

Annex 6 to final report

Market review of card scheme and processing fees

Descriptive data analysis

March 2025

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

Annex 6

Descriptive data analysis

- 6.1** This annex sets out our descriptive analysis of card fees and activities associated with scheme and processing services. The analysis is based primarily on quantitative data and narratives submitted by Mastercard and Visa covering incentives and rebate payments, transaction activity and fees.
- 6.2** The purpose of this analysis is to inform our assessments of the factors that influence and may constrain how Mastercard and Visa set scheme and processing fees, and to identify the differences in the structure and level of scheme and processing fees charged to different scheme participants.
- 6.3** Our analysis of scheme and processing fees covers all fees associated with core scheme, core processing and optional services.¹ But we have chosen not to look in detail at any disaggregated trends in fees by service group (core scheme, core processing and optional services) in light of the issues raised in clearly delineating fees described in paragraphs 6.35 to 6.42.
- 6.4** Since our interim report publication, we have extended parts of our analysis, set out in more detail within the next paragraph, so that they cover the most recently available six- to seven-year periods for which we could obtain data from Mastercard (now covering the period 2017 to 2023) and Visa (updated to cover 2018 to 2023).
- 6.5** The annex is structured as follows:
- a. The first section sets out our analysis of the main characteristics of the provision of card scheme and processing services in the UK, including card scheme activities separately for issuers and acquirers. We have extended our analysis of card scheme characteristics since our interim report so that it covers the most recently available period up to 31 December 2023 for both Mastercard and Visa.
 - b. The second section provides an overview of the fees paid by clients (including issuers, acquirers and merchants) to Mastercard and Visa, including all incentives and rebate payments paid to clients by Mastercard and Visa. We have extended this analysis since our interim report so that it covers the most recently available six- to seven-year periods.
 - c. The third section sets out a description of the main drivers and categories of scheme and processing fees paid by acquirers for Mastercard and Visa, including how the main fee drivers and categories have evolved over time. We have updated our analysis of mandatory and optional fees so that it covers the most recently available six- to seven-year periods.

¹ With the exception of Visa's exclusion of non-core revenues earned by entities other than Visa Europe Limited (VEL), which accounted for [3-]% of total gross revenues in FY2022. This is calculated based on Visa's response to PSR questions dated 23 November 2022 [3-].

- d. The fourth section presents an analysis of how average fee revenues for Mastercard and Visa have evolved from 2017 to 2023 and 2018 to 2023 respectively, in aggregate and separately for issuers and acquirers, in two parts. First, we look at trends in total average fee revenues and for issuers and acquirers across all fee categories. We have extended this analysis since our interim report so that it covers the most recently available six- to seven-year periods. Second, we look in more detail at trends in acquirer fee categories from 2017 to 2021 and 2018 to 2022. We have left this analysis unchanged from our interim report.

6.6 In the last two sections we have mainly focused only on acquirer fees. As set out in paragraphs 6.49 to 6.50 and 6.53 to 6.56, it was not possible to capture the client-level incentives and rebates payments sufficiently accurately due to the limitations in the incentives data provided by the schemes. As a large proportion of incentives and rebates are allocated to issuers and only a small proportion to acquirers, these limitations have a large and material impact on our analysis of issuers but not on our analysis of acquirers. We have not looked at the fees paid by other clients of core scheme, core processing and optional services in this annex as these fees accounted for only a small proportion of total gross fee revenues.

Card scheme activities: characteristics

- 6.7** In this section we set out an analysis of the main characteristics related to the provision of core scheme, core processing and optional services in the UK, covering:
- a. the shares of total UK card transactions associated with core scheme, core processing and optional services by card scheme
 - b. changes in the types of UK card transaction associated with core scheme, core processing services and optional services made since 2017
 - c. Mastercard's and Visa's clients of core scheme, core processing and optional services
 - d. issuer card transaction activity associated with core scheme, core processing and optional services
 - e. acquirer card transaction activity associated with core scheme, core processing and optional services

Card schemes' shares of UK card transactions

- 6.8** The largest card schemes in the UK are Visa and Mastercard. Figure 1 shows the shares of the total value of card transactions where a UK consumer and/or a UK merchant was involved, for Visa, Mastercard, and other card schemes combined, involving cards of all types.^{2, 3}

2 Card types include: consumer and commercial credit cards, consumer and commercial debit cards, consumer and commercial prepaid cards, consumer and commercial charge cards, and other card types.

3 We note that this and our other analyses in this annex lead to the same or very similar conclusions if the volume of transactions is used instead of value. For this reason, we do not report any analyses on the basis of volume.

Figure 1: Shares of the overall value of UK card transactions

[2]

Source: PSR calculations of data from Visa, Mastercard and other card schemes operating in the UK in response to PSR questions dated 21 November 2022, 23 November 2022 and 11 January 2023 respectively [2].

Notes: UK card transactions defined as any transactions involving a UK cardholder, a UK merchant, or both. [2].

6.9 As the figure shows, we find that schemes other than Visa and Mastercard account for a small proportion of overall UK transactions across all card types, and this has not changed over the four years. We do not include these schemes in the rest of our analysis. Of the two largest schemes, Visa has been consistently larger than Mastercard in terms of the total number of cards issued. Visa has lost some of its share to Mastercard recently.

6.10 Not all card schemes active in the UK offer all types of cards. For example, American Express does not offer consumer debit cards other than prepaid debit cards. Mastercard and Visa both offer a broad range of card types⁴ but have different portfolios: Mastercard serves [2] while the [2] transactions processed by Visa are made using consumer debit cards. This is shown in Figure 2, which is based on 2023 data.

Figure 2: Value of UK transactions processed by Visa and Mastercard by card type (2023)

[2]

Source: PSR calculations of data submitted by Visa and Mastercard in response to PSR questions dated 19 July 2024 and 22 July 2024 respectively [2].

Note: UK transactions defined as any transactions involving a UK cardholder, a UK merchant, or both. The category 'Commercial Debit' includes the 'Commercial Debit', 'Commercial Charge' and 'Commercial Other' sub-types. 'Other' aggregates over 'Consumer Charge', 'Consumer Other', 'Consumer Prepaid' and 'Commercial Prepaid' sub-types. [2].

6.11 In the last three years (2021-2023) Mastercard has expanded its debit card business in the UK, gaining share from Visa. This is shown in Figure 3, which plots the share of Mastercard versus Visa in the UK by type of card. The figure excludes other card schemes (such as American Express), therefore the shares for the commercial and consumer credit card types are slightly overstated.

6.12 We also note that, as shown in Figure 2, Mastercard's debit card business has grown to such an extent that Mastercard now processes [2].

Figure 3: Mastercard's share of Mastercard and Visa UK transactions (by value) by card type

[2]

Source: PSR calculations of data submitted by Visa and Mastercard for September 2017 to December 2023 in response to PSR questions dated 21 November 2022 and 19 July 2024, and 23 November 2022 and 22 July 2024, respectively [2].

Note: The category 'Commercial Debit' includes the 'Commercial Debit', 'Commercial Charge' and 'Commercial Other' sub-types. Excludes other card schemes, therefore shares for credit cards are slightly overstated. Excludes 'Consumer Charge', 'Consumer Other', 'Consumer Prepaid' and 'Commercial Prepaid' sub-types. UK transactions defined as any transactions involving a UK cardholder, a UK merchant, or both. [2].

4 Card types include: consumer and commercial credit cards, consumer and commercial debit cards, consumer and commercial prepaid cards, consumer and commercial charge cards, and other card types.

- 6.13** As the figure shows, since 2017 Mastercard's share of consumer and commercial debit card transactions value in the UK vis-à-vis Visa [£].
- 6.14** The growth in Mastercard's debit card business can be attributed to some large issuers switching from Visa to Mastercard [£].

Trends in the types of transaction

- 6.15** The two figures below (Figure 4 and Figure 5) summarise the trends in the total volume and value of UK transactions processed by Mastercard and Visa respectively.

Figure 4: Value of Mastercard and Visa transactions in the UK (2018 to 2023)

[£]

Source: PSR calculations of data submitted by Visa and Mastercard in response to PSR questions dated 21 November 2022 and 19 July 2024, and 23 November 2022 and 22 July 2024, respectively [£].

Note: Total transaction value equals average of acquirer and issuer domestic transaction value plus cross-border acquirer transaction value and cross-border issuer transaction value.

Figure 5: Volume of Mastercard and Visa transactions in the UK (2018 to 2023)

[£]

Source: PSR calculations of data submitted by Visa and Mastercard in response to PSR questions dated 21 November 2022 and 19 July 2024, and 23 November 2022 and 22 July 2024, respectively [£].

Note: Total transaction volume equals average of acquirer and issuer domestic transaction volume plus cross-border acquirer transaction volume and cross-border issuer transaction volume.

- 6.16** The figures show that:
- Transaction value has increased from £[£] in 2018 to £[£] in 2023 for Mastercard and marginally increased [£] from £[£] in 2018 to £[£] in 2023 for Visa.
 - Transaction volume has increased from [£] in 2018 to [£] in 2023 for Mastercard and from [£] in 2018 to [£] in 2023 for Visa.
- 6.17** Since 2017 we have seen some changes in the types of card transaction made and consumer habits. The main changes we have identified are:

- A significant increase in the total value of UK transactions made by consumer debit cards, while the value of transactions by other card types grew more slowly. This is shown in Figure 6.

Figure 6: Value of Mastercard and Visa UK transactions made by consumer credit cards, consumer debit cards and other card types

[£]

Source: PSR calculations of data submitted by Visa and Mastercard in response to PSR questions dated 21 November 2022 and 19 July 2024, and 23 November 2022 and 22 July 2024, respectively [£].

Notes: Excludes other card schemes. UK transactions defined as any transactions involving a UK cardholder, a UK merchant, or both. [£].

- An increase in the proportion of CNP transactions increased in 2020, due to the impact of the COVID-19 pandemic, as shown in Figure 7. The proportion then reduced between 2021 and 2023 but has not returned all the way back to pre-pandemic levels.

Figure 7: Share of Mastercard and Visa UK merchant transactions accounted for by card-present versus card-not-present transactions

[3]

Source: PSR calculations of data submitted by Visa and Mastercard in response to PSR questions dated 21 November 2022 and 19 July 2024, and 23 November 2022 and 22 July 2024, respectively [3].

Note: Transactions with no data available for the Card Not Present/Card Present disaggregation are excluded.⁵

- c. A slight increase in the proportion of UK cardholder transactions made using consumer debit cards, at the expense of consumer credit cards. Figure 8 shows the proportion of consumer debit card transactions increased during the pandemic but has now returned close to the pre-pandemic level.

Figure 8: Proportion of Mastercard and Visa UK transactions (by value) made by consumer credit cards, consumer debit cards and other card types

[3]

Source: PSR calculations of data submitted by Visa and Mastercard in response to PSR questions dated 21 November 2022 and 19 July 2024, and 23 November 2022 and 22 July 2024, respectively [3].

Notes: UK transactions defined as any transactions involving a UK cardholder, a UK merchant, or both. [3].

- d. A reduction in the proportion of UK merchant card transactions accounted for by EEA cardholders, as shown in Figure 9. Although cross-border transactions by non-EEA (rest-of world (ROW)) cardholders also fell during the pandemic and after the UK's withdrawal from the EU in 2020, in 2022 and 2023 they returned to similar levels to those observed pre-2020.

Figure 9: Proportion (by value) of Mastercard and Visa UK merchant transactions made by EEA and rest of world cardholders

[3]

Source: PSR calculations of data submitted by Visa and Mastercard in response to PSR questions dated 21 November 2022 and 19 July 2024, and 23 November 2022 and 22 July 2024, respectively [3].

- 6.18** Some of these changes in the transaction mix may impact the total scheme and processing fee revenues paid by issuers and acquirers.

Mastercard's and Visa's issuers and acquirers

- 6.19** Figure 10 and Figure 11 show the gross revenues that Mastercard and Visa earned from different types of client.

Figure 10: Mastercard aggregate gross fee revenues attributed to different client types between 2017 and 2023

[3]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022, 22 July 2024 and 1 October 2024 [3].

⁵ Transactions with no data available accounted for less than 0.00% of total transaction value and less than £3m of transaction value in any given month in 2023.

Figure 11: Visa aggregate gross fee revenues attributed to different client types between 2018 and 2023

[redacted]

Source: PSR calculations of data submitted by Visa in responses to PSR questions dated 23 November 2022 and 19 July 2024 [redacted].

6.20 The figures show total gross revenues have increased from £[redacted] to £[redacted] ([redacted]%) between 2017 and 2023 for Mastercard,⁶ and increased from £[redacted] to £[redacted]([redacted]%) between the financial years 2018 and 2023 for Visa.⁷ We also find that:

- a. Total issuer fees accounted for [redacted]% to [redacted]%⁸ ([redacted] from £[redacted] to £[redacted] between 2017 and 2023) and [redacted]% to [redacted]%⁹ ([redacted] from £[redacted] to £[redacted] between the financial years 2018 and 2023) of total gross fee revenues for Mastercard and Visa respectively. [redacted]¹⁰ issuers for Mastercard (between 2017 and 2023) and [redacted]¹¹ issuers for Visa (between the 2018 and 2022 financial years) processed some transactions involving UK cardholders.
- b. Total acquirer fees accounted for [redacted]% to [redacted]%¹² of total gross fee revenues for Mastercard ([redacted] from £[redacted] to £[redacted] between 2017 and 2023) and for [redacted]% to [redacted]%¹³ of total gross fee revenues for Visa ([redacted] from £[redacted] to £[redacted] between the financial years 2018 and 2023). [redacted]¹⁴ acquirers for Mastercard and [redacted]¹⁵ acquirers for Visa processed some transactions involving UK merchants in between 2017 and 2023 and between the 2018 and 2023 financial years, respectively. [redacted]% of UK transaction value is accounted for by [redacted] acquirers for Mastercard in 2023, and by [redacted] acquirers for Visa in the 2023 financial year.
- c. Fees paid by other types of clients [redacted] accounted for [redacted]%¹⁶[redacted] in the 2023 financial year for Visa.

-
- 6 PSR calculation based on gross fee revenues reported in Mastercard response to PSR questions dated 21 November 2022, 22 July 2024 and 1 October 2024 [redacted].
 - 7 PSR calculation based on gross fee revenues reported in Visa response to PSR questions dated 23 November 2022 and 19 July 2024 [redacted].
 - 8 PSR calculation based on gross fee revenues reported in Mastercard response to PSR questions dated 21 November 2022 and 22 July 2024 [redacted].
 - 9 PSR calculation based on gross fee revenues reported in Visa response to PSR questions dated 23 November 2022 and 19 July 2024 [redacted].
 - 10 PSR issuer number based on Mastercard response to PSR questions dated 21 November 2022 and 22 July 2024 [redacted].
 - 11 PSR issuer number based on Visa response to PSR questions dated 23 November 2022 [redacted].
 - 12 PSR calculation based on gross fee revenues reported in Mastercard response to PSR questions dated 21 November 2022, 22 July 2024 and 1 October 2024 [redacted].
 - 13 PSR calculation based on gross fee revenues reported in Visa response to PSR questions dated 23 November 2022 and 19 July 2024 [redacted].
 - 14 PSR acquirer number based on Mastercard response to PSR questions dated 21 November 2022, 22 July 2024 and 1 October 2024 [redacted].
 - 15 PSR acquirer number based on Visa response to PSR questions dated 23 November and 19 July 2024 [redacted]. Acquirers with either no acquirer fees recorded or no transaction value recorded are excluded.
 - 16 PSR calculation based on gross fee revenues reported in Visa response to PSR questions dated 23 November 2022 and 19 July 2024 [redacted].

6.21 To identify clients that engage in both issuing and acquiring we made assumptions to exclude those clients that were charged almost all gross fee revenues¹⁷ for one of issuing or acquiring. Only clients which were charged more than 5% of total gross fee revenues attributed to both sides were classified as engaging in both activities.

6.22 Figure 12 shows the proportions of issuers and acquirer clients that engaged in both issuing and acquiring activity over the period from 2017 to 2021 for Mastercard and 2018 to 2022 for Visa. Issuers that were engaged in both activities accounted for more than [redacted]% and [redacted]% of total issuer gross revenues for Mastercard and Visa respectively. Acquirers that were engaged in both activities accounted for more than [redacted]% of total acquirer gross fee revenues for both schemes.

Figure 12: Proportions of aggregate gross fee revenues attributed to different types of client by activity for Mastercard (2017 to 2021) and Visa (financial years 2018 to 2022)

[redacted]

Source: PSR calculations of data submitted by Mastercard and Visa in response to PSR questions dated 21 and 23 November 2022 respectively [redacted].

Notes: 'Both' defined as gross fee revenues attributed to clients which were charged total issuer gross fee revenues and total acquirer gross fee revenues which each accounted for more than 5% of a client's total gross fee revenues. 'Issuer only' defined as issuer fee revenues attributed to clients which were charged total issuer fees, but not total acquirer fee revenues, greater than 5% of total gross client fee revenues. 'Acquirer only' defined as acquirer revenues attributed to clients which were charged total acquirer fee revenues, but not total issuer fee revenues, greater than 5% of a client's total gross fee revenues. 'Other' defined as issuer or acquirer fee revenues that accounted for less than 5% of a client's total gross fee revenues. Issuer and acquirer gross fee revenues for clients without transaction value in the same financial year are excluded. [redacted].

Issuer card scheme characteristics

6.23 As set out above in paragraph 6.20(a), there were [redacted] issuers issuing Mastercard cards between 2017 and 2023, and [redacted] issuers issuing Visa cards to UK cardholders between the 2018 and 2022 financial years. Some of these issuers were very small. The largest six issuers in 2018 accounted for [redacted]% of total UK cardholder transaction value, and this share declined to just over [redacted]% in 2023. The ten largest issuers in 2023 are shown in Figure 13 below.

Figure 13: Shares of Mastercard and Visa UK cardholder transaction value accounted for by the largest card issuers (all card types)

[redacted]

Source: PSR calculations of data submitted by Mastercard and Visa in response to PSR questions dated 21 November 2022 and 22 July 2024, and 23 November 2022 and 19 July 2024, respectively [redacted].

Notes: Excludes other card schemes. Value data was originally provided: [redacted].

6.24 As the figure demonstrates, the transaction value accounted for by issuers other than the largest six has been increasing. This trend is primarily driven by new entrants such as [redacted] and [redacted].

6.25 We have also assessed whether issuers use only one of Visa and Mastercard, or both. The data suggests that although many issuers do issue both Visa and Mastercard cards, these tend to be different types of cards (for example, a consumer debit card from Visa and a consumer

¹⁷ As defined in the next section.

credit card from Mastercard). In the majority of cases, issuers use only one scheme for a given type of card. This is particularly pronounced for consumer debit cards, as shown in Figure 14.

Figure 14: Number of issuers issuing Mastercard and Visa consumer debit cards to UK cardholders, by scheme

[2]

Source: PSR calculations of data submitted by Mastercard and Visa in response to PSR questions dated 21 November 2022 and 22 July 2024, and 23 November 2022 and 19 July 2024, respectively [2]. Excludes other card schemes.

Note: An issuer is considered to issue Visa or Mastercard consumer debit cards when at least 5% of the annual value of the issuer's transactions is attributable to Visa or Mastercard.

- 6.26** The figure shows that in 2018 and 2019 there were virtually no issuers having both a Visa and a Mastercard consumer debit card on issue. This number grew between 2020 and 2023. This is partly due to the transition period required for issuers that are switching from Visa to Mastercard to reissue all cards with Mastercard. One exception is Revolut, which issues both Visa and Mastercard cards.
- 6.27** Overall, this analysis shows that most issuers exercise a choice between Visa and Mastercard for a given card type.

Acquirer card scheme characteristics

- 6.28** As mentioned above in paragraph 6.20b, there were [2] and [2] acquirers that facilitated UK merchant transactions for Mastercard between 2017 and 2023 and for Visa between the 2018 and 2023 financial years respectively.
- 6.29** Figure 15 below shows the share of total UK merchant transaction value accounted for by the eight largest acquirers in 2023 and by others in aggregate.

Figure 15: Shares of Mastercard and Visa UK merchant transaction value accounted for by the largest acquirers and others (all card types)

[2]

Source: PSR calculations of data submitted by Mastercard and Visa in response to PSR questions dated 21 November 2022 and 22 July 2024, and 23 November 2022 and 19 July 2024, respectively [2].

Note: Excludes other card schemes.

- 6.30** The five largest acquirers in 2018 accounted for [2]% of UK merchant transaction value 2018, but this declined to [2]% in 2023. The significant growth in the share of smaller acquirers is driven by the expansion of entrants such as [2], [2] and [2].
- 6.31** Virtually all acquirers acquire both Visa and Mastercard transactions. Although the data we have collected included some acquirers that acquired UK merchant transactions from only one of the schemes, this accounted for a negligible proportion of total transaction value.

Overview of scheme and processing fees

- 6.32** In this section we provide an overview of the scheme and processing fees, for provision of all core scheme, core processing and optional services, charged by Mastercard and Visa, covering:
- a. the definitions of UK gross and net fee revenues
 - b. how scheme and processing fees are structured
 - c. incentives and rebates to clients (including all payments and contra revenue)

Definitions of UK gross and net fees

- 6.33** Visa and Mastercard earn gross revenue by charging issuers and acquirers scheme and processing fees. We refer to these as **gross fee revenues**. Some of these fees are offset by incentive payments and rebates paid by the schemes to issuers and acquirers. We refer to the balance earned by the schemes after deducting incentives and rebates payments (including payments that are not directly linked to gross fee revenues) as the **net fee revenues**.¹⁸
- 6.34** We asked the schemes to report all UK gross fee revenues from issuers and acquirers for all transactions involving a card payment (i) to a UK merchant and/or (ii) from a UK cardholder. Due to the global nature of Mastercard and some of its customers, it was not always possible for Mastercard to meet our definition for the UK nexus with respect to UK scheme and processing fees. The definition of UK activity used in our requests was not aligned with Visa's existing data systems, which meant that Visa was in some circumstances unable to extract data in a manner wholly consistent with our request. Consequently, in some circumstances manual methods were used in preparing datasets. Notably, to meet our UK definition, the card schemes needed to perform manual review and allocations of some [redacted].¹⁹ For example, Mastercard needed to make manual allocations for fees that cannot be matched to individual transactions. These fees usually apply to acquirers providing services on a Europe-wide basis, which are only partially related to the UK.²⁰

The delineation between core scheme and processing services

- 6.35** There can be multiple charges on a bill charged by the schemes to issuers and acquirers, triggered by a range of factors such as the volume and value of transactions that took place, the characteristics of transactions, and other (optional) services the clients may be purchasing.²¹ Relevant transaction characteristics may include whether the card was present or not, the locations of the merchant and cardholder and the type of card used (e.g. commercial or consumer, credit or debit). We set out these drivers in more detail in the analysis of acquirer fee structure in the next section, where we focus only on acquirer fees for the reasons set out in paragraph 6.6.

18 Merchants also pay an interchange fee, and an acquirer margin, in addition to scheme and processing fees as part of their bill for accepting card transactions. Card schemes do not receive interchange fees or the acquiring margin.

19 Mastercard response to PSR questions dated 21 November 2022 [redacted] and Visa response to PSR questions dated 23 November 2022 [redacted].

20 See [redacted].

21 Mastercard response to PSR questions dated 12 January 2022 [redacted].

- 6.36** The separation of scheme and processing entities was first introduced in the Interchange Fee Regulation (IFR)²² (see IFR, Article 7). The IFR defines:
- a. payment card scheme as a single set of rules, practices, standards and/or implementation guidelines for the execution of card-based transactions and which is separated from any infrastructure or payment system that supports its operation and includes any specific decision-making body, organisation or entity accountable for the functioning of the scheme (IFR, Article 2(16)); and
 - b. processing as the performance of payment transactions processing services in terms of the actions required for the handling of a payment instruction between the acquirer and the issuer (IFR, Article 2(27))
- 6.37** We consider scheme fees are those associated with payment card scheme services and processing fees are those associated with processing services. We sought to collect fee information having regard to the IFR requirements, covering the entirety of UK transactions, in line with our terms of reference²³ which includes all scheme and processing fees regardless of whether they are subject to the IFR.²⁴ Our data request therefore requested that the schemes provide information on scheme and processing fees defined as follows:
- a. Scheme fees were defined as all fees that arise as a result of customers being party to UK transactions, including all non-processing fees that are directly attributable to a transaction as well as fees that are paid as a condition of participation in the payment scheme.
 - b. Processing fees were defined as all fees paid by customers for the processing of transactions that arise as a result of them being party to UK transactions.
- 6.38** Mastercard provided fee information for all scheme fees and processing (which it refers to as 'switch') fees, in line with its internal record-keeping [redacted].
- 6.39** [redacted].²⁵ [redacted],²⁶ [redacted].^{27, 28} [redacted].
- 6.40** We allocated Visa UK [redacted].²⁹
- 6.41** Looking at the split between scheme and processing fees for UK transactions, we found that Mastercard's [redacted], as a proportion of transaction value, with both [redacted] between [redacted]. For Visa, the levels of gross scheme and processing fees were [redacted], but Visa's [redacted].

22 Regulation (EU) 2015/751 of the European Parliament and of the Council of 29 April 2015 on interchange fees for card-based payment transactions, OJ L 23, 19.5.2015, pages 1–15: [Regulation - 2015/751 - EN - EUR-Lex](#).

23 MR 22/1.2, Market review of card scheme and processing fees: Final terms of reference (October 2022), paragraph 2.9.

24 We understand that in some cases whether certain services and fees are subject to IFR is subject to interpretation for Visa. Visa submitted that [redacted].

25 Visa response to PSR questions dated 23 November 2022 [redacted].

26 Visa response to PSR questions dated 23 November 2022 [redacted].

27 [redacted]. Visa response to PSR questions dated 23 November 2022 [redacted].

28 [redacted].

29 We calculated this number using the financial data that Visa submitted for the financial years 2018 – 2023. Visa response to PSR questions dated 23 November 2022 and 19 July 2024 [redacted].

- 6.42** In light of the issues raised in clearly delineating between scheme and processing services, we have not differentiated our remaining analysis in this annex by core scheme, core processing and optional services and only present our analysis in aggregate.

Incentives and rebates to clients

- 6.43** The majority of incentive and rebates are made to issuers and acquirers. Based on our analysis, [X]% and [X]% of [X] by Mastercard and Visa, respectively.
- 6.44** The granularity of data the schemes were able to provide on incentives and rebates was limited. For example, some records of payments could not be linked to an individual client, or payments to clients that are acting as both an issuer and an acquirer could not be associated with one or the other side of the client's business. We provide more detail below.

Mastercard's payments to clients and revenue discounts

- 6.45** In aggregate, incentives and rebates amounted to [X]% of Mastercard's gross fee revenues between 2017 and 2023.³⁰
- 6.46** Data submitted by Mastercard showed that, in 2023, [X]% of incentives and rebates to clients combined across scheme and processing are not associated with fees (or groups of fees within a fee category) charged as part of gross fee revenues, while [X]% are associated with fees (or groups of fees within a fee category) charged as part of gross fee revenues.³¹
- 6.47** Within incentives and rebates payments that are not associated with fees (or a fee category) charged as part of gross fee revenues, Figure 16 below shows the main categories of such payments.

Figure 16: Mastercard's payments to clients by payment type where payments are not related to fees

[X]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022 and 22 July 2024 [X].

Note: [X].

- 6.48** We observe that:
- Incentives and rebates labelled as [X]³² accounted [X]. The [X] was mainly attributed to greater incentive payments to [X].
 - [X] are another [X] category which have [X] in value relative to 2017.
 - [X]³³ [X] relative to other incentive and rebate types between 2017 and 2023.

30 PSR calculation based on Mastercard response to PSR questions dated 21 November 2022, 22 July 2024 and 1 October 2024 [X].

31 PSR calculation based on Mastercard response to PSR questions dated 21 November 2022 and 22 July 2024 [X].

32 Mastercard response to PSR questions dated 21 November 2022 [X].

33 [X].

- d. Incentives and rebates point to Mastercard's [£], including [£] between 2017 and 2023.³⁴
- e. The 'Other' category, which comprised [£] accounted [£].

6.49 [£].³⁵ Figure 17 shows the allocation of Mastercard's incentives and rebates by client type.

Figure 17: Mastercard's total payments to clients by allocation to type of client

[£]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022 and 22 July 2024 [£].

Note: The figure aggregates over all clients and scheme and processing payments.

6.50 [£].³⁶

Visa's payments to clients and revenue discounts

6.51 In aggregate, [£] amounted to [£]% of Visa's gross fee revenues over the financial years from 2018 to 2023.

6.52 Visa identified a number of types of [£].³⁷

- a. For issuers, [£].
- b. For acquirers, [£].

6.53 In the data provided by Visa detailing [£].³⁸

6.54 Figure 18 below summarises Visa's data on incentives and rebates to issuers and acquirers.

Figure 18: Visa's total payments to clients by allocation to type of client

[£]

Source: PSR calculations of data submitted by Visa in response to PSR questions dated 23 November 2022 and 19 July 2024 [£].

Notes: The figure aggregates over all clients' scheme and processing payments. [£].

6.55 As the figure demonstrates, Visa could provide only aggregate data on [£].

6.56 [£].³⁹

34 Mastercard response to PSR questions dated 21 November 2022 [£].

35 Mastercard response to PSR questions dated 21 November 2022 [£].

36 We calculated this number using Mastercard's submitted data for the financial years 2017–2023. Mastercard response to PSR questions dated 21 November 2022 and 22 July 2024 [£].

37 Visa response to PSR questions dated 23 November 2022 [£].

38 Visa response to PSR questions dated 23 November 2022 [£].

39 We calculated this number using the financial data that Visa submitted for the financial years 2018 to 2023. Visa response to PSR questions dated 23 November 2022 and 19 July 2024 [£].

Descriptive analysis of acquirer fees

- 6.57** In this section we set out our descriptive analysis of acquirer fees, for all core scheme core processing and optional services, to identify trends in the main services that acquirers have paid for in recent years.
- 6.58** Since Mastercard's and Visa's fee structures comprise a large number of either individual acquirer fees or billing events,⁴⁰ we have not looked at the drivers and levels of individual fees or billing events. Instead, to allow us to analyse acquirer fee revenues on a more aggregated basis, we asked Mastercard and Visa to provide us with fee categorisations and used those categorisations to identify the main types of services acquirers have paid for and how they have changed over time. Although we consider that these fee categorisations allow us to undertake more informed analysis, we note that, since Mastercard and Visa's fee categorisations were not created on a consistent basis, we are unable to use them to assess the complexity of fee structures and make comparisons, as any trends we observe may be impacted by the different ways the two schemes have categorised fees. Nevertheless, the fee categorisations allow us to identify the main services and transaction characteristics (such as transaction volume and value) that have driven revenue from acquirers in recent years.
- 6.59** The analysis in this section captures only gross fee payments by acquirers, without accounting for incentive and rebate payments to acquirers. This is because data on incentives and rebates payments was not available at a sufficiently granular level. However, the payment data we received from the two schemes showed that payments that were allocated to acquirers were relatively small in aggregate, with most incentives and rebates payments allocated to issuers (as shown by our analysis in Figure 17 and Figure 18 above). Therefore, we consider that the omission of incentives and rebates payments from our acquirer fee analysis is unlikely to have a material impact on the conclusions we take from it.
- 6.60** We find that:
- a. Mastercard's four largest fee categories ([X]) each accounted for more than [X]% of acquirer fee revenues, and together accounted for [X]% of gross acquirer fee revenues in 2021. Visa's five largest fee categories [X] each accounted for [X]% of acquirer fee revenues, and together accounted for [X]% of acquirer fee revenues in the 2022 financial year.
 - b. Optional fees accounted for [X]% of acquirer gross fee revenues for Mastercard in 2023, while for Visa optional fees accounted for [X]% of acquirer gross fee revenues in the 2023 financial year. The levels and proportions of acquirer gross fee revenues that are optional has [X] Mastercard and Visa over the periods from 2017 to 2023 and from 2018 to 2023, respectively.⁴¹

40 Different cases when a fee may or may not be charged at different rates.

41 In relation to Visa, we note that the optional services identified in this context are not necessarily entirely consistent with the set of optional services considered for Visa in Annex 4, due to data issues, as set out in Annex 4, paragraph 4.30.

- c. The [£] were earned from fees driven by transaction value from 2017 to 2021 and from the financial years 2018 to 2022 for Mastercard and Visa respectively. However, for both schemes, the composition of acquirer fee revenues derived from different fee categories and drivers [£], and for both schemes the proportions of acquirer fee revenues that are driven by transaction value, and transaction volume and value combined [£].

Mastercard

Acquirer fee categories

- 6.61** Mastercard told us that it did not require the fee categorisation which we requested to be available for business purposes. So, to provide us with an appropriate fee categorisation, we asked Mastercard to create one that was closely aligned with an existing billing document ('the commercial billing hierarchy'), which Mastercard had created in 2020 to aggregate the fees and billing events outside UK/Europe that existed at that time.⁴²
- 6.62** Mastercard provided a breakdown of gross fee revenues by fee category,⁴³ as well as a description of each fee category. The [£] Mastercard fee categories, [£] of which accounted [£]. Figure 19 shows Mastercard's revenue from each of these categories. We have aggregated the acquirer gross fee revenues in the remaining fee categories outside the [£] into a single category – 'Other fees' – which is the largest category of fees in 2021 displayed in the figure.

Figure 19: Mastercard gross fee revenue by acquirer fee category between 2017 and 2021

[£]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022 [£]

- 6.63** We find that the four largest acquirer fee categories, [£] accounted for [£]% of total UK acquirer gross fee revenues in 2021:
- [£] accounted for [£]% of total acquirer gross fee revenues in 2021.
 - [£] accounted for [£]% of total acquirer gross fee revenues in 2021.
 - [£] accounted for [£]% of total acquirer gross fee revenues in 2021.
 - [£], which were [£], accounted for [£]% of total acquirer gross fee revenues in 2021.
- 6.64** The above figure also highlights that the composition of Mastercard's gross fee revenues from acquirers has been changing. For example, the revenue generated from [£], while the revenue from [£].
- 6.65** Mastercard also provided more aggregated groupings of each fee category.⁴⁴ These groupings provided limited insight for the largest fee categories. With the exception of [£] fee categories [£] and [£], all fee categories presented in Figure 19 accounted for [£]% [£]. Mastercard's fee category groupings allowed us to better identify trends within the [£] category presented in Figure 19.

42 Mastercard provided [£] in response to PSR questions dated January 2022.

43 Mastercard refers to these as 'Fee sub-groups'.

44 Mastercard refers to these as 'Fee Groups'.

6.66 [£] accounted for [£]% of total acquirer gross fee revenues in 2021. The [£] fee groups, [£]. Figure 20 below shows Mastercard’s revenue by each of [£] fee groups in [£].

Figure 20: Mastercard gross fee revenues within the ‘Other fees’ category by fee group between 2017 and 2021

[£]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022 [£].

Note: ‘Other Fee groups’ includes remaining revenues within ‘Other fees’ from the remaining fee groups.

6.67 We find that the [£] fee groups within [£] comprise:

- a. [£],⁴⁵ [£],⁴⁶ [£],⁴⁷ [£]⁴⁸ [£]⁴⁹ accounted for [£]% of total acquirer gross fee revenues in 2021.
- b. [£] accounted for [£]% of total acquirer gross fee revenues in 2021.
- c. [£] accounted for [£]% of total acquirer gross fee revenues in 2021.
- d. [£] accounted for [£]% of total acquirer gross fee revenues in 2021.

6.68 Except for [£] which [£], the remaining fee revenues within [£] have [£]. We find that [£] was driven by [£]⁵⁰ [£] and a longer tail of smaller fee groups.

Mandatory and optional fees

6.69 Figure 21 below shows the gross acquirer fee revenues that are earned from either mandatory or optional services. Most acquirer gross fee revenues earned by Mastercard are mandatory, but the level and proportion of acquirer gross fee revenues that are optional has increased between 2017 and 2023 ([£] from [£]% to [£]%).

Figure 21: Mastercard acquirer gross fees that are either mandatory or optional

[£]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 22 July 2024 and 1 October 2024 [£].

Acquirer fee drivers

6.70 Figure 22 shows the composition of acquirer fee revenue in terms of the activity drivers that generated the fees. We find that most acquirer fee drivers for Mastercard were a function of either the value or the volume of transactions.

Figure 22: Proportions of Mastercard acquirer gross fee revenues by fee driver

[£]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022 [£].

45 [£].
46 [£].
47 [£].
48 [£].
49 [£].
50 [£].

6.71 We find that most acquirer gross fee revenues ([£]) were earned from fees driven by transaction value,⁵¹ including drivers based on the value of all or a sub-type of transactions ([£]). Of the acquirer gross fee revenues driven by transaction value, [£] transactions accounted for an increasing proportion whereas [£] accounted for a decreasing proportion over the period. Smaller, but increasing, proportions of acquirer gross fee revenues were earned from fees driven by transaction volume ([£]) and from fees not driven by value or volume ([£]).

Visa

Acquirer fee categories

6.72 We requested that Visa provide a breakdown of gross fee revenues according to a fee categorisation, including a description of each fee category, for groups of fees contributing [£]% of its total UK gross fee revenues.

6.73 Figure 23 below plots Visa's gross fee revenues from the largest six acquirer fee categories (by revenue), which we find together accounted for [£]% of Visa's total gross fee income from acquirers in the 2022 financial year. Smaller fee categories (none of which individually accounted for more than [£]% of total gross acquirer fee revenues) are grouped into the category 'Other'.

Figure 23: Visa gross acquirer fee revenues by acquirer fee category between 2017 and 2022

[£]

Source: PSR calculations of data submitted by Visa in response to PSR questions dated 23 November 2022 [£].

6.74 We find that five of the acquirer fee categories shown each accounted for [£]% of Visa's acquirer gross fee revenues in the 2022 financial year:

- a. [£] in the 2022 financial year.
- b. [£] in the 2022 financial year.
- c. [£] in the 2022 financial year.
- d. [£]⁵² [£]⁵³ [£] in the 2022 financial year.
- e. [£]⁵⁴ [£]⁵⁵ [£] in the 2022 financial year.

51 Including the value of [£].

52 Clearing is the process of delivering final transaction data from Visa acquirers to Visa issuers for posting to the cardholder's account.

53 Settlement is the process of calculating, determining and reporting the net financial position of acquirers for all transactions cleared.

54 The authorisation process effectively confirms that the account exists, and that the cardholder has sufficient funds for the transaction, thus helping to reduce the levels of fraud and chargebacks. Not all transactions require authorisation, and some transactions are authorised multiple times.

55 VisaNet is a platform which records data on transactions facilitated by the Visa network following Visa Scheme rules.

6.75 We also note that the composition of Visa's acquirer gross fee revenues by category changed. Notably, the category [X], increased in terms of revenue more than some other categories and by the 2022 financial year was the largest source of Visa's gross fee revenues from acquirers.

Mandatory and optional fees

6.76 In our November Information Notices, we asked Visa to provide (among other things) information on fees levied on acquirers that represented [X]% of total UK scheme and processing fee revenue in the 2021 financial year; and to indicate whether each fee was mandatory, optional or a mix of both.⁵⁶ As stated in Annex 4, because this data was not sufficiently granular, we subsequently requested distinct and more detailed information to analyse the effectiveness of competitive constraints on the optional services Visa sells to acquirers in the UK.⁵⁷

6.77 Figure 24 below shows the acquirer fee revenues that are earned from either mandatory or optional services, based on the information we received in response to our November information notices. Gross fee revenues earned from optional services fees account for a small minority ([X]%) of total acquirer gross revenues earned by Visa, although the proportion of gross acquirer fee revenues that are earned from optional services fees has [X] between the 2018 and 2023 financial years (from a share of [X]% to [X]%).⁵⁸

Figure 24: Visa acquirer gross fees that are either mandatory or optional

[X]

Source: PSR calculations of data submitted by Visa in response to PSR questions dated 23 November 2022 and 19 July 2024 [X].

Acquirer fee drivers

6.78 Figure 25 shows the composition of acquirer fee revenues in terms of the activity drivers that generated fees within fee categories. We find that most acquirer fee drivers for Visa were a function of either the value or volume of transactions.

Figure 25: Proportions of Visa acquirer gross fee revenues by fee driver

[X]

Source: PSR calculations of data submitted by Visa in response to PSR questions dated 23 November 2022 [X].

6.79 We find that [X] acquirer fee revenues ([X]% to [X]%) were earned from fees driven by transaction value. [X] acquirer gross fee revenues were earned from fees driven by transaction volume ([X]% to [X]%) , including the volume of authorised and cleared/settled transactions, and from fees not driven by value or volume ([X]% to [X]%).

⁵⁶ PSR questions dated 23 November 2022.

⁵⁷ Annex 4, paragraph 4.30.

⁵⁸ The pink 'Unknown' bars denote fee categories containing a mix of optional and mandatory fees. These fees were treated as neither mandatory nor optional but were included in the denominator for these calculations.

Trends in average fees

- 6.80** This section sets out our analysis of how scheme and processing fees, for all core scheme, core processing and optional fees, evolved in recent years. It covers the trends in:
- The total average gross and net fee revenues related to UK transactions charged by Mastercard and Visa.
 - The average gross and net fee revenues related to UK transactions charged by Mastercard and Visa separately for issuers and acquirers.
 - The average acquirer fee revenues related to UK transactions within acquirer fee categories charged by Mastercard and Visa, controlling for transaction activity.
- 6.81** As described in paragraph 6.58, the fee structures are complex, with many different individual fees and drivers of fees contributing to the calculation of an acquirer's bill. Abstracting away from this fee structure, the metric we use to measure average fee revenues is the fees paid expressed as a percentage of the transaction value. For example, a 0.1% average fee revenue means that a £100 card transaction would be subject to a total of £0.1 (10 pence) of scheme and processing fees. We consider that this simplified metric allows us to view the overall evolution of fees over time, regardless of the precise underlying structure. We also consider that any increases in acquirer fees observed in this metric over time are 'real', as they are minimally impacted by inflation since most fee revenues are driven by transaction value and will automatically rise in line with inflation.⁵⁹
- 6.82** We note an upward trend in fee revenues over time could have a number of possible explanations. Mastercard and Visa may have raised the fees charged for the same services the two schemes provided in the past. An observed increase in average acquirer fee revenues could also be due to changes in the mix of transactions processed by each scheme, whereby transactions that attracted higher or additional fees have grown as a proportion of total transactions over time. Average fee revenue increases may be explained by a desire to sustain profitability if costs increase.
- 6.83** In this section:
- We observe that average total fee revenues and average acquirer fee revenues have increased for Mastercard between 2017 and 2023 and for Visa between 2018 and 2023. These average fee revenue trends do not control for transaction volume, value and mix.⁶⁰
 - We also look at trends in average acquirer fee revenues within individual fee categories after controlling for the relevant fee driver for the specific fee category (such as the value of cross-border transactions for cross-border fees). Although we find that average acquirer fee revenues increased within many categories and fell in others, we cannot use our analysis to conclude on the overall trend in average acquirer fee revenues.

59 We calculate that [3-] % to [3-] % and [3-] % to [3-] % of acquirer gross fee revenues are driven by transaction value between 2017 and 2021 and the 2018 and 2022 financial years for Mastercard and Visa respectively.

60 This is addressed in our econometric analysis set out in Annex 7.

6.84 Since we cannot conclude on the overall trend in average acquirer fee revenues after controlling for transaction value, volume and mix in this section, we have also undertaken econometric analysis in Annex 7 to examine whether there has been an increase in average acquirer fee revenues after controlling for transaction mix for the population of all acquirers. We then conclude on the overall trend in average acquirer fee revenues in paragraph 6.68 of Chapter 6.

Gross and net fees

6.85 Figures 26 and 27 summarise the overall average gross and net fee revenues, expressed as a percentage of total transaction value, charged by Mastercard and Visa, respectively, on scheme and processing services related to UK transactions paid by both issuers and acquirers in total.

Figure 26: Total gross and net fee revenues charged by Mastercard on UK transactions, expressed as a proportion of transaction value

[]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022, 22 July 2024 and 1 October 2024 [].

Note: Percentage of UK transaction value equals total gross and net fee revenues divided by the average of the total value of UK transactions involving a UK cardholder and the total value of UK transactions involving a UK merchant.

Figure 27: Total gross and net fee revenues charged by Visa on UK transactions, expressed as a proportion of transaction value

[]

Source: PSR calculations of data submitted by Visa in response to PSR questions dated 23 November 2022 and 19 July 2024 [].

Note: Percentage of UK transaction value equals total gross fee revenues and net fee revenues divided by the average of the total value of UK transactions involving a UK cardholder and the total value of UK transactions involving a UK merchant.

6.86 As the figures show, we find that there was a fall in the average net fee revenues earned by Mastercard between 2017 and 2023, and an increase in average fee revenues earned by Visa between the 2018 and 2023 financial years ([]). Based on our analysis:

- a. Mastercard net fee revenues (expressed as a share of transaction value) fell by []% from []% to []% of transaction value between 2017 and 2023. This fall is likely to be driven by a combination of [].
- b. Visa's net fee revenues (expressed as a share of transaction value) increased by []% from []% to []% of transaction value between the 2018 and 2023 financial years.

Fees paid by issuers and acquirers

6.87 We calculated the average combined total of scheme and processing fees expressed as a percentage of transaction value separately for issuers and acquirers. To calculate the net fee, where payments to clients were not allocated in the data to the issuing or acquiring side, we have made informed assumptions about the allocation (see explanation above in paragraphs 6.50 and 6.56).

6.88 The figures below (Figures 28, 29, 30 and 31) show the levels of Mastercard's and Visa's gross fees revenues, incentives or rebates, and net fee revenues from issuers and acquirers.

Figure 28: Mastercard's issuer gross fee revenues, incentives and rebates, and net fee revenues as a proportion of transaction value

[redacted]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022, 22 July 2024 and 1 October 2024 [redacted].

Note: Percentage of UK transaction value equals total gross, total incentives and rebates, and net fee revenues divided by total value of UK transactions involving a UK cardholder.

Figure 29: Mastercard's acquirer gross fee revenues, incentives and rebates, and net fee revenues as a proportion of transaction value

[redacted]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022, 22 July 2024 and 1 October 2024 [redacted].

Note: Percentage of UK transaction value equals total gross, total incentives and rebates, and net fee revenues divided by total value of UK transactions involving a UK merchant.

Figure 30: Visa's issuer gross fee revenues, incentives and rebates, and net fee revenues as a proportion of transaction value

[redacted]

Source: PSR analysis of data submitted by Visa in responses to PSR questions dated 23 November 2022 and 19 July 2024 [redacted].

Notes: Percentage of UK transaction value equals total gross fee revenues, total incentives and rebates, and net fee revenues divided by total value of UK transactions involving a UK cardholder. Other revenues, incentives and rebates (as defined by Visa's internal management classification) recorded under issuers are included in our calculations of gross and net fee revenues.

Figure 31: Visa's acquirer gross fee revenues, incentives and rebates, and net fee revenues as a proportion of transaction value

[redacted]

Source: PSR analysis of data submitted by Visa in responses to PSR questions dated 23 November 2022 and 19 July 2024 [redacted].

Notes: Percentage of UK transaction value equals total gross fee revenues, total incentives and rebates, and net fee revenues divided by total value of UK transactions involving a UK merchant. Other revenues, incentives and rebates (as defined by Visa's internal management classification) recorded under acquirers are included in our calculations of gross and net fee revenues.

6.89 The figures show that:

- a. Issuer fees are heavily offset by incentives and rebates. Incentives and rebates amount to [redacted]% and [redacted]% of total issuer gross fee revenues over the periods from 2017 to 2023 and the financial years 2018 to 2023, paid in aggregate to Mastercard and Visa respectively. The proportion of issuer gross revenues accounted for by incentives has [redacted] increased for both Mastercard (from [redacted]% to [redacted]%) and Visa (from [redacted]% to [redacted]%) over the period.
- b. Acquirers pay higher fees compared with issuers on a net basis. Mastercard and Visa attributed an average proportion of [redacted]% and [redacted]% of total annual net fee revenues to acquirer fee revenues across all years respectively.

- c. The relative amounts that acquirers pay compared with issuers has increased. The proportion of net fee revenues attributed to acquirers [£] for Visa. The same proportion for Mastercard [£].
- d. Acquirer gross fee revenues (expressed as a share of transaction value) marginally increased by [£]% between 2017 and 2023 for Mastercard, and significantly increased by [£]% between the 2018 and 2023 financial years for Visa. These increases are likely to be impacted by changes in transaction mix. For example, the reduction in the proportion of Mastercard acquirer transaction value accounted for by [£] between 2021 and 2023 (from [£]% to [£]%)⁶¹ is likely to have lowered Mastercard's overall acquirer fee levels, as some of Mastercard's largest acquirer fees are specific [£].⁶² As such, we consider the fall in Mastercard's acquirer gross fee revenues between 2021 and 2023 is likely to be partially attributed to transaction mix changes as Mastercard [£].

Acquirer fee categories

6.90 We used acquirer fee categories to look at whether, from the perspective of an acquirer, they paid more for the same service than they had in the past. To do this, we observed the rate of change in average fee revenues within fee categories when average fees are measured as a proportion of a category's fee drivers across the different categories of fees provided by Mastercard and Visa. To do this:

- a. We computed the fee (price) for each of the fee categories, expressing them as price per transaction activity (as set out in Table 1). The structure of fees varies by category: some fees are charged as a function (typically, percentage) of transaction value; some as pence per transaction; some are triggered only by specific types of transactions or events. Based on the information provided by the two schemes on the type of driver and the volume of underlying activity, we calculated the price per activity driver.
- b. We then calculated the percentage change in this fee (price) between 2017 and 2021.

6.91 We have also only captured gross fee payments by acquirers, without accounting for incentive and rebate payments, when analysing average fee revenues within fee categories for the reasons set out in paragraph 6.59.

61 PSR calculation based on transaction value reported in Mastercard response to PSR questions dated 21 November 2022 and 22 July 2024 [£].

62 For example, we note according to an internal document from March 2019 [£].

Mastercard

6.92 Table 1 sets out our analysis of the rate of change in average fee revenues across the different categories of Mastercard acquirer fee revenues.

Table 1: Mastercard changes in acquirer fee revenues per transaction activity by fee category

	Share of total gross revenues in 2021	2017	2018	2019	2020	2021	Cumulative change 2017–2021
Value fees (% of transaction value)							
[redacted]	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%
[redacted]	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%
[redacted]	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%
[redacted]	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%
[redacted]	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%
[redacted]	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%	[redacted]%
Volume fees (real pence per transaction)							
[redacted]	[redacted]%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]%
[redacted]	[redacted]%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]%
[redacted]	[redacted]%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]%
[redacted]	[redacted]%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]%
[redacted]	[redacted]%	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]%

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022 [redacted].

Notes: [redacted].

6.93 We visualise this metric in Figure 32 below. The figure plots each acquirer category on two dimensions:

- On the x-axis, the proportion of gross acquirer fees charged by Mastercard in 2021 that the category accounts for. This illustrates the importance of the category of fees within Mastercard's acquirer fee income.
- On the y-axis, the percentage change in the fee (price per activity driver) between 2017–2021 for that fee category. This illustrates the direction and magnitude in which Mastercard changed that category of its acquirer prices.

6.94 Categories that are further to the right of the chart can have a higher impact on Mastercard's fee income even if the fee rate changes by a small amount. Categories that are higher in the chart have experienced a larger increase in the rate per activity driver.

Figure 32: Mastercard cumulative % change in acquirer gross fee revenues between 2017 and 2021 (gross fee revenues measured as a proportion of transaction activity)

[2]

Source: PSR calculations of data submitted by Mastercard in response to PSR questions dated 21 November 2022 [2].

Notes: [2].

6.95 As Figure 32 illustrates, Mastercard's fees increased in some categories, decreased in some other categories, and remained the same in a few categories. This suggests that Mastercard has changed its fee structure, but it does not allow us to conclude whether, overall, average acquirer fee revenues are increasing after controlling for transaction mix.

Visa

6.96 Table 2 sets out our analysis of the rate of change in average fee revenues across the different categories of Visa fees.

Table 2: Visa changes in acquirer gross fee revenues per transaction activity by fee category

	Share of total gross revenue in 2022	2018	2019	2020	2021	2022	Cumulative change in fees 2018–2022
Value fees (% of transaction value)							
[2]	[2]%	[2]%	[2]%	[2]%	[2]%	[2]%	[2]%
[2]	[2]%	[2]%	[2]%	[2]%	[2]%	[2]%	[2]%
[2]	[2]%	[2]%	[2]%	[2]%	[2]%	[2]%	[2]%
Volume fees (real pence per transaction)							
[2]	[2]%	[2]	[2]	[2]	[2]	[2]	[2]%
[2]	[2]%	[2]	[2]	[2]	[2]	[2]	[2]%
Fees not driven by value or volume							
[2]	[2]%	[2]	[2]	[2]	[2]	[2]	[2]%
[2]	[2]%	[2]	[2]	[2]	[2]	[2]	[2]%
[2]	[2]%	[2]	[2]	[2]	[2]	[2]	[2]%
[2]	[2]%	[2]	[2]	[2]	[2]	[2]	[2]%

Source: PSR calculations of data submitted by Visa in response to PSR questions dated 23 November 2022 [2].

Notes: [2]

6.97 Figure 33 below plots each Visa acquirer fee category on two dimensions:

- On the x-axis, the proportion of gross acquirer fees charged by Visa in the 2022 financial year that the category accounts for. This illustrates the importance of the category of fees within Visa's acquirer fee income.

- b. On the y-axis, the percentage change in the fee (price per activity driver) between the financial years 2018 and 2022 for that fee category.⁶³ This illustrates the direction and magnitude in which Visa changed that category of its acquirer fees.

Figure 33: Visa cumulative % change in acquirer gross fee revenues between the 2018 and 2022 financial years (gross fees measured as a proportion of transaction activity)

[redacted]

Source: PSR calculations of data submitted by Visa in response to PSR questions dated 23 November 2022 [redacted].

Notes: [redacted]⁶⁴ [redacted].

6.98 The figure shows that:

- a. [redacted].
- b. [redacted].
- c. [redacted].

6.99 On balance, the analysis above suggests that there has been an increase in the fees Visa charges on various transaction activities. However, the analysis does not allow us to conclude whether, overall, average acquirer fee revenues have changed after controlling for transaction mix. We conclude on the overall trend in average acquirer fees revenues, controlling for transaction mix, in Annex 7.

Summary of results

6.100 Our analysis of card scheme characteristics is consistent with our conclusions in Chapter 4 of our final report that acquirers could not credibly refuse to participate in either Mastercard or Visa's payment schemes in response to an increase in scheme or processing fees (as set out in paragraph 4.10 of our final report), and that Mastercard and Visa face a degree of competition (from each other and from other payment methods) on the issuing side (as set out in paragraph 4.8 of our final report). We find that:

- a. Card schemes other than Visa and Mastercard account for a small proportion of overall UK transactions (as set out in paragraph 6.9).
- b. In the last three years, Mastercard has expanded its debit card business in the UK, gaining share from Visa (as set out in paragraphs 6.11 and 6.12).
- c. In the majority of cases, issuers use only one scheme for a given type of card. As a result, most issuers exercise a choice between Visa and Mastercard for a given card type (as set out in paragraphs 6.25 to 6.27).
- d. Virtually all acquirers acquire both Visa and Mastercard transactions. Although the data we have collected included some acquirers that acquired UK merchant transactions from only one of the schemes, this accounted for a negligible proportion of the total transaction value (as set out in paragraph 6.31).

⁶³ We could not compute fees per driver for 2017 because Visa's data on activity drivers by fee category for 2017 was incomplete.

⁶⁴ But the change in [redacted].

6.101 Our analysis of gross revenues (before accounting for incentives and rebates) shows that Mastercard and Visa's revenues from scheme and processing fees on the acquiring side in the UK have risen substantially in recent years. We find that:

- a. First, the total amount of gross revenue from both issuers and acquirers for scheme and processing services has increased substantially over the six- to seven-year periods that we looked at (as set out in paragraph 6.20).
- b. Second, looking at the split between scheme and processing fees for UK transactions, we found that Mastercard's [£], as a proportion of transaction value, with both [£] between [£]. For Visa, the levels of gross scheme and processing fees were [£], but Visa's [£] (as set out in paragraph 6.41).
- c. Third, focusing on the acquirer side, the total amount of gross fees paid by acquirers for scheme and processing services has increased substantially (as set out in paragraph 6.20(b)).
- d. Fourth, 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. Mastercard data shows a large and growing share of its gross revenue coming from optional services (as set out in paragraph 6.69). For Visa, the equivalent share is much lower, although also increasing over time (as set out in paragraph 6.77).

6.102 Finally, our analysis of gross and net revenues shows that the acquiring side accounts for a large and increasing proportion of Mastercard and Visa's revenues and that incentives and rebates largely offset the issuer-side revenues of the two schemes. We also consider it is likely that acquirer revenues (expressed as share of transaction value) have significantly increased in recent years for both schemes, although we note the increase for Mastercard is not visible before controlling for changes in its transaction mix. We find that:

- a. As shown in Figure 28 and Figure 30, Mastercard and Visa provide high incentives and rebates to issuers. The evidence also indicates that incentives have become larger in recent years, reflecting increased competition between the schemes (as set out in paragraph 6.89(a)).
- b. Revenue from the acquiring side accounts for most [£] net scheme and processing fee revenue, as can be seen by comparing Figure 28 with Figure 29, and Figure 30 with Figure 31 (as set out in paragraph 6.89(b)).
- c. The relative amounts that acquirers pay compared with issuers has increased (as set out in paragraph 6.89(c)).
- d. As shown in Figure 29 and Figure 31, acquirer gross fee revenues (expressed as a share of transaction value) marginally increased between 2017 and 2023 for Mastercard, and significantly increased between the 2018 and 2023 financial years for Visa. But these increases are likely to be impacted by changes in transaction mix (as set out in paragraph 6.89(d)).

6.103 Taken together, we consider the findings of our descriptive analysis, regarding the card fees and activities associated with scheme and processing services of both Mastercard and Visa, are consistent with a lack of competitive constraints on the acquiring side, substantial increases in acquirer gross fee revenues, and the acquirer side accounting for a large and increasing proportion of net revenues.

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