had to purchase optional data, reporting and consulting services from one or both schemes to understand their fees.[617,618] For example, one of these acquirers purchased consulting services from one scheme [✂] costing [✂] to enable it to pass fees on to its merchants.[619]

7.84 Some acquirers described unintentionally paying for optional scheme and processing services from Mastercard after being automatically opted into purchasing them.[620, 621] For example, one acquirer told us that opting out of one service it had automatically been enrolled in was a 'difficult process that required several weeks of back and forth with the Mastercard account manager.'[622] One of these acquirers told us it has since been reimbursed for one of the two services it purchased unintentionally.[623]

Mastercard's response

7.85 Mastercard said that its fees are set to reflect the value its users receive. It also told us that its mandatory fees are 'consolidated and straightforward' and that it seeks to reduce pricing complexity where appropriate. [✂].[624]

7.86 Addressing the impact of fee changes on its customers, Mastercard told us that it carries out impact assessments to inform its pricing strategy and its price-setting process. [✂]. These assessments inform internal discussions and are not shared with customers.

7.87 Mastercard considers that acquirers are better placed than it is to assess the impact of a fee change on their business and merchants. Mastercard said its analysis is based on historical data, and that acquirers may change their behaviour to influence the impact of a new or modified fee. Mastercard said that the acquirer will therefore be in a 'better position' to understand the impact of fee changes on its business.[625] Mastercard said that it provides a 'fee charge calculation' to help acquirers with this, which includes information about fee 'drivers' and their rationales.

7.88 Regarding optional services, Mastercard told us that acquirers will have an incentive to use a service only if it delivers value to them. Mastercard submitted analysis of the split of revenue of non-mandatory fees generated from the top UK acquirers by transaction value in 2021, which Mastercard said [✂].[626] Mastercard added that acquirers are [✂].

7.89 Addressing acquirers being automatically enrolled into optional services, Mastercard described the 'growing importance of "opt-out" services', stating that [✂].[627]

617 As set out in more detail in paragraphs 7.45-7.47 above, 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.

618 [✂].

619 [✂].

620 We note that acquirers did not give comparable examples of being opted into purchasing optional services from Visa.

621 [✂].

622 [✂].

623 [✂].

624 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].

625 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].

626 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].

627 Mastercard submission, May 2022 [✂].

Visa's response

7.90 Visa said it does 'not recognise [its] fees as complex given the efforts [it makes] to engage with [its] clients on changes, the resources clients have available to engage with Visa if they have questions on fees, and the fact that [its] full schedule of fees is available at all times on VOL, as is the full set of Visa Rules'.[628]

7.91 Visa also said that its clients are in the 'best position to review and determine the overall implications of fee changes for their business'. [✂].[629]

7.92 Visa told us that [✂]. However, as part of its response to our market review, Visa reviewed fee changes for UK clients over the period 2014-2021. Visa said this showed that the number of fee change approvals each year [✂]. Visa said that this [✂].[630] It also said that it has [✂].

Our assessment

7.93 The schemes' submissions outline their approach to communicating fees and fee changes to their customers. We consider 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.[631]

7.94 However, despite the schemes' efforts, a large proportion of the acquiring market reports issues relating to understanding mandatory and optional scheme and processing fees.

7.95 The acquirer submissions we reviewed indicate that the issues acquirers face relating to understanding these fees can increase their costs. For example, acquirers may:

- 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.

7.96 In some cases, the acquirer submissions also indicate that the difficulty understanding scheme and processing signals 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
- Unintentionally purchasing optional services, because they do not understand the services are optional or because they are automatically enrolled
- Difficulty appraising the possibility of self-supplying certain services

7.97 The scale of impact these issues had on acquirers and their merchants is significant. 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 90% of the total acquiring market.

628 Visa's response to the PSR's letter dated 22 June 2023 [✂].

629 Visa's response to the PSR's letter dated 22 June 2023 [✂].

630 Visa's response to the PSR's letter dated 22 June 2023 [✂].

631 Mastercard's analysis of variation in acquirers' take-up of optional services is considered in Annex 4.

7.98 The submissions indicate these issues had a range of impacts on individual acquirers.

7.99 For example, some acquirers reported financial costs amounting to hundreds of thousands of pounds. Similarly, some acquirers provided qualitative descriptions of substantial impacts, such as mispricing their merchants or being less able to make effective plans. However, others said that there were only minimal financial costs.[632]

Clarifying information

7.100 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.

Evidence from acquirers

7.101 Acquirers told us that they sometimes face difficulties successfully clarifying information from the schemes, with responses sometimes late or inadequate.

7.102 Acquirers said that it can take weeks or months to receive a response when they send questions to their contacts at Mastercard[633] and Visa.[634] They said that these protracted engagements with the schemes lead to additional resource costs,[635] and their inability to access information can lead to errors in assessing the impact of fees and pricing their merchants.[636]

7.103 For example, one acquirer said that both 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. The acquirer said that completing this engagement may require internal resources amounting to 'several thousands of US [dollars]' for one individual query, and 'tens of thousands of US [dollars]' over the course of a year.[637]

7.104 Another acquirer also told us that both Mastercard and Visa take several weeks to respond to its questions. It said that its inability to access the information it required had led to it absorbing costs and mispricing its merchants.[638]

7.105 Acquirers also told us that the quality of the responses that they receive from one or both schemes[639,640] can be inadequate. For example, the information can be insufficient, and subsequent responses may be contradictory or unclear. Acquirers indicated that these issues can lead to increased costs – for example because they are unable to pass on fees or because of the costs of addressing these issues.

632 As described at paragraph 7.37, 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.

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637 [✂].

638 [✂].

639 [✂].

640 [✂].

7.106 For example, one acquirer said that the information it receives from different Mastercard departments is vague and inconsistent. It said the issues have become more frequent in the last few years because Mastercard is making its fees 'increasingly complicated'. The acquirer also said that addressing these issues is 'extremely time-consuming and in general often unsuccessful'. It told us that these issues can have a negative effect on its relationships with merchants, as it is difficult to pass on fees to them promptly or transparently. Sometimes the acquirer may be unable to pass on fees totalling 'hundreds of thousands of Euros'. The acquirer said that the issues it faces create 'operational overhead' for acquirers, which is passed on to merchants.[641]

7.107 Another acquirer said that its contacts at both Mastercard and Visa provide 'late and unsatisfactory' responses. The acquirer also told us that these contacts demonstrate a 'lack of expertise around their own billing systems' and provide 'confusing' answers to the acquirer's questions.[642]

7.108 Some acquirers' submissions described recent improvements the schemes had made. A few said that one or both schemes[643] have assigned dedicated technical support staff to their account.

Mastercard's response

7.109 Mastercard told us that its annual customer survey indicates that acquirers 'often have a positive experience of accessing information through their account managers'. It pointed out acquirer account management teams received an average rating of [✄] between 2020 and 2022.[644]

7.110 Mastercard also told us that it had recently created a new role –the technology account manager – to further assist its clients.[645]

Visa's response

7.111 Visa said that it responds quickly to the vast majority of acquirer client queries. Visa told us that based on the support it provides to clients and the 'very positive feedback' it receives from clients, it believes it gives them the resources and support they need 'to confidently act on the information' it provides.[646]

7.112 For example, Visa said that its annual customer survey for the 2023 financial year found that [✄]% of acquirer clients rated it at least a 7 out of 10 when asked whether Visa 'effectively resolves their service and support requests'.[647]

7.113 Visa also explained that it also undertakes client satisfaction surveys to gather feedback after its client services team resolves a query. Visa said that it received a 'very high Net Promoter Score (NPS) for client services of [✄]' in the 2022 financial year.[648]

641 [✄].
642 [✄].
643 [✄].
644 Mastercard's response to the PSR's letter dated 22 June 2023 [✄].
645 Mastercard's response to the PSR's letter dated 22 June 2023 [✄].
646 Visa's response to the PSR's letter dated 22 June 2023 [✄].
647 Visa's response to the PSR's letter dated 22 June 2023 [✄].
648 Visa's response to the PSR's letter dated 22 June 2023 [✄].

7.114 Visa also submitted more detailed analysis of [✂] responses to client satisfaction surveys from [✂] acquiring clients[649] making queries between November 2021 and December 2022. Visa scored:[650]

- [✂] out of 10 in respect of 'ease of doing business'
- [✂] out of 10 in respect of 'availability of the case owner'
- [✂] out of 10 in respect of 'speed of the (query) acknowledgement'

7.115 The analysis also showed that [✂]% of respondents said that their query was resolved either sooner than expected or as quickly as they would expect.

7.116 Visa combined the scores it received in 'a number of separate categories' concerning clients' experience of query resolution to generate an overall satisfaction score out of 100.[651] This analysis also considered [✂] responses and yielded an overall score of [✂].[652] Visa described this as an 'extremely impressive score'.[653, 654]

7.117 Visa also submitted analysis examining the length of time required for Visa to respond to acquirer queries. The results showed that [✂]% of the queries included in the sample were resolved within [✂] days.[655]

Our assessment

7.118 The schemes have described various teams they employ to support acquirers with their queries. Mastercard has pointed out the creation of its 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.

7.119 Notwithstanding this, evidence shows that at least some 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 this further engagement
- Distort their responses to the schemes' pricing, for example by causing them to make errors in forecasting or billing their merchants

7.120 The scale of impact of these issues is in our view significant. 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 almost 90% of the total acquiring market.

7.121 The evidence we gathered indicates that the severity of impact on individual acquirers varied.

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649 Visa added that it had established this list based on [✂] in payments volume in the UK in Visa's FY2022, representing [✂]% of payment volume in FY2022.

650 Visa's response to the PSR's letter dated 22 June 2023 [✂].

651 These include the measures detailed in paragraph 7.114 above, as well as: the extent to which the client felt the case owner understood both their query and their business; the availability of the case owner; the knowledge and attitude of the case owner; and the speed/accuracy of case resolution.

652 Visa's response to the PSR's letter dated 22 June 2023 [✂].

653 Visa's response to the PSR's letter dated 22 June 2023 [✂].

654 Visa also told us that this is a voluntary survey and may therefore be expected to include [✂].

655 Visa's response to the PSR's letter dated 22 June 2023 [✂].

7.122 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.[656] Other estimates ranged between thousands[657] and hundreds of thousands of pounds.[658]

7.123 Acquirers also told us that these issues had various non-financial consequences. For example, acquirers described negative impacts on their relationships with their merchants[659] and on their ability to develop or progress certain projects.[660] However, one acquirer told us that the issues they experienced had no impact on their ability to make commercial decisions.[661]

7.124 Most acquirers told us that they had escalated these issues internally – for example, to senior management. We think this suggests the issues had a relatively severe impact.

7.125 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.

7.126 We note Visa's analyses of customer feedback on query resolution and Mastercard's summary of feedback to its customer survey. We think acquirers' reports of difficulty resolving issues likely relate to more complex questions, and may exclude more minor queries. By contrast, we understand that Visa's analyses[662] considered acquirer queries it received on a sample basis. This would include query types that can be more quickly resolved, such as questions from acquirers having difficulty accessing their account on the Visa portal, as well as more complex queries which may require a specialist team. Similarly, we understand that the feedback described by Mastercard covers the full breadth of its account management team's role, which includes assisting acquirers with both simple and more complex queries, as well as providing other support. This may explain the apparent discrepancy between the acquirers' and the schemes' submissions.

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658 As described at paragraph 7.37, 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.

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662 Specifically those setting out the results of Visa's 'Client Satisfaction Surveys' and the analysis described in paragraph 7.114.

Using the schemes' portals

7.127 Some acquirers indicated that they experience difficulty using the schemes' portals to access information.[663]

- Several acquirers told us that they struggle to access historical data using one or both schemes' portals.[664,665] Some acquirers said this is because historic notices are deleted.[666] Others said that this is because the search function in one or both schemes' portals is limited.[667,668]
- A few acquirers described difficulties understanding fees as the pricing bulletin codes used by one or both schemes' portals do not match those used on invoices.[669,670]
- A couple of acquirers also noted that Visa does not provide a PDF version of its fee guide, and that this can make it more difficult to review fees.[671]

7.128 Acquirers told us that these issues force them to engage further with the schemes, leading to additional costs.[672] Other acquirers reported incurring additional costs because difficulty accessing information impedes acquirers' ability to understand the impact of fee changes.[673] One acquirer said that the difficulty of accessing data through the portal leads to delays which increase the likelihood of fines, as it cannot make the necessary preparations in time.[674] In addition to increasing costs, another acquirer said these difficulties impede its ability to decide how to mitigate fee changes for its merchants.[675] Some said that the difficulty they face accessing the required information through the portal has an impact on their merchants - for example, because this increases the likelihood of its merchants being mispriced (including because fees cannot be passed on).[676]

7.129 The schemes' statements about their portals are set out above in paragraphs 7.8-7.11.

663 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.

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Our assessment

7.130 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 this 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

7.131 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 roughly half of the UK's acquiring market.

7.132 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.[677] Two provided a more general outline of the quantitative impact of fee complexity: one stated that [✂].[678] The other told us that it has unmodelled fees amounting to several million pounds, [✂] globally, due to the quality of information provided by Mastercard.[679] A few acquirers said that the financial costs are minimal or non-existent.[680]
- **Qualitative descriptions of impacts:** Acquirers told us that these issues cause delays in their decision making,[681] can lead to difficulties billing their merchants,[682] and create operational costs associated with reviewing the fees.[683] 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.[684] However, a couple of acquirers indicated that the issues they experienced had no impact on their ability to make decisions.[685]

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Behavioural fees charged to acquirers when not triggered by them or their merchants

7.133 Some acquirers told us they had been charged behavioural fees when neither they, nor their merchants, were responsible for triggering them.[686] These acquirers identified a variety of stakeholders responsible for triggering fees that they were then charged, specifically:

- **Fraudsters:** A couple of acquirers told us that fraudsters can make a large number of payment attempts on a given card by trying to guess its security number. This can trigger behavioural fees for acquirers. Both acquirers described measures they had taken to mitigate the impact of these fees, including [✂] educating merchants, and using additional fraud prevention tools.[687]
- **Third-party payment service providers:**[688,689] A couple of acquirers pointed out that they have limited influence or control over these suppliers.[690] One acquirer said the schemes do not give it sufficient time to coordinate with its third-party processors to resolve issues when they arise.[691]
- **Banks involved in the transaction:** One acquirer told us that its bank sometimes fails to meet settlement deadlines, leading to behavioural fees.[692] Another acquirer said that it is charged behavioural fees when the issuing bank involved in the transaction sends incorrect information.[693]

Mastercard's response

7.134 Mastercard said that its behavioural fees are avoidable and are not charged when an acquirer displays 'good practice behaviour' (see paragraph 7.52).[694]

Visa's response

7.135 When we asked Visa about behavioural fees being triggered by events outside acquirers' control, Visa said that it was unsure to which events the PSR was referring to and sought further details.[695] 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.[696]

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689 Although they did not make detailed submissions on these points, a couple of acquirers [✂] noted that behavioural fees may be triggered by their merchants' third-party providers.

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693 [✂].

694 Mastercard's response to the PSR's letter dated 22 June 2023 [✂].

695 Visa's response to the PSR's letter dated 22 June 2023 [✂].

696 Visa's response to the PSR's letter dated 22 June 2023 [✂].

Our assessment

7.136 Overall, we currently do not consider that the evidence we have seen suggests this issue 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. Therefore, we think these examples suggest the relevant behavioural fee is working to incentivise behaviour as the schemes describe. 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.

7.137 We also do not think the current evidence shows that the schemes have failed to provide necessary information to acquirers, or otherwise prevented them from avoiding these fees.

Provisional conclusions

7.138 In this chapter we have set out our assessment of the issues acquirers experience when accessing, assessing and acting on information from Mastercard and Visa. 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' abilities to respond to the schemes' price signals.

7.139 The poor outcomes we have observed include that:

- Acquirers experience consistent difficulty understanding behavioural fees, for the reasons set out in paragraphs 7.40-7.76. In addition to impacting acquirers' costs, the submissions suggest 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).
- Acquirers often experience difficulty understanding mandatory and optional scheme and processing fees, as set out in paragraphs 7.77-7.99 (that is, acquirers cannot always accurately assess the optional or mandatory nature of the services and fees in question).
- Acquirers often face difficulties clarifying information with the schemes, as discussed in paragraphs 7.100-7.126 (that is, they can struggle to access relevant information).
- Some acquirers experience difficulties accessing information through the schemes' portals, as set out in paragraphs 7.127-7.132.

7.140 We consider that these outcomes are below the standard expected in a well-functioning market. Moreover, given the prevalence of these issues in the acquiring market as a whole, we think that assessing individual instances in isolation may understate the associated costs and does not properly account for the full impact of these issues.

7.141 Overall, we have found evidence that acquirers' abilities to access, assess and act on relevant pricing information is below that we would expect in well-functioning market. On accessing information, we have found that the information that acquirers receive from Mastercard and Visa can be insufficient to understand the fees they are charged. In addition, these fees are overly complex and acquirers cannot readily assess them. This affects acquirers' ability to act on this information and can impact their merchants. For example, acquirers can find it difficult or impossible to accurately price their offerings to merchants.

7.142 For these reasons, we provisionally 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.[697] We set out our approach to intervention in Chapter 8.

7.143 We welcome comments on the provisional findings in this chapter, and in particular responses to the questions below.

Questions for stakeholders

Question 15

- Do you have any views on our analysis and conclusion that issuers have a generally positive experience regarding the information they receive from Mastercard and Visa (such that they are able to access, assess and act on that information)?

Question 16

- Do you have any views on our analysis and assessment of the materiality of issues experienced by acquirers?

Question 17

- Do you have any views on our analysis and assessment of our analysis in respect of behavioural fees, and acquirers' ability to pass these fees on to merchants (as set out in Table 4)? If so, do you have any experience and/or views how widespread the issues identified are and their underlying cause or causes?

Question 18

- Please provide your views on the prevalence (or otherwise) of acquirers having to purchase optional services to identify merchants incurring behavioural fees.

Question 19

- Do you consider that we have omitted issues of concern regarding non-price outcomes experienced by issuers, acquirers or merchants in our assessment? If you do consider that relevant outcomes have been omitted, please explain what these outcomes are.

697 As explained in paragraph 2.26 of this report, the PSR's 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 Potential remedies and next steps

This chapter outlines the possible action we are considering may be appropriate for addressing or mitigating the issues we have identified for scheme and processing services, contingent on our final conclusions.

Introduction

8.1 Our provisional conclusion is that the supply of scheme and processing services is neither working well nor working in the interests of all service users. Contingent on our final conclusions, we currently consider that it may be appropriate for us to intervene to address the issues we have provisionally identified.

8.2 We are concerned that Mastercard and Visa are subject to ineffective competitive constraints in the setting of scheme and processing fees.

8.3 We are considering what action we could take to improve outcomes for UK acquirers, merchants and consumers.

8.4 Our provisional conclusion is based on our provisional findings including that:.

- Mastercard and Visa do not face effective competitive constraints on the acquiring side (see further, Chapter 4, including the provisional conclusions at paragraphs 4.175 to 4.181).
- Mastercard and Visa have been able to significantly increase prices in recent years, with evidence pointing towards fees being increased with little or no link to changes in service quality (see further Chapter 6, including the provisional conclusions at paragraphs 6.150 to 6.154) and the reasons for pricing decisions being poorly documented (see further, paragraphs 6.101 to 6.116).
- The evidence we have gathered is consistent with a finding that Mastercard's and Visa's margins are higher than would be expected in competitive markets. However, Mastercard and Visa do not report full UK-specific profit and loss and balance sheet information in the normal course of business (see further paragraphs 6.147 to 6.149). As such, there is insufficient data available to us in order to reach a firm conclusion on the existence of unduly high prices or excessive profits (and the level of harm arising from it), noting the wide range of possible margins.
- Mastercard and Visa's scheme and processing fees are overly complex and the billing information that acquirers receive from the schemes is lacking in transparency, resulting in harm to customers, including acquirers and merchants (see further Chapter 7, including the provisional conclusions set out at paragraphs 7.138 to 7.142).

Action we're considering

8.5 We're considering actions to address the detriment we've identified. At this stage, we briefly outline our objectives and some potential high-level approaches we could take. We welcome early feedback and alternative proposals from stakeholders on how we could effectively address the concerns we have identified.

8.6 We expect to carry out further detailed work on the design of potential remedies, and we may still decide not to take any action**. We intend to consult further on potential remedies in the second half of 2024.**

Regulatory Financial Reporting

8.7 While we found evidence of substantial rises in the level of average scheme and processing fees paid on the acquiring side to both card schemes and a large difference between the level of revenue being generated from the acquiring versus the issuing side, we encountered significant challenges in looking at UK profitability. Mastercard and Visa do not report full UK-specific profit and loss and balance sheet information in the normal course of business.

8.8 The challenges we have encountered are outlined in more detail in Chapter 6 and Annex 10. Despite the production of bespoke datasets by Mastercard and Visa, these limitations in assessing UK profitability were not resolved. The principal challenges we have encountered include the exclusion of revenues or inclusion of costs, resulting in a lower UK profit margin, and the cost allocation choices made by Visa and Mastercard.[698]

8.9 If we had had access to more accurate information, we would have been able to make a more precise and robust assessment of harm and, if appropriate, pursue remedies to address the concerns we have identified on a more direct basis. Such remedies may have included a price cap or a form of price control. As set out further below, we are not currently considering a price cap.

8.10 As a result, we are considering requiring the card schemes to provide us with their UK financial information and performance on an ongoing basis (regulatory financial reporting, or RFR), to ensure that the PSR has access to sufficient information going forward to ensure that it has an accurate and consistent understanding of the financial performance of Mastercard and Visa's UK businesses.

8.11 This remedy would be targeted at Mastercard and Visa's UK activities, and it would require the card schemes to prepare reports comprising profit and loss and balance sheet information in relation to their UK activities. We envisage that these would be prepared in accordance with an appropriate methodology on an enduring basis.

8.12 We recognise that developing RFR will take time to get right, and that it may require investment and changes to the card schemes' processes. The additional remedies we are proposing that would require greater clarity around pricing decisions may, in time, also help to ensure that relevant information is prepared in a more granular and consistent way.

698 As set out at paragraph 6.134 and Annex 10

8.13 We consider that RFR has the potential to remedy the key shortcoming of our profitability analysis. Properly developed, it would be capable of providing us with sufficient information to understand how revenues, costs and profitability of the schemes' UK activities are changing over time. Given the increasing proportion of revenues that are associated with optional services, and the use of issuer incentive and rebates, we consider it appropriate that RFR applies to the full UK activities of Mastercard and Visa, including all international and cross-border transactions (including FX conversion revenues) and activities with a UK nexus.

8.14 We note that an RFR remedy for this market review has the potential to overlap with, or complement, the PSR's ongoing consideration of an appropriate form of regulatory financial reporting for designated payment systems.[699] This work is being led by our Supervision, Compliance and Monitoring (SCM) division. Any such work would likely go beyond the parameters of this market review and relates to the need for the PSR to have access to robust, reliable and timely information in relation to all designated payment systems.[700] We recognise that we would need to take appropriate steps to ensure the two forms of reporting, if implemented, operated in an efficient way.

8.15 Once RFR is in place, we would expect to have access to a robust set of indicators of profitability. These will enable the PSR, should intervention be merited, to take action to ensure that the supply of scheme and processing services is working in the interests of service users.

Pricing methodology and governance

8.16 We are considering requiring the schemes to take their pricing decisions in a more consistent and formalised way would mitigate the detriment we are seeing. We are primarily considering methods to improve decision-making processes around pricing and the introduction of new services. However, we could also expand the scope of a remedy to require, for example, a review of existing service pricing.

8.17 The aims of a remedy in this area would be to ensure that decisions were taken in a suitable way, both procedurally and substantively. Procedurally, this might mean that decisions are taken with a clear role for a UK-led committee or sub-committee. Substantively, it might mean that decisions need to be based on, or have regard to, specified considerations and that price increases are linked to underlying cost increases.

8.18 In this context, when we refer to 'UK pricing decisions' we include the decision to introduce new services and all changes to pricing affecting scheme and processing services in the UK. Our focus would be on the substance of decisions so that, for example, decisions taken by global or regional committees would be within scope if those decisions affected UK consumers or service users.

8.19 The remedies we're considering include requiring the card schemes to:

- Take UK pricing decisions via a governance structure that include a UK pricing committee or sub-committee

699 MR22/1.5.

700 In addition to Visa and Mastercard, such RFR may apply to some or all of the operators of Bacs, CHAPS, Cheque & Credit, FPS, LINK, and Sterling Fnality Payment System.

- Prepare a pricing methodology for approval (or non-objection) by the PSR, setting out how UK pricing decisions will be made in accordance with specified principles or outcomes, for example that all decisions relating to core scheme and processing services should be based on cost, whilst decisions relating to optional services should include clear evidence of why a service is considered optional
- Report to the PSR on a regular basis about the governance of UK pricing decisions

8.20 We consider that a pricing methodology may be supplemented by, or embody, the following obligations in respect of all UK pricing decisions:

- decisions must be recorded in writing;
- decisions above a minimum level must be taken by a minimum of two individuals, and all decisions must be recorded in writing, with reasons;
- each scheme must make available to the PSR a suitably senior individual to discuss their application of the pricing methodology;
- the schemes would in general be restricted from taking pricing decisions other than in accordance with the methodology; and
- the methodology should include criteria requiring that prices be determined with a view to ensuring adequate consideration of the interests of service users.

8.21 We consider that the effectiveness of such a remedy is likely to be enhanced if responsibility for compliance can be directed to a UK-specific pricing committee within the card schemes.

8.22 The pricing methodology and decision-making governance remedies we are proposing would place the schemes under positive obligations to consider cost, service quality and service users more generally before making pricing decisions. It may be possible to curtail the schemes' ability to rely upon abstract and often ambiguous concepts such as 'value' in taking pricing decisions.[701] We consider that such a package of remedies may be capable of having a disciplining effect on the schemes' pricing decisions. We also consider it may be capable of addressing (potentially in parallel with other remedies) the complexity and transparency issues we have provisionally identified.

Mandatory consultation and timely notification requirements

8.23 As provisionally found in Chapter 6, the schemes often have limited records of their pricing decisions. This means that we cannot verify the considerations that have informed those decisions. We also note our current finding, set out in Chapters 6 and 7, that changes to pricing are notified after they have been agreed and as set out in Chapter 7, although the schemes do notify acquirers in advance of fee changes, they can be substantially revised as close as five weeks before implementation.[702]

701 We consider this integral to the effectiveness of any proposed pricing methodology given that such a concept is ambiguous, and it can be difficult to satisfactorily demonstrate that an assessment of 'value' is not itself directly or indirectly influenced by the lack of effective competitive constraints the schemes face.

702 See Table 8.

8.24 We are considering potential remedies to address these issues:

- a requirement to consult acquirers on all fee changes before they have been approved internally;
- a requirement to report to acquirers and the PSR on how acquirer feedback has been taken into account in the development of fee policy; and
- a formal requirement to not implement fee changes until a specified period of time has passed.

8.25 We note that these requirements could be implemented in conjunction with a possible pricing methodology remedy by specifying the external engagement process that must be followed to implement fee changes.

8.26 We note that a formal consultation obligation has been suggested by a merchant [✂] as a way to improve the ability of merchants to understand and challenge fee increases.[703] Under this proposal, the card schemes would be required to provide merchants with an opportunity to provide representations before the implementation of significant fee changes. We recognise that such a development has the potential to bring about change in the dynamics underlying the four-party card scheme. Such a proposal could also fundamentally change card acquiring within the four-party model in ways that are difficult to predict and that may therefore result in outcomes that are disproportionate or that outweigh the benefits of such a remedy. We are therefore presently focusing on ways in which acquirers could be consulted, but consider further below ways in which merchants could be more actively involved in the development of new services.

8.27 We note that these remedies are also relevant to our consideration of complexity and transparency.

8.28 In addition to the above, and as considered below in relation to complexity and transparency, we consider that additional measures may be appropriate in relation to behavioural and optional fees, where there is evidence that at least some acquirers have been incurring fees in situations where the value they were deriving was unclear or ambiguous, or the scheme (or schemes) were unable to explain the basis for the charges.

8.29 We note that the headline amount of time Mastercard and Visa provide for fee changes obscures the reality that amendments to fee changes are often communicated days or weeks before they take effect. Visa itself has acknowledged negative customer feedback at the level of changes made to fees towards the end of the implementation process (see Table 8). Even under its revised process, however, changes can be made just five weeks before implementation. Given the complexity of scheme and processing fees, we have concerns that this may be insufficient time to allow systems to updated and appropriate adjustments made.

8.30 We are keen to hear from acquirers and merchants on whether it might be possible to use the existing time more constructively, for example, with one- or two-month consultation phase prior to any decisions being taken. This would depend on acquirers engaging with the consultation process and we recognise that they may have less incentive to highlight whether a fee can or cannot be implemented when it is hypothetical. Conversely, they are likely to have a significantly greater incentive to raise objections to a fee when it is hypothetical.

703 Stakeholder response to PSR working paper dated June 2023. [✂]

Complexity and transparency

8.31 We have provisionally found that scheme and processing fees are overly complex and lacking in transparency, and that this is not working in the interests of service users. 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' abilities to respond to the schemes' price signals.

8.32 We are considering potential remedies to address these issues:

- A requirement that behavioural fees are invoiced with sufficient detail, in an appropriate and accessible format, to ensure that acquirers can accurately pass the costs on to those merchants responsible for triggering them.
- A requirement that for all optional services they are clearly identified as optional through the development of clear service level descriptions setting out how and why they are considered optional, and are offered on an opt-out basis
- A requirement to provide clear information to merchants on how scheme and processing fees work, whether through bespoke materials or a dedicated web-portal. This might include a tool to allow merchants to understand what services a business of their size and industry would typically purchase. This tool might also include the ability for merchants to input information i.e. nature of their transactions to help get a better information relevant to their business.
- A developed taxonomy of scheme and processing fees, so that the classification of fees is consistently understood across the UK payments sector. If fees were wrongly classified as optional or mandatory, sanctions could be imposed and affected acquirers and merchants compensated.
- Requirements on the card schemes to reduce their number of services, either in the form of a broad obligation to demonstrate steps being taken over time to reduce their number of services or precise obligations to reduce their number of services by a specified number of percentage.
- Improvements to the ways in which information is made available through the schemes' portals.

8.33 A particular area of focus for our thinking in this area is likely to be in respect of SMEs, who lack internal expertise and familiarity with acquiring contracts. We consider that there is more that Mastercard and Visa can, and should, do to simplify the increasingly complex range of services provided via acquiring contracts to merchants. We recognise, however, that such interventions would need to be developed in a way that respects and reflects the variety of commercial relationships between acquirers and merchants. We are keen to hear from acquirers about ways in which they think Mastercard and Visa could help to improve understanding of scheme and processing services on the acquiring side.

8.34 More generally, we consider that any remedy or remedy package put in place to address the complexity and transparency issues we have provisionally found should deliver meaningful transparency. This should arise both directly, by bringing into focus considerations or aspects of the market that had hitherto been concealed or poorly understood, and holistically, by helping contribute to an enhanced ecosystem in which Mastercard and Visa are held accountable to a higher standard of transparency and clarity than they are at present.

Action we're not considering

Boosting competition

8.35 We have considered in principle whether we could do more to boost competition in alternative payment methods for card transactions in the UK.

8.36 We have provisionally found that there are very few alternative methods to pay for these transactions (see Chapter 4). In this regard, we consider that the work programme underway in the PSR to unlock the potential of account-to-account payments, including through Open Banking, could introduce more competition over time, leading to innovation, payment services that better meet the needs of end users and competitive [or efficient or more cost-reflective prices. The provisional findings in this market review emphasise the importance of this work, and we are considering what further action may be necessary to accelerate the introduction of structural competition in account-to-account payments. Our finding that Mastercard and Visa face ineffective competitive constraints underscores the importance of our existing work to unlock the full potential of open banking payments, including in retail use cases.

8.37 Therefore, noting that boosting competition is already an important part of the PSR's Strategy, we are not minded to explore further this type of action as part of this market review.

Encouraging steering

8.38 Merchants may 'steer' their customers to choose a payment method that is advantageous for the merchant.

8.39 We have considered at a principles level the implications of encouraging merchants to:

- provide a benefit or disadvantage for choosing a particular payment option
- use behavioural or visual cues to encourage customers to choose a particular payment option

8.40 This could include:

- nudging customers towards cheaper payment methods through user-interface design
- ordering the list of accepted payment methods
- reducing the friction for customers when they select the non-card-payment method rather than the card-payment method

8.41 In theory, if payers had wider access to alternative payment methods, merchants could use other ways to steer consumers towards payment methods beneficial for the merchant. Encouraging UK merchant steering could theoretically let those UK merchants avoid higher scheme and processing fees. However, we have provisionally found that there are currently limited alternative ways to pay for UK card transactions, and that the constraint 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. We have also provisionally found that merchants have limited ability and incentives to steer customers away towards them in response to scheme or processing fees, noting also that consumer steering often has limited impact and can 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.[704]

8.42 Against this backdrop, our current view is that remedies requiring merchants to actively steer their customers to choose a payment method beneficial for the merchant would not be effective in addressing the issues identified in this market review.

Price cap

8.43 We have considered in principle whether a price-control remedy may be appropriate – in particular, capping the level of scheme and processing fees, or categories of scheme and processing fees, currently set by Mastercard and Visa.

8.44 We have also considered what this might look like in practice. In addition, we have identified and considered potential timing issues, and how we might address them in the best interests of all service users.

8.45 We consider that the issues we have encountered gathering suitable data from the card schemes mean that it is not an appropriate response, at the present time, to the harm we have identified. Mastercard and Visa offer hundreds of scheme and processing fees, and whilst we have clear evidence of ineffective competitive constraints in the supply of core scheme and processing services to acquirers, we have also found that Mastercard and Visa compete on the issuing side of the market, and that there may be competition in the supply of certain optional services. As such, we think that it would be challenging, based on the evidence we currently have, to design a price cap that was consistent with our statutory objectives.

8.46 In reaching this provisional conclusion, we note that, whilst we do not consider a price cap appropriate for now, we would consider doing so in the future, either on the basis of existing information or improved information as might be available were we to implement remedies following this market review. We note also that, with access to better data, it is possible that the PSR may have reached an alternative conclusion.

Implementation and interim remedies

8.47 We note that it may be possible, for example, for certain measures to be implemented relatively quickly, for example the provision of training materials or billing guides to acquirers and merchants, and the establishment of a UK pricing committee or sub-committee. Other measures may take more time, for example the development of RFR or the notification and approval of a pricing methodology requirement.

8.48 We expect to carry out further detailed work to consider the most effective way to design and implement any potential remedies, including their proportionality, and we welcome views on the potential remedies set out in this chapter, or alternative options (including on their relative benefits, costs and potential ramifications). Before implementing any remedy package we would consider our most appropriate tool to do so, potentially giving one or more directions or imposing a requirement under FSBRA. We note that no decisions have been taken and the PSR may choose to pursue all or none of the above options.

704 See paragraphs 4.96 to 4.97.

Depending on responses to this consultation, we may decide that action is not warranted or that it is preferable to take alternative action to that set out above.

8.49 Taking the above considerations into account, we consider that it is possible that it may take up to two years for RFR to be fully implemented, and several years for the PSR to act upon the information gathered as a result, if necessary to do so. We therefore consider that it may be necessary or appropriate, in line with our statutory objectives, to put in place interim remedies (by which we mean alternative remedies to mitigate the issues we have identified in the short-term whilst developing our enduring remedies). Such remedies would require careful consideration, and may include placing obligations on the schemes to take certain steps before implementing price increases, for example requiring explanations of the basis for increases (including by reference to cost changes), and consultation with affected participants, including acquirers, merchants and merchant associations. Before implementing such a remedy, we would need to consider how to deal with the situation where one card scheme was in compliance and the other was not, without causing prejudice to service users or the card schemes.

Questions for stakeholders

Question 20

- What are your views on our proposed remedies? Which remedy or category of remedy set out in Chapter 8 do you think we should prioritise implementing?

Question 21

- Are any transitional provisions needed?

Question 22

- Please explain (with reasons) if you think we should be considering a regulatory financial report remedy?

Question 23

- Please explain (with reasons) if you think we should be considering possible mandatory consultation and timely notification requirement remedies?

Question 24

- Do you have any views on ways in which other stakeholders, for example merchants, merchant associations and consumer groups could participate in consultative discussions with the card schemes?

Question 25

- Please explain (with reasons) if you think we should be considering possible remedies to address complexity and transparency issues? In particular, do you think that more detailed, timely and accurate information in respect of behavioural fees would help acquirers and merchants? Do you think a taxonomy or system for classifying fees into different categories would help service users?

Question 26

- On the assumption that some or all of our proposed remedies are taken forward, do you have views on whether the costs (implementation or other) incurred by various market participants, including the schemes, issuers, acquirers and merchants, would be greater than the costs they would typically incur when a change in fees is announced? In other words, will the costs associated with implementing our remedy be captured (or absorbed) through 'business as usual' activity?

Question 27

- Do you agree that the initiatives we considered to boost competition are unlikely to achieve the outcomes we would want to see in a timescale that removes the need for regulatory intervention? Please explain your position either way.

Question 28

- Do you agree that the initiatives we considered to encourage surcharging or other forms of steering are unlikely to remove the need for regulatory intervention? Please explain your position either way.

Question 29

- Do you agree with that a price cap or price control could not be implemented following this market review given the issues identified in this interim report, in particular with regard to collective robust and reliable data from the card schemes? Please explain your position either way.

Question 30

- Should any remedies be time-limited? If so, please provide a recommended timescale together with your reasons.

Question 31

- Are there other remedies we should consider on either an interim or long-term basis? We would be particularly interested in evidence to demonstrate why any such remedy was proportionate and capable of being effective in addressing the problems we (or you) have identified.

Question 32

- Are there any relevant customer benefits that we should consider as part of our assessment of any possible remedies?

Question 33

- Is there anything else we have not considered, and you think we should consider?

Next steps

8.50 We welcome feedback on our provisional findings and our current views on potential remedies including our preferred remedies.

8.51 Please send us your comments by **5 pm on 30 July 2024**. You can email us at **schemeandprocessingfees@psr.org.uk** or write to us at:

Scheme and processing fees market review team
Payment Systems Regulator
12 Endeavour Square London
E20 1JN

8.52 We will consider the feedback and aim to publish a Final Report in Q4 2024. All steps after our Final Report are contingent upon our findings in our Final Report.

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12 Endeavour Square
London E20 1JN
Telephone: 0300 456 3677
Website: www.psr.org.uk