Payment Systems Regulator

Annex 10 to final report

Market review of card scheme and processing fees

Profitability

March 2025

MR22/1.10 Annex 10

Contents

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

1 Introduction

Introduction and purpose of this paper

1.1 The purpose of this annex is to set out our analysis of profitability within this market review. We explain our approach to the profitability analysis of Mastercard and Visa and the analysis we have undertaken in order to come to our findings on profitability.

1.2 This is an updated version of MR22/1.9 Annex 10, which was published in May 2024 as part of the interim report; it has been updated to reflect additional information provided to us in the interim report consultation responses and further evidence we have gathered from Mastercard, Visa and third parties.

1.3 The analysis presented in this annex builds on our work since we published our terms of reference in October 2022.[1] In particular, we refer to the following:

a. The fully loaded[2] UK P&L accounts prepared by Mastercard and Visa in response to our 9 November 2022 s81 notice requiring Mastercard and Visa to submit revenues and costs to us for their relevant UK operations (the November 2022 s81 information notice).[3]

b. Our February 2023 working paper[4], and our September 2023 publication summarising stakeholder responses to it.[5]

c. Our December 2023 confidential working papers (CWP) on profitability (margin analysis) and comparator benchmark margin analysis, and the responses provided by Mastercard and Visa in December 2023 and January 2024.[6]

d. Material provided to us by Mastercard and Visa over the course of this market review, including responses to queries raised in writing or on calls, and evidence gathered from other submissions and information notices.

e. Our interim report published in May 2024 and the responses we received in response to it.[7]

f. Other parts of this final report, published contemporaneously with this annex.[8]

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1 MR22/1.2 *Final terms of reference* (October 2022).

2 The fully loaded UK P&L accounts are UK P&L accounts provided by Mastercard and Visa in response to our s81 request from November 2022, which provide each scheme's analysis of revenues and expenses on a fully allocated cost basis for the relevant UK operations.

3 Mastercard response to PSR questions dated 21 November 2022 [✂].
Visa response to PSR questions dated 23 November 2022 [✂].

4 MR22/1.5 *Approach to profitability analysis working paper* (February 2023).

5 MR22/1.7 *Stakeholder input (and non-confidential responses) to the competitive constraints call for evidence and profitability working paper* (September 2023).

6 Mastercard response to PSR working papers dated 1 December 2023 and 18 December 2023 [✂].
Visa response to PSR working papers dated 1 December 2023 and 18 December 2023 [✂] .

7 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024). Visa response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024). Four third parties: [✂].

8 'Market review of scheme and processing fees Final Report' MR22/1.10 (March 2025) – ('final report').

1.4 This annex is structured as follows:

a. In Section 2 we set out our approach to the profitability analysis, including:

   1. the scope of our profitability analysis, in terms of the services covered by our profitability analysis and the time period we have considered

   2. how we have assessed the financial performance of Mastercard and Visa, including how we would expect common[9] costs to be allocated (where this is applicable)

b. In Sections 3 and 4, we identify profit margins for first Mastercard and then Visa for the relevant UK operations, including:

   1. an overview of the data we have used to assess financial performance and the resulting profitability information, including the fully loaded UK P&L accounts, European and global accounts

   2. how we have derived our view of the profitability of the relevant UK operations from this data including the challenges we have faced in doing so

   3. scheme submissions and our responses (and any relevant third-party submissions)

   4. our conclusions on the profitability of the relevant UK operations of Mastercard and Visa

c. In Section 5, we assess whether Mastercard's and Visa's profitability is expected to change significantly in the short to medium term.

d. In Section 6, we undertake a comparator benchmarking analysis, identifying the profit margins of sufficiently similar companies to Mastercard's and Visa's relevant UK operations that operate in competitive markets, including:

   1. the approach to identifying relevant comparators

   2. the selection of the comparators and their profit margins

   3. scheme and third-party submissions and our responses

   4. our conclusions from the comparator benchmarking analysis

e. In Section 7, we set out our conclusions, including a comparison of Mastercard's and Visa's margins for the relevant UK operations to the comparator benchmark margin.

9 When referencing common costs or fixed and common costs we refer to costs that cannot be directly allocated to the relevant UK operations. Common costs can be common variable costs (for example, global functions serving multiple geographies) or common fixed cost (for example, global data centres).

2 Approach to the profitability analysis

2.1 In this section we set out the factors we have taken into account when selecting the method to assess the profitability of Mastercard's and Visa's relevant UK operations in this market review. We also set out the method we have chosen and some of the key challenges we have faced in undertaking the relevant analysis.

Context and background

2.2 In this market review, we are assessing market outcomes for the supply of scheme and processing services provided by Mastercard and Visa in the UK (the relevant UK operations). This includes an assessment of the profitability of the relevant UK operations of Mastercard and Visa, and how these have changed over time.[10]

2.3 Analysing profitability is a way of understanding the outcomes in a market, including whether the prices that companies charge are in line with their economic costs.[11] This can therefore help us understand whether prices are inconsistent with the levels that we might expect in a competitive market.

2.4 We have found in our competitive assessment (see Chapter 4 in the final report) that, on the acquiring side, Mastercard and Visa do not face effective competitive constraints in the provision of core scheme and processing services. Mastercard and Visa are subject to varying degrees of constraint across their optional services, with stronger indications that the lack of effective alternatives results in Mastercard and Visa not facing effective competitive constraints in the supply of some of these services.[12]

2.5 We are therefore interested in whether Mastercard and/or Visa earn profits higher than would be expected in competitive markets (what economists term supernormal profits or economic profits) in the relevant UK operations. This helps us to assess whether Mastercard and/or Visa are benefiting from a lack of effective competitive constraints. We note, however, that the absence of supernormal profits (or economic profits) would not necessarily mean that Mastercard and/or Visa do not benefit from the lack of effective competitive constraints.

10 We noted in our terms of reference that this 'may include obtaining European data from Mastercard and Visa for cost attribution and reconciliation purposes in order to ensure our UK profitability analysis is robust.' (MR22/1.2 *Final terms of reference* (October 2022) paragraph 3.5).

11 References to economic costs and benefits throughout this annex refer to financial costs and benefits that accrue to Mastercard and Visa as a result of their relevant UK operations. This is to distinguish them from accounting costs and befits in that economic costs and benefits take wider considerations into accounts, such as indirect (for example, financial benefits in other parts of Mastercard's or Visa's business) or future benefits.

12 See paragraph 4.206 and 4.208 of the final report.

The method to assess profitability

2.6 A competitive market is likely to generate significant variations in profit levels between firms as supply and demand conditions change, but with an overall tendency towards levels of profit margins that reflect the cost of production, including the cost of capital, for firms (regardless of the level of quality they provide[13]). This is known as the 'normal' level of profits. At particular points in time, the profits of some firms may exceed the 'normal' level. Reasons for this could include, for instance, cyclical factors, the fact that some firms may be more efficient than others, and the fact that some firms may be earning profits gained as a result of past innovation. However, competition is a dynamic process which should put downward pressure on profit levels, so that firms move towards profit margins that reflect the efficient cost of production (including the cost of capital) in the medium to long run. A situation where profits are persistently above the 'normal' level or above a fair margin (as defined in paragraph 2.52) could be an indication that prices are higher than expected in a competitive market.[14]

2.7 Commonly, a profitability analysis involves a consideration of the cost of capital and, specifically, consideration of the returns on capital employed (ROCE) of the businesses and the comparison of these with a competitive benchmark, such as the weighted average cost of capital (WACC).[15]

2.8 An alternative to a ROCE analysis, sometimes used in less capital-intensive sectors, is a profit margin analysis including comparator benchmarking. In this approach a measure of Mastercard's and Visa's profit margins (for example, earnings before interest and tax – EBIT, also referred to as operating profit) in the relevant UK operations is compared to a competitive benchmark margin. Unlike a ROCE analysis, this approach does not require explicit information on capital employed or assets that comprise it.

2.9 In our February 2023 working paper setting out our approach to profitability analysis (February 2023 working paper)[16] we said that we planned to assess profitability using operating profit margins and benchmark this analysis against suitable comparators. This was primarily because a ROCE approach requires an assessment of the value of a company's assets needed to undertake the relevant UK operations and:

a. a large proportion of assets are likely to be distributed between the UK and other geographies, and there is not a clear and economically unambiguous way of allocating them[17]

13 This means that we would not expect that firms with higher quality products would be able earn profits that are higher than required to defray the costs of production – even if both prices and cost are higher to reflect the higher quality – if they operate in competitive markets.

14 Or, more precisely, a situation where profits are persistently above the level that reflects the efficient long-run cost of production (including the cost of capital), for firms that represent a substantial part of the market, could be an indication that prices are higher than those which would be expected a competitive market would generate.

15 See paragraphs 6.166 to 6.170 for more details.

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

17 We note in this context that this should not be interpreted to suggest that allocating assets to the UK (or estimating bottom-up replacement cost of UK assets) is impossible, but rather that this would require a number of assumptions and may be time and data intensive.

b. global intangible assets are likely to be substantial, and may be difficult to reliably value and attribute to the UK[18]

c. the data challenges are larger where assumptions will need to be made[19]

2.10 In response to the February 2023 working paper, some stakeholders suggested that we should undertake a ROCE analysis, and we indicated that we would consider whether to do so.[20]

2.11 As indicated in our interim report, we have kept this decision under review, but have ultimately determined not to undertake a ROCE analysis within this market review. Thus, our profitability analysis in this final report has focused on a margin-based approach.

2.12 This is because we do not consider it necessary to supplement the benchmark margin analysis with a ROCE analysis, when taking into account:

- the conclusions we are drawing from this profitability analysis, including that we have not reached a firm conclusion on whether prices are higher than would be expected in a competitive market (and on the level of harm arising from it)
- that our findings in respect of profitability (together with our separate findings on pricing) are consistent with our finding of a lack of competitive constraints on the acquiring side[21] and consistent with a finding that schemes' margins are higher than would be expected in competitive markets with harm to customers on the acquiring side of both schemes
- our view that this would have required a significant amount of work from the schemes and would have required us to extend the timelines for this review
- the lack of appropriate data and the findings of a lack of competitive constraints on the acquiring side pointing to the need for the schemes to regularly disclose data that would allow the PSR to monitor financial performance

Assessing profitability using a benchmark margin approach

2.13 We have assessed the profitability of Mastercard and Visa in the following way:

a. We estimate the profit margins of Mastercard and Visa in their relevant UK operations.

b. We compare the profit margins of Mastercard and Visa in the UK with the margins of sufficiently comparable companies operating in competitive markets.

2.14 If the profit margins of Mastercard and/or Visa are persistently and substantially higher than those of comparable companies operating in competitive markets, this would be one potential indicator that Mastercard and/or Visa benefit from the lack of effective

18 We note in this context that this should not be interpreted to suggest that valuing intangible assets is impossible, but rather that this would require a number of assumptions and may be time and data intensive.

19 We note in this context that this should not be interpreted to suggest that undertaking a ROCE analysis is impossible, but rather that this would require a number of assumptions and may be time and data intensive.

20 MR22/1.7 *Stakeholder input (and non-confidential responses) to the competitive constraints call for evidence and profitability working paper* (September 2023).

21 Final report, paragraph 6.193.

competitive constraints. In order to assess the profitability of Mastercard's and Visa's relevant UK operations, we need to obtain their profit figures.

2.15 We recognised in our February 2023 working paper that this could potentially be difficult for several reasons, including:[22]

a. Mastercard's and Visa's UK card schemes are parts of global businesses. They do not report profits on a UK basis externally. Current internal reporting for both schemes for the UK is based on revenues and direct costs only.[23]

b. Mastercard's and Visa's businesses in the UK include services unrelated to the scheme and to the processing of transactions which are therefore out of the scope of our market review. These services may use shared functions, platforms and costs. Revenues and costs from those services need to be excluded from the UK scheme and processing profits, but there are challenges in separating out this information.

c. The majority of the UK card schemes' costs are common costs relating to the global platform. The card schemes do not currently attribute these costs to the UK for internal reporting.

d. There are different ways that costs can be attributed to the UK operations of the card schemes, which means a number of approaches could be used.

e. We have not previously reviewed cost information in relation to the card schemes, and that we had yet to develop an understanding of the card schemes' cost drivers.

f. The revenue and cost information for our analysis would be based on accounting data. While this is a useful starting point for analysis, interpreting and understanding it requires care. For example, the attribution of value to goodwill and intangibles, such as brands, can be problematic when trying to compare assets, as the differences in the companies' methods of growth (organic versus acquisition) and accounting policies can affect the reporting of costs and asset values.[24]

2.16 While these challenges are real, we (supported by the schemes) said that they should not be insurmountable.[25, 26] We also recognised in our February 2023 working paper that these challenges 'do not undermine the validity and importance of profitability analysis'.[27] We have kept these challenges in mind when choosing our analytical approach and we have taken a cautious approach when interpreting the results.

2.17 The schemes have subsequently provided us with their analysis of the profitability of their relevant UK operations in the fully loaded UK P&L accounts. We have noted that these estimates are sensitive to the cost allocation assumptions made and that there are some other aspects of the accounts that may understate the wider economic benefits that Mastercard and Visa derive from the relevant UK operations.

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22 MR22.1.5 *Approach to profitability analysis working paper* (February 2023) paragraph 3.3.

23 [✂].

24 For example, accounting valuations often require adjustments from accounting book values to economic values (or Modern Equivalent Asset Values).

25 MR22/1.5 *Approach to profitability analysis working paper* (February 2023) paragraph 3.55.

26 For example, we consider that whilst common cost allocations can be complex and require a number of assumptions, it should be possible to identify a range of possible cost drivers and to assess which ones are preferable for use in a market review over others.

27 MR22/1.5 *Approach to profitability analysis working paper* (February 2023) paragraph 3.4.

2.18 It has become clear that the different ways common costs can be allocated can result in very different estimates of the profit margins of the relevant UK operations and that the fully loaded UK P&L accounts provided to us by Mastercard and Visa may understate the economic benefits Mastercard and Visa derive from the relevant UK operations.[28] This means considerable work is required to develop revenue and cost allocations that appropriately reflect the economic benefit that Mastercard and Visa derive from their relevant UK operations. However, we consider that undertaking this work as part of this market review is not required, when taking into account the conclusions we are drawing from this profitability analysis (as explained above at paragraph 2.12 and in paragraph 6.133 to 6.137 in our final report).

2.19 As a result, we have not been able to use the fully loaded UK P&Ls to reach a view on the level of profit margins that Mastercard and Visa earn in the relevant UK operations, other than to note that the fully loaded UK P&L accounts are likely to understate the economic benefits Mastercard and Visa derive from the relevant UK operations.

2.20 We have therefore also taken into account other information that can be used to help understand the margins for the schemes' relevant UK operations. This is mainly the published European and global accounts (also considered in the February 2023 working paper) and internal documents commenting on profitability and the financial performance of Mastercard and Visa.

2.21 These data points, taken together, allow us to derive a range for the margins in the relevant UK operations of Mastercard and Visa. We consider that the resulting ranges provide a sufficiently robust basis (that is, a basis suitable for the purposes of assessing whether market outcomes are consistent with a competitive market) for our view that there is an indication that margins (and as a result pricing) may be higher than would be expected in competitive markets. This is because, notwithstanding the shortcomings of the data gathered, taking relevant evidence in the round, the margins in the relevant UK operations are likely to be higher than in the fully loaded UK P&L accounts that Mastercard and Visa provided to us and higher than the margins for the benchmark comparators.

Frame of reference

2.22 For the purposes of this market review, Mastercard's and Visa's relevant activities are defined as the supply of scheme and processing services in the relevant geographical region (the UK) – ('relevant UK operations').[29]

Timeframe

2.23 We set out in our terms of reference that we would collect data for the period of five years from 2017. Further, both Mastercard and Visa have highlighted difficulties they faced in retrieving detailed historical information.[30] We did not receive any submissions in response to our February 2023 working paper, the CWPs or our interim report, that would have

28 See paragraph 3.160 for Mastercard and paragraph 4.37 for Visa.

29 See paragraphs 2.12 to 2.16 in the final report for a more detailed description of the scope of our market review.

30 See further MR22/1.5 *Approach to profitability analysis working paper* (February 2023) Annex 1 paragraph 3.59.

suggested a longer or shorter timeframe than five years. Since we published the February 2023 working paper, both Mastercard and Visa have reported their 2023 results.[31]

2.24 We have therefore analysed Mastercard's profitability over the six-year period of 2018 to 2023 for the purpose of this market review.[32] We have analysed Visa's profitability over the six-year period of 2017/18 to 2022/23 for the purpose of this market review.[33]

Choosing the measure of profitability

2.25 We have estimated profit margins by reference to EBIT margins. Other margin estimates (Earnings Before Interest, Taxes, and Amortisation (EBITA) and Earnings Before Interest, Taxes, Depreciation, and Amortisation (EBITDA))[34] may be used as a cross-check. EBIT reflects most operational costs but excludes financing costs and as such best represents the economic benefits that a firm receives from its business activities, whilst being agnostic to a company's financing structure.

2.26 The above notwithstanding, we have previously noted that there is 'not much difference between EBITDA, EBIT and Profit Before Tax (PBT) for both card schemes' European accounts, and variations are consistent, because reported depreciation, amortisation and interest costs are relatively low compared to other operating costs'.[35]

2.27 With all the measures of profitability set out above, adjustments may need to be made to reflect differences in accounting compared to economic profits and to reflect the underlying business activities rather than non-operational items or extraordinary events. Such adjustments can, for example, include the removal of exceptional profits or losses (e.g., on business disposals).

Selecting the estimation method for EBIT profit margins

2.28 EBIT margins are the ratio between EBIT (operating profit) and revenues. For example:

a. Visa's operating profit[36] in its 2023 global accounts was $21 billion. For the same period, net revenues were $32.653 billion. Dividing the figure for operating income by the figure for net revenues results in an EBIT margin of 64%.

31 As explained further below, we have extended relevant aspects of our analysis to 2023. This consisted mainly in updating the financial information in this annex, in particular the information derived from the fully loaded UK P&L accounts and publicly available financial information. We have not, however, sought further internal documentation from the schemes.

32 See further MR22/1.5 *Approach to profitability analysis working paper* (February 2023) Annex 1.

33 Mastercard's financial year end is in December, hence the time-period covered spans the calendar years 2018–2023.

34 Visa's financial year end is in September, hence the time-period covered spans the period of October 2017 to September 2023.

35 MR22/1.5 *Approach to profitability analysis working paper* (February 2023) Annex 1, paragraph 1.2, see also Figures 6 and 7.

36 Visa expresses operating profits as 'operating income' in its global accounts (Source: Visa Annual Report 2022, page 57).

b. Mastercard's operating profit[37] in its 2023 global accounts was $14.008 billion. For the same period net revenues were $25.098 billion. Dividing the figure for operating income by the figure for net revenues results in an EBIT margin of 56%.

2.29 For revenues we have used net revenues (which is gross revenues less client incentives and/or rebates). This is consistent with how Mastercard and Visa predominantly report revenues (and how Mastercard reports its EBIT margins) in their fully consolidated audited global accounts, in line with US accounting standards (US GAAP). It is also consistent with how Mastercard and Visa present revenues in their published European accounts.[38] We said in our February 2023 working paper that gross revenues were not suitable for comparison purposes, because: (i) gross revenue information is not publicly available for some entities (e.g. Mastercard Europe); and (ii) the use of net revenues is consistent with relevant accounting standards and as such how comparators to Mastercard and Visa report their results.[39] We note that neither Mastercard nor Visa commented on this proposed approach in their responses to that working paper. Further, net revenues are based on the actual commercial agreements in the market.

2.30 We note, however, that our approach includes a deduction for Mastercard's and Visa's rebates and incentive payments to issuers, which [✂]. The fully loaded UK P&L accounts also show that [✂].[40]

2.31 As a result, we have also performed, using broad assumptions, an estimate of the EBIT margins that Mastercard and Visa derive from the acquiring side, effectively assuming that Mastercard and Visa operate a separate acquiring and issuing division within the overall relevant UK operations. For this exercise we have taken the fully loaded UK P&L accounts provided to us by the schemes and assumed that the costs in the fully loaded UK P&L accounts are shared 50/50 between issuers and acquirers.[41]

2.32 EBIT margins vary widely between companies and sectors. For example, in our February 2023 profitability consultation paper we noted that the average EBIT margin across approximately 70 companies in the US IT sector over the five years to 2022, was 21%.[42] The range of EBIT margins within this sector (when excluding Mastercard and Visa) was 3% to 45%.[43] It is therefore more informative to compare the margins of Mastercard and Visa to a relevant benchmark of companies operating in competitive markets than to assess their margins themselves. We set out our benchmark margin analysis in Section 6 later in this annex.

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37 Mastercard expresses operating profits as 'operating income' in its global accounts (Source: Mastercard Annual Report 2022, page 46).

38 Mastercard told us that in the published European accounts, certain incentives are treated as operating costs, consistent with Belgian accounting standards.

39 MR22/1.5 *Approach to profitability analysis working paper* (February 2023) Annex 1, paragraph 1.7.

40 We also note that to the extent that rebates and incentives are upfront investments, an economically robust approach may involve smoothing them over their economic life and an assessment of whether these investments all relate only to scheme and processing services.

41 We note that there are also other ways to allocate costs between acquirers and issuers and that different allocation methods can result in different margins for the acquiring and issuing sides.

42 MR22/1.5 *Approach to profitability analysis working paper* (February 2023) paragraph 4.25.

43 MR22/1.5 *Approach to profitability analysis working paper* (February 2023) Table 13.

Identifying and allocating common costs

2.33 Given that Mastercard and Visa do not publish audited financial statements specifically for the relevant UK operations, in order to estimate UK EBIT and the resulting UK EBIT margins we need to allocate all costs that are relevant to the UK.[44]

2.34 In our February 2023 working paper we identified four features that Mastercard's and Visa's UK P&Ls should satisfy in order to be of most relevance to our assessment of economic profitability:[45,46]

a. *Disaggregation and attribution:* We expected that the card schemes would need to disaggregate and attribute global, European and UK costs. We recognised that there would not be a uniquely correct way to do this.[47] We have requested that the schemes provide us with descriptions of individual costs and how they have been attributed to UK activities.

b. *Cost types:* We expected that information provided by the schemes would help us to identify which costs are genuinely fully fixed and/or common across jurisdictions, business lines or customer groups.

c. *Attribution drivers, cost allocation methods and reconciliation:* We expected that as well as the total European aggregate cost, we would also obtain total European attribution drivers and the UK-specific driver values and allocations. We also expected that the schemes would reconcile the information provided to us to the published European accounts. This would allow us to see how the attribution of costs to the UK compares with Mastercard's and Visa's published financial statements.

d. *Sensitivity testing:* We expected the information we received would allow us to test sensitivities by changing cost attribution drivers, which would reveal the impact of attribution choices and provide a range of plausible scenarios.

2.35 We signalled in our February 2023 working paper that if Mastercard and Visa were unable to provide disaggregated data or if the data was unduly detailed, implausibly constructed, or presented other difficulties, we may consider using common costs as a percentage of revenue observed at the European level as an appropriate proxy for estimating an allocation of such costs to the UK business. In the absence of suitable UK level data, we said that we would also consider whether the full European profit and loss accounts could be an appropriate proxy for UK scheme and processing services.[48]

44 Mastercard told us that revenues for the UK are reported in the statutory accounts for Mastercard Europe.

45 MR22/1.5 *Approach to profitability analysis working paper* (February 2023) paragraph 3.53 to 3.55. We refer to these considerations in Sections 3 and 4 when we consider the cost allocations, whether it is likely that the cost allocation in the fully loaded UK P&Ls is based on a fully allocated cost (FAC) basis using activity-based costing principles. See further paragraphs 3.9 and 4.9.

46 We note that there could also be other ways in which to assess the suitability of the fully loaded UK P&L accounts. For example, using principles including: completeness, accuracy, objectivity, causality, consistency, materiality and compliance (for example, with accounting standards).

47 However, as we set out later in this annex, we consider that the starting point for cost allocations for the purpose of a market review should be activity-based costing principles.

48 MR22/1.5 *Approach to profitability analysis working paper* (February 2023) paragraph 3.55.

2.36 Given the global nature of Mastercard's and Visa's operations, it is likely that many of the costs incurred in running the relevant UK operations are either common with costs incurred in running similar operations in other jurisdictions, or common with costs incurred in Mastercard's and Visa's other operations in the UK. Therefore, these common costs must be allocated.

2.37 There are three primary cost concepts through which the allocation of common costs can be considered:

a. **Stand-alone cost:** This is the cost that Mastercard and Visa would incur if they were only providing the relevant services in the UK (and no other services in the UK and no services in other countries). For example, data centre costs would be fully allocated to relevant UK operations, but would need to be significantly scaled down to account for the fact that the amount of data they would need to process and hold for UK-only operations is a fraction of the data that they are currently provisioned for at a global level. Using stand-alone costs can inform the upper bound of what could be viewed as the cost of providing the relevant UK operations.

b. **Incremental cost:** This is the additional cost that Mastercard and Visa would incur by adding the relevant services in the UK to their pre-existing suite of other services. This could include the variable costs of providing the relevant services in the UK and may include additions to fixed costs that result from adding UK services. For example, an increase in the size of the data centre, and consequently an increase in the cost of the data centre due to the addition of the UK operations. Using incremental costs can inform the lower bound of what could be viewed as the cost of providing the relevant UK operations.

c. **Fully allocated costs (FAC):** Under this approach, in addition to direct costs, a portion of common costs is allocated to the relevant UK operations. Here an allocation methodology is used to assign common costs across all services that give rise to them. For example, data centre costs would need to be allocated to relevant UK operations, relevant services in other jurisdictions and any other service using the data centre in the UK or elsewhere. Using FAC would result in a level of cost that is between a stand-alone and an incremental cost estimate.

2.38 We consider that for the purpose of the profitability analysis in our market review, where we are seeking to understand the profitability of the UK card businesses and how these have changed over time, fully allocated costs is an appropriate cost concept.[49] This is because, for example, it allocates costs not only to the relevant UK operations, but also to the remaining non-UK operations of Mastercard and Visa and reconciles those costs to the total costs of all services provided by Mastercard and Visa.

2.39 Allocating common costs using the FAC concept can be done using a variety of cost allocation methods. These can be:

a. **Input-based*:*** i.e., allocations are based on inputs to producing the product or providing a service, such as staff numbers, hours of time spent etc.

49 We note that there are also other ways to allocate costs. For example, Ofcom also considered the concept of Distributed Long Run Incremental Costs (DLRIC) in its regulatory decisions. Ofcom, Cost orientation, Review, Consultation, June 2013.

b. **Output-based:** i.e., allocations are based on what is produced, such as number of transactions, number of traders or consumers using the service etc.

c. **Value-based:** i.e., allocations are based on prices or revenues realised, such as net revenues.

2.40 In the context of a market review, we would normally expect cost allocations using either input-based or output-based approaches as either inputs (for example, staff) or outputs (for example, transactions) can give rise to costs to be incurred (for example, help desk costs and data centre costs respectively).

2.41 Within this we would expect that an appropriate methodology for allocating costs is used. A methodology that is often used is activity-based costing (ABC).[50,51] Under such a methodology, all activities required to provide a service are identified and divided into cost pools. Where these cost pools are shared across a number of activities, these are added to arrive at a total cost pool for each activity. These cost pools are then unitised by dividing the total cost pool for an activity with an appropriate cost driver (which could include an output measure like the number of cards in use, the number of merchants connected or the number of transactions).

2.42 Cost drivers are the factors or activities within an organisation that causes a particular cost to be incurred. For example, a cost driver could be an employee. If services have dedicated employees that support their provision (e.g., UK customer service having dedicated staff members), the total cost pool can be divided by the total number of employees in that cost pool (e.g., customer service spend divided by total full-time equivalents in customer service). Costs allocated to the relevant UK operations would then be calculated as the number of cost drivers – employees – used to provide the service multiplied by the unit cost – cost per full-time employee (FTE).

2.43 Cost drivers are also expected to vary across cost pools. For example, employee hours may be an appropriate cost driver for billing support, number of transactions may be appropriate for IT systems that carry them, and floor space may be appropriate for buildings housing staff or equipment.

2.44 We would expect that revenue is only used as a cost driver where no other cost driver can be identified, or where the information is not available to allocate costs across appropriately identified cost drivers. This is because revenue generated is a consequence of the cost that has been incurred, but it is not its cause. Further, allocating costs on the basis of revenue generated could over-allocate costs to services that are highly profitable, and under allocate costs to less profitable services. This could also lead to an over-allocation of costs for operations where competition is weaker (and where this results in higher prices) compared to operations with strong competition (creating a circularity problem). Where no other cost driver can be identified, or where the information is not available, we consider, in the context of our market review, that net revenues are

50 For example, the regulatory accounts for BT Group are underpinned by activity-based costing. See: https://www.bt.com/content/dam/bt-plc/assets/documents/about-bt/policy-and-regulation/our-governance-and-strategy/regulatory-financial-statements/2023/accounting-methodology-documentation-2023.pdf.

51 Whilst we have considered the use of activity-based costing principles as the preferred approach to the allocation of common costs in this market review, there are alternative approaches, which could include a 'notional' licensing scheme. This may be appropriate where there is a fixed cost that needs to be recovered without an obvious activity driver. We note that IP is often licensed on a percentage of sales basis (or proxies for that).

preferable as a cost driver compared to gross revenues as gross revenues are less reflective of the financial value of the underlying transaction than net revenues.[52,53]

Our approach to obtaining estimates of profitability for the relevant UK operations

2.45 Ideally, our profitability assessment would be based on financial information for the relevant UK operations, where all relevant costs incurred are for the relevant UK operations and the only services provided are the relevant UK operations.

2.46 Alternatively, cost and revenues would need to be allocated. As set out above, this allocation would comprise the identification of in-scope revenues and directly attributable costs. Common cost would need to be allocated, for example, on a FAC basis, and follow activity-based costing principles. We consider that allocating common costs on the basis of FAC is the most appropriate approach given that Mastercard and Visa are globally integrated payment firms.

2.47 Mastercard and Visa provide a number of products across multiple jurisdictions. We are particularly interested in whether Mastercard and Visa are able to earn profits in their relevant UK operations that are higher than would be expected in competitive markets. To assess the profitability of Mastercard and Visa in the relevant UK operations, it is important to identify and appropriately allocate revenues and costs to the relevant UK operations.

2.48 As set out above, Mastercard's and Visa's UK card schemes are parts of global businesses. They do not report profits on a UK basis externally and current internal UK reporting for both schemes is based on revenues and direct costs only. We therefore asked Mastercard and Visa to submit revenues and costs for the relevant UK operations to us in the form of fully loaded UK P&L accounts.

2.49 We have used the considerations set out above as a starting point for our assessment of whether the cost allocations performed by Mastercard and Visa in the fully loaded UK P&L accounts are sufficiently reflective of the economic benefits Mastercard and Visa derive from the relevant UK operations. This then forms part of our assessment of whether the fully loaded UK P&L accounts provide a suitable basis to estimate margins for the relevant UK operations.

2.50 Given the challenges set out above we have also assessed whether European and global accounts could serve as a basis to estimate margins for the relevant UK operations.

2.51 We assess this in the following sections, first for Mastercard (Section 3) and then for Visa (Section 4).

52 For example, gross revenues are likely to be more influenced by a company's sales and marketing (and associated pricing) strategy and therefore likely to be less closely linked to market information than net revenues. Net revenues are based on the actual prices agreed in the market and therefore, assuming competitive market conditions, all else being equal, are a more objective measure of the cost of production compared to gross revenues.

53 Nevertheless, should revenues need to be used as the allocation driver, the results should be interpreted with caution, e.g. they should only be used as a lower or upper bound estimate (or sensitivity) where there is the possibility that revenues may be impacted by a lack of effective competitive constraints.

The benchmark margin analysis

2.52 In a well-functioning market, we expect the EBIT margin should be sufficient to pay providers of capital a reasonable return and cover company taxes but no more. We expect that the magnitude of a reasonable return would vary based on how capital intensive and risky the company's activities are. The EBIT margin that is required to service capital can be referred to as the 'fair margin'. When applying a benchmark margin analysis, it is therefore important that the risk profile and capital intensity of the comparable businesses are broadly similar to those of Mastercard's and Visa's relevant UK operations. It is more likely for this to be the case where the comparable businesses operate in broadly similar markets to Mastercard and Visa.

2.53 Where there is a lack of effective competitive constraints, companies may raise prices to a level above those that can be achieved in competitive markets. In such a scenario we would expect the EBIT margin to be higher than the fair margin, due to a feature (or features) of the market (such as a barrier to entry) that allows the incumbent firms to earn profits higher than this fair margin, without attracting entry or expansion. Profits more than the fair margin are commonly referred to as economic profits (or supernormal profits).[54] In other words, a firm in a competitive market would expect to make zero economic (or zero supernormal) profits.[55] The presence of persistent economic profits can be a result of a lack of effective competitive constraints.

Approach

2.54 To establish whether economic profits are present, Mastercard's and Visa's margins in the relevant UK operations can be compared with those of comparable firms operating in competitive markets – that is, markets working well from a competition perspective (for example, where there is limited market concentration[56] and an absence of other features indicating the lack of competitive constraints, such as high barriers to entry). This is important as we are trying to establish whether the level of Mastercard's and Visa's profitability for the relevant UK operations is consistent with outcomes that would be expected in a well-functioning market.

2.55 In other words, a benchmark margin should be derived from:

a. companies operating in competitive markets and without a significant lack of effective competitive constraints

b. comparators that have broadly comparable risk and capital intensity, and operate in sectors that are broadly similar to Mastercard's and Visa's relevant UK operations[57]

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54 We note that zero economic profit does not mean zero accounting profit (e.g., as accounting profits would include returns on capital).

55 Or 'normal' profits.

56 Market concentration would be considered to be present where market shares are concentrated among a small number of firms.

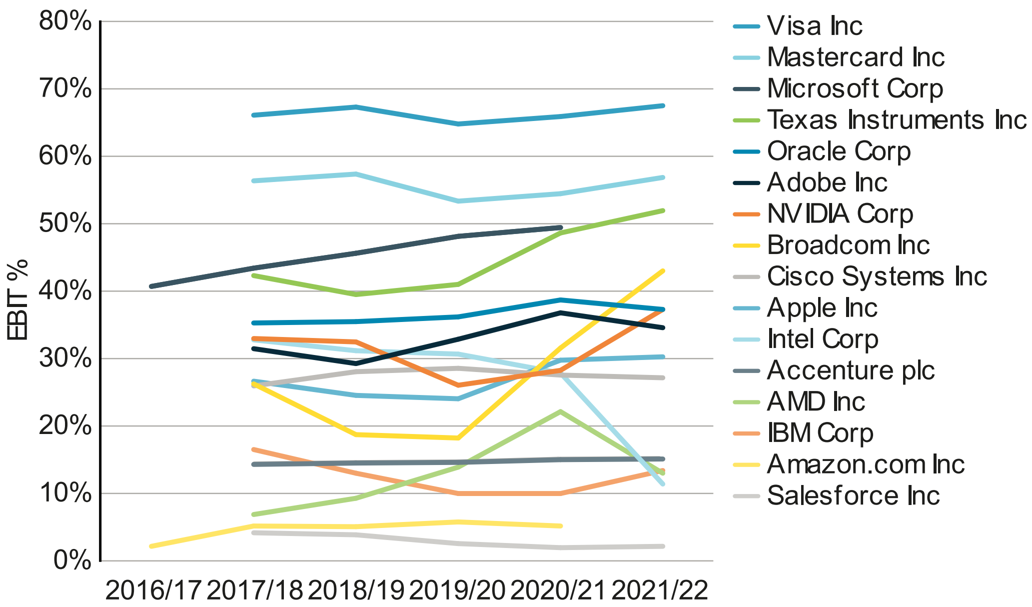
57 We set out in more detail in paragraph 6.12 to6.25, how we have selected comparable firms in this market review. We set out there that an appropriate comparator for this market review would be one which has a similar overall risk profile and capital intensity (as well as a similar business model) as Mastercard and Visa. We have identified a number of appropriate comparators, which we have described as 'sufficiently similar comparators' in Section 6.

2.56 Once a suitable comparator or comparators have been identified and their EBIT margins established, we compare them to those of Mastercard's and Visa's relevant UK operations. If Mastercard's and/or Visa's margins for the relevant UK operations are significantly higher than the margins of comparators that are operating in competitive markets, this would indicate that Mastercard and/or Visa may be benefiting from a lack of competitive constraints to raise prices to earn economic profits.

Our February 2023 working paper

2.57 In our February 2023 working paper we performed initial high-level comparisons between the margins of Mastercard's and Visa's global operations and those of other companies operating in similar industries. This included companies from the information technology (IT) and credit services sectors of the New York Stock Exchange (NYSE) as we made the initial assumption that these comprised companies with similar business models.[58] We noted that, for example, Mastercard's and Visa's global EBIT margins were above every other major NYSE listed IT sector firm (see Figure 1).[59]

Figure 1: EBIT for major NYSE IT sector companies[60] 2016/17 to 2021/22



Source: S&P Capital IQ/PSR analysis

58 MR22/1.5 *Approach to profitability analysis working paper* (February 2023) paragraph 4.24.

59 In MR22/1.5 *Approach to profitability analysis working paper* (February 2023) we also set out the margins for comparators in the credit services sector. We have not repeated this information here.

60 This chart excludes American Express, for which S&P Capital IQ do not report an EBIT percentage. S&P Capital IQ report five year average Earnings Before Tax (EBT), excluding unusual items to be 22% between 2016/17 and 2020/21. (Source: MR22/1.5 *Approach to profitability analysis working paper* (February 2023), Figure 9, FN 62).

Stakeholder responses to our February 2023 working paper

2.58 In response to the February 2023 working paper, six stakeholders commented on our approach to selecting comparators.[61] Respondents[62] to our February 2023 working paper noted that comparators should be similar to Mastercard and Visa in risk profile, capital intensity, and stage in the business life cycle.[63] They also queried the:

a. use of NYSE-listed companies only

b. inclusion of companies that sell physical goods and provide credit to consumers

c. use of whole-of-firm margins rather than just those of operations comparable to payment systems

d. use of IT companies as they may not be in a competitive market[64]

2.59 However, respondents did not suggest any specific comparators, although one respondent said jurisdictions where Mastercard and Visa compete with strong domestic card schemes might provide a good comparator.[65]

2.60 In light of the responses and based on further analysis of the information available to us, we have refined our approach to selecting the comparators. Our analysis in the February 2023 working paper provided some initial high-level comparisons of Mastercard's and Visa's global operations indicating that Mastercard's and Visa's margins are relatively high. We have now undertaken a more detailed analysis to derive a comparator benchmark margin for Mastercard's and Visa's relevant UK operations. This included identifying comparators that operate in competitive markets and that share the closest similarities with Mastercard's and Visa's relevant UK operations. This is because, for example, many of the companies in the IT sector may have different business models to Mastercard's and Visa's relevant UK operations and may operate in a market where there is market concentration. This means that they may not be suitable comparators for the purpose of our market review. Similarly, many of the comparators in the credit services sector have different business models, for example, many earn a high percentage of their income through interest, so their risk profile and capital intensity are likely to be different to that of Mastercard's and Visa's relevant UK operations.

2.61 We set out how we have selected the comparators and the results of our comparator benchmarking analysis in Section 6, after our assessment of Mastercard's and Visa's profitability.

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61 MR22/1.7 *Stakeholder input (and non-confidential responses) to the competitive constraints call for evidence and profitability working paper* (September 2023) paragraphs 3.6 to 3.10.

62 American Express, Innovate Finance, Mastercard, Teya, Startup Coalition and Visa. See: *Non-confidential stakeholder responses to competitive constraints call for evidence and profitability working paper* (September 2023).

63 See MR22/1.7 *Stakeholder input (and non-confidential responses) to the competitive constraints call for evidence and profitability working paper* (September 2023) for a more comprehensive summary of the responses to MR22/1.5 *Approach to profitability analysis working paper* (February 2023).

64 MR22/1.7 *Stakeholder input (and non-confidential responses) to the competitive constraints call for evidence and profitability working paper* (September 2023) paragraphs 3.13 and 3.16.

65 MR22/1.7 *Stakeholder input (and non-confidential responses) to the competitive constraints call for evidence and profitability working paper* (September 2023) paragraphs 3.14 and 3.15.

Stakeholder responses to our December 2023 Confidential Working Papers (CWP) and May 2024 interim report

2.62 In December 2023, we invited Mastercard and Visa to comment on two CWPs on profitability. We offered Mastercard and Visa the opportunity to respond to these papers, providing supporting evidence and reasoning as appropriate, on the approach that we set out in those working papers. Mastercard's and Visa's responses are set out within Sections 3 to 6 of this annex along with our responses.

2.63 In response to the May 2024 interim report, six stakeholders (including Mastercard and Visa) commented or made representations on our approach to profitability analysis and our findings. These, together with our responses, are also integrated into Sections 3 to 6, below.

2.64 Of the four third parties[66] that commented on our profitability analysis, all of them agreed with our provisional conclusion that the findings indicated that Mastercard's and Visa's margins for their relevant UK operations suggested that their profits are or may be higher than those that we would expect to observe in competitive markets. We also consider and respond to third party responses to our comparator analysis in paragraphs 6.246 to 6.249.

66 [✂].

3 Assessing Mastercard's profitability

3.1 In this section we set out our assessment of Mastercard's profitability in the relevant UK operations. We also set out how we have taken into account the submissions we have received from Mastercard in response to the CWP and interim report on Mastercard's profitability and our response to them.[67,68]

Datasets used to assess Mastercard's profitability

3.2 We have looked at the following data sources to estimate the profitability of Mastercard's relevant UK operations:

a. Fully loaded UK P&L accounts submitted to us by Mastercard.

b. Mastercard's audited European Financial statements ('European accounts', 'Mastercard Europe SA (as reported) – MES' and 'MES – adjusted for intercompany transfers to MESL').

c. Mastercard's audited global financial statements ('global accounts', 'Mastercard global').

3.3 Table 1 shows the unadjusted[69] EBIT margins from each of the datasets.

Table 1: Mastercard's UK, European and global EBIT margins (%)

	2018	2019	2020	2021	2022	2023	Average (2018–23)
Mastercard fully loaded UK P&L accounts	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂][70]
Mastercard Europe SA (as reported) – MES	17.3	27.0	25.3	26.0	27.7	28.3	25.3
Mastercard global	48.7	57.2	52.8	53.4	55.2	55.8	53.9

Source: Mastercard fully loaded UK P&L accounts, Mastercard European and global financial statements

3.4 Below we assess the suitability of each data source in turn and then set out our view of Mastercard's profitability in the relevant UK operations.

67 Mastercard response to PSR working paper dated 1 December 2023 [✂].

68 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024).

69 That is, the EBIT margins as reported in each dataset without any adjustments.

70 Mastercard's fully loaded UK P&L accounts did not include data for 2018 ([✂] we agreed with Mastercard that this did not need to be provided). References to averages for 2018-2023 for Mastercard's margins in the fully loaded UK P&L accounts should therefore be read as referring to the average of 2019-2023.

Estimating UK EBIT margins based on Mastercard's fully loaded UK P&L accounts

3.5 In response to our November 2022 s81 request[71] (as subsequently supplemented with 2022 data on 12 January 2024[72] and 2023 data on 25 September 2024[73]), Mastercard provided us with fully loaded UK P&L accounts. The EBIT margins in these accounts are set out in the table below.[74]

Table 2: Mastercard's UK EBIT margins (%)

	2018	2019	2020	2021	2022	2023	Average (2018–23)
Mastercard fully loaded UK P&L accounts	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Mastercard fully loaded UK P&L accounts

3.6 We provided some guidance in our November 2022 s81 notice that all revenues and costs should be attributed on a consistent basis in the fully loaded UK P&L accounts. The accounts provided to us were based on allocation methods chosen by Mastercard. Mastercard's view was that its approach to attribution was consistent with the principles set out by us and with well-established methodologies, such as the Office of Fair Trading (OFT) 2003 paper on analysing profitability.[75]

3.7 Mastercard said that it had prepared the fully loaded UK P&L accounts based on a detailed cost allocation exercise which attributed indirect costs to the UK business based on relevant cost drivers.[76]

3.8 We have assessed whether the fully loaded UK P&L accounts provided by Mastercard reflect the considerations for the allocation of revenues and common costs set out in our approach section above.

3.9 Using the considerations set out in paragraph 2.34 above we have reviewed whether it is likely that the cost allocations in the fully loaded UK P&L accounts are based on a FAC basis using ABC principles:

a. **Disaggregation and attribution:** In January 2023 we received descriptions of the cost allocations chosen from Mastercard.[77] These provided a relatively high-level overview and were not accompanied by the associated calculations. We received the relevant calculations on 12 January 2024 from Mastercard. The calculations provided information on how common costs are allocated to the fully loaded UK P&L accounts. The calculations provided limited information on how costs that were not related to

71 Mastercard response to PSR questions dated 21 November 2022 [✂].

72 Mastercard response to PSR 13 December 2023 working paper [✂].

73 Mastercard response to PSR questions dated 22 July 2024 [✂].

74 Mastercard only provided data for 2019–2023 in response to our section 81 requests (which was an agreed position given Mastercard's representations that it would find it difficult to present 2018 data consistent with data for 2019–2021).

75 Office of Fair Trading (OFT) (2003), '*Assessing profitability in competition policy analysis*', prepared by Oxera.

76 Mastercard response to PSR questions dated 21 November 2022 [✂].

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

scheme and processing services were removed from the common cost pool before a proportion of this pool was allocated to the UK activities.

b. **Cost types:** We asked Mastercard for information about incremental costs incurred in providing scheme and processing services. Specifically, on 13 July 2023, we asked Mastercard a number of questions in relation to incremental costs. On 1 August 2023 Mastercard provided a very limited response, reiterating its statement (expressed previously at a meeting on 20 July 2023) that it does not hold detailed information.[78]

c. **Attribution drivers, cost allocation methods and reconciliation:** Mastercard provided us with reconciliations between UK and global costs on 12 January 2024. We note that this reconciliation is relatively high level and, for example, does not allow us to assess what services Mastercard is providing other than the services in scope for our market review or whether all costs for these services have been removed from global costs before global costs are allocated to the UK. We also did not have sufficient information to assess the suitability of the allocation metrics chosen by Mastercard to allocate global costs to the UK for the purpose of this market review.[79]

d. **Sensitivity testing:** Mastercard provided us with its underlying calculations on 12 January 2024, which allowed us to undertake sensitivity analysis on the assumptions that were used to allocate revenues and common costs in the fully loaded UK P&L accounts.

Our assessment of Mastercard's fully loaded UK P&L accounts

3.10 We have reviewed Mastercard's fully loaded UK P&L accounts to consider whether these are an appropriate reflection of the margins for the relevant UK operations for the purpose of our market review. We find that:

a. we currently do not have sufficient information to fully assess whether Mastercard's fully loaded UK P&L accounts can be considered a reliable reflection of the profitability of the relevant UK operations for the purpose of our market review

b. the fully loaded UK P&L accounts may be understating the economic benefits Mastercard receives from its relevant UK operations

3.11 This is because:

a. We would require more detailed information to assess whether the global cost base that is allocated to UK scheme and processing fees is free from costs that are unrelated to scheme and processing services (e.g., account-to-account payment services).

b. We would require more detail on how closely a chosen cost allocation metric correlates with how common costs are incurred in practice when providing scheme and processing services.[80]

78 Letter from Mastercard [✂] to the PSR, 1 August 2023. [✂]. Mastercard stated that 'the nature of the business means that incremental costs will be limited, but this not something that we quantify'.

79 We did not request this information from Mastercard. This is because we do not consider it necessary to do so as part of this market review, given conclusions we are drawing from this profitability analysis, as discussed in paragraph 2.12.

80 Mastercard has provided us with a number of examples, but not a full assessment, Source: Mastercard response to PSR working paper dated 1 December 2023 [✂].

c. Mastercard did not provide a detailed response to a question on the level of incremental costs of its UK operations for additional transaction values and volumes, other than stating that 'the nature of the business means that incremental costs will be limited, [✂]'. We would also like to better understand the different incremental costs of different services (for example, the difference in incremental costs between Card Not Present (CNP) transactions and other transactions).[81]

d. We identified a number of factors that indicated that the fully loaded UK P&L accounts do not include all relevant revenues and may over-allocate costs to the relevant UK operations.

3.12 In the paragraphs below, we set out nine examples of where we did not have sufficient information to fully assess the costs in Mastercard's fully loaded UK P&L accounts and, where relevant, why we think Mastercard's fully loaded UK P&L accounts may consequently understate the economic benefits it derives from the relevant UK operations.

(a) The choice of cost drivers used to allocate common costs

3.13 Mastercard told us that it allocates a significant proportion [✂]%[82] of its common costs on the basis of the number of processed transactions. The information on incremental costs provided by Mastercard implies that costs for incremental transactions are low.[83] There may therefore be more meaningful cost drivers for common costs than transaction numbers. This could, for example, be the total number of cards in issue or the number of merchants, acquirers or issuers connected.

3.14 In most cases, the information Mastercard provided in relation to cost allocations was not sufficiently granular to assess whether costs in the fully loaded UK P&L accounts are allocated taking into account activity-based costing principles. For example, for Product and Services Indirect Expenses Mastercard told us that 'the expenses directly related to each specific product or service are allocated to the UK using keys connected with product usage and roll-out metrics in each country'.

<u>Mastercard's views</u>

3.15 In response to our interim report, Mastercard said that it was misleading to say that the information it had provided in relation to cost allocations was not sufficiently granular. The allocation metrics chosen were explained to the PSR, in particular:[84]

a. [✂]

b. [✂]

c. [✂][85] [✂]

81 Mastercard response to PSR questions dated 13 July 2023 [✂].

82 Mastercard response to PSR questions from meeting on 19 January 2024, Part 1, 1 February 2024.

83 Mastercard told us that it 'has a high proportion of fixed costs, and the nature of the business means that incremental costs will be limited', Letter from Mastercard [✂] to the PSR, 1 August 2023. [✂].

84 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 15-17, Section 2.2.3.

85 Mastercard told us that P&S costs are linked to the development and the operation of specific Mastercard products and services, [✂].

3.16 Mastercard said that revenues should be used with caution when allocating costs, as a circularity problem may arise.[86] However, in this particular case, such a circularity problem would not arise, in its view, since revenues were not used to allocate costs to different products but to allocate costs to different countries. The circularity problem would only arise if the fees for the relevant services were significantly [✂] in the UK than in other countries. Mastercard argued that, as fees in the UK are either [✂] than in other countries, revenues can be used as a proxy for the use of the services in each country. Mastercard said that [✂] would then result in an [✂] of the costs in the UK. For example, since the market for [✂] is highly competitive in the UK and more so than in other countries and regions, in Mastercard's view, the allocation of [✂].[87]

<u>Our consideration of Mastercard's views</u>

3.17 We have considered Mastercard's representations. We continue to consider that the information provided to us by Mastercard does not allow us to assess whether the cost allocations used in the fully loaded UK P&L accounts best reflect ABC principles (i.e. whether they were the most appropriate cost allocation choices). For example, if the incremental costs of a transaction are low, then a transaction may not be an appropriate cost driver (Mastercard has chosen transaction numbers for the allocation of around [✂] of its common costs). Similarly, another [✂] of common costs have been allocated based on revenues, which Mastercard themselves concedes should be used with caution. We have set out in paragraph 2.44 why revenues should only be used where no other cost driver can be identified. Mastercard has not set out why no other cost driver can be identified for P&S costs. [88,89,90]

3.18 We set out in paragraph 3.11b that we would require more detail on how closely a chosen cost allocation metric correlates with how common costs are incurred in practice when providing scheme and processing services before making a decision on whether the fully-loaded UK P&L accounts are an appropriate reflection of Mastercard's relevant UK operations.

3.19 We decided not to undertake this analysis as part of this market review, given that this would have extended the timelines for this review and given the conclusions we are drawing from this profitability analysis (see paragraph 2.12).[91]

The relative size of the UK market for Mastercard

3.20 The UK is [✂] of Mastercard's [✂] markets: evidence submitted by Mastercard shows that the UK is [✂] of Mastercard's [✂] territories and [✂] European territory.[92] As such, we consider that it is plausible that costs on a per-transaction basis in the UK may not be the

86 See also paragraph 2.44.

87 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 15-17, Section 2.2.3.

88 Mastercard's view was that notwithstanding the general principle of exercising caution in allocating costs based on revenues, no concern arises in using revenues to allocate costs for P&S services.

89 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 15-17, Section 2.2.3.

90 Common costs in this context are costs that Mastercard classifies as neither being direct costs or dedicated costs in its fully loaded UK P&L accounts (which together account for approximately half of the costs in the fully loaded UK P&L accounts).

91 See also final report, paragraph 6.193.

92 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), pages 8 and 9.

same as for a market with a smaller overall size and/or where Mastercard has a smaller market share, given the low incremental unit costs of an additional transaction.[93]

Mastercard's views

3.21 In response to our interim report, Mastercard said that our analysis is predicated on a misunderstanding and that the UK is '[✁] market for Mastercard', and that 'the UK has a [✁] proportion of CNP transactions, which require certain Mastercard activities and services that *may* differ from other types of transaction' [emphasis added].[94]

Our consideration of Mastercard's views

3.22 We have considered Mastercard's representations. We note that Mastercard does not dispute that the UK is its [✁] market in terms of revenue. However, Mastercard cites evidence that the UK represents '[✁]% of Mastercard's processed transactions [✁]% of reported transactions … and [✁]% in terms of net revenues' on average in the period of 2019-2021.[95,96,97,98]

Table 3: Volume and value of UK transactions as a % of global for 2019-2023

Mastercard UK as a % of global	2019	2020	2021	2022	2023	Average (2019–23)
Value of processed transactions	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%
Value of reported transactions	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%
Number of processed transactions	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%
Number of reported transactions	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%

Source: Mastercard fully loaded UK P&L accounts

3.23 We make two final observations. First, Mastercard does not elucidate whether the UK's [✁] does in fact result in differences applicable to the UK and, if so, their relevance. Second, Mastercard does not comment on the premise that scale is relevant to costs per transaction. We therefore continue to consider it reasonable to assume that Mastercard's

93 For example, if Mastercard bought technology services from a third party in competitive markets, it is highly likely that it would pay a lower unit cost for larger transaction volumes where the technology services have low incremental costs. Or, similarly, if the various countries that Mastercard is serving were buying wholesale services from Mastercard headquarters on an arm's length basis, we would expect the largest countries to be able to negotiate a better rate. A simple pro-rata allocation of common costs to the UK does not reflect this dynamic.

94 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, page 8-9 (emphasis added).

95 We note that Mastercard's UK share of global transaction numbers has [✁] since 2021 (see Table 3 below).

96 For example, by 2023 Mastercard's relevant UK operations accounted for [✁]% of processed transactions and [✁]% of reported transactions.

97 The information included in Table 3 based on commercial and consumer cards (including debit, credit and prepaid). Table 3 is based on information Mastercard provided to us as part of the fully loaded UK P&L accounts.

98 The figures for the share of transactions submitted by Mastercard in its response to our interim report differ slightly from the figures calculated from Mastercard's fully loaded UK P&L accounts shown in Table 3. However the differences are small.

relative scale in the UK, especially compared to other European countries, may result in lower costs per transaction.

(c) Incremental costs for additional transactions are low

3.24 Mastercard told us that one of the reasons EBIT declined in its relevant UK operations was because it [✂].[99]

3.25 Mastercard's internal documents indicate that [✂] its expansion into UK debit cards.[100] The expansion into debit cards resulted in a [✂] in the number of transactions in the UK. Mastercard's fully loaded UK P&L accounts show (based on the cost allocation methods chosen by Mastercard) that over the period of 2019-2023 its costs [✂] in the UK (see Table 4 below).

Table 4: Transaction and cost growth in the fully loaded UK P&L accounts

Mastercard operating expenses fully loaded UK P&L accounts	2019	2020	2021	2022	2023
Transaction numbers (reported) in $m	[✂]	[✂]	[✂]	[✂]	[✂]
% growth	[✂]	[✂]	[✂]	[✂]	[✂]
Operating expenses (excluding incentive payments) in $m	[✂]	[✂]	[✂]	[✂]	[✂]
% growth	[✂]	[✂]	[✂]	[✂]	[✂]

3.26 However, Mastercard also told us that the cost of an additional transaction is low. We therefore consider it is possible that the cost of expanding into debit cards is significantly lower than implied by Mastercard's fully loaded UK P&L accounts. This is because the way Mastercard allocates common costs is to a significant extent based on transaction numbers with each transaction receiving an allocation of the full costs of providing scheme and processing services. From an economic perspective it is plausible that the cost associated with the expansion into debit cards is much lower and closer to the likely very low incremental cost of additional transactions. Mastercard's internal documents support this view. [✂].[101]

3.27 We also note that the EBIT in Mastercard's fully loaded UK P&L accounts has declined by [✂] (see Table 5 below). This is despite net revenues having increased [✂] (and by [✂]). Thus, [✂] despite an increase in rebates and incentives to issuers. If the costs of expanding into debit cards were lower than presented in Mastercard's fully loaded UK P&L accounts, then this would suggest that Mastercard's margins in the relevant UK operations may have declined much less than shown in the fully loaded UK P&L accounts, or potentially not declined at all.

99 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 25, Section 3.2.

100 Mastercard said in response to our interim report that the expansion into debit cards did not account for the margin [✂] in 2019/2020. This was because [✂] in relation to debit cards affected only later years. One of the reasons for [✂] in yields in 2019/2020 was the [✂] - Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 25, Section 3.2.

101 [✂].

Table 5: Mastercard's UK EBIT ($ millions)

	2019	2020	2021	2022	2023
Mastercard fully loaded UK P&L accounts	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Mastercard fully loaded UK P&L accounts

3.28 This is plausible in Mastercard's case, because where incremental costs of additional transactions are low, the significant increase in transaction numbers associated with the investment in debit cards may not have resulted in a significant increase in total costs incurred by Mastercard. Table 6 below shows that [✂] are, on average, significantly higher than in Mastercard's global (adjusted for acquisitions) and European (adjusted for MESL)[102] accounts.[103] We consider that this is implausible for a business characterised by a large proportion of fixed and common costs.

Table 6: Cost growth global and Europe ex-UK and fully loaded UK P&L

Operating cost growth Mastercard	2020	2021	2022	2023	Average (2020–23)
Global (adjusted for acquisitions) in USD	-4.8%	13.9%	6.2%	8.6%	6.0%
Europe (adjusted for MESL) in EUR	-1.6%	17.7%	11.8%	12.0%	10.0%
Fully loaded UK P&L accounts in EUR	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%

Notes:
The cost growth figures in Table 6 exclude litigation related costs.
The figures for the fully loaded UK P&L exclude incentive costs. This may make them less comparable to the European cost growth figures, which include incentive costs.
The figures for global have been adjusted to remove the effect on cost growth from acquisitions. This is because we consider that Mastercard's acquisitions may not be related to the relevant UK operations. For example, the largest acquisition was the account-to-account (A2A) business of Nets Denmark A/S in March 2021 (Source: Mastercard annual report).

3.29 This suggests that the reduction in margins in Mastercard's fully loaded UK P&L accounts is to a significant extent driven by [✂]. We show an additional sensitivity in paragraph 3.98 where we have assumed that Mastercard's costs in the UK since 2019 have [✂]. This shows that the margins in Mastercard's fully loaded UK P&L accounts would have been [✂].[104]

<u>Mastercard's views</u>

3.30 Mastercard said that the allocation of costs in the fully loaded UK P&L accounts should be based on FAC (or stand-alone costs) and that allocating costs on a FAC basis was in line with good practice.[105] It was therefore not appropriate to look at the incremental costs of

102 That is Mastercard's European accounts adjusted for the intercompany transactions with Mastercard Europe Service Limited (MESL). See paragraph 3.109 to 3.115 for details.

103 This is particularly the case from 2021 onwards, which is when most of the expansion into debit cards occurred. See paragraph 3.50.

104 Results are similar when undertaking the equivalent analysis using costs in Mastercard's European accounts.

105 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 3, Section 1.2.2 and Annex 2, Page 5, Section 2 and Annex 2, Page 7–8, Section 2.1.2.

transactions when assessing the suitability of the fully loaded UK P&L accounts for the purpose of our market review.[106]

<u>Our consideration of Mastercard's views</u>

3.31 We have considered Mastercard's representations. When assessing the suitability of the fully loaded UK P&L accounts we have looked at how Mastercard has allocated costs to the UK operations. Mastercard has allocated a proportion of costs based on transaction numbers. Because [✁] (see Table 7 below), this has resulted in an increase in the proportion of total costs that are allocated to the UK. However, given that Mastercard has told us that incremental costs of a transaction are limited, this raises the question of whether the fully loaded UK P&L accounts, which are allocating some of the costs based on transaction numbers, provide the best possible assessment of the economic benefits that Mastercard derives from the relevant UK operations.

Table 7: Mastercard number of reported transactions UK and global[107]

Mastercard UK debit and credit card transactions	2019	2020	2021	2022	2023
UK Transaction numbers (reported) in m	[✁]	[✁]	[✁]	[✁]	[✁]
% growth	N/A	[✁]%	[✁]%	[✁]%	[✁]%
Global Transaction numbers (reported) in m	[✁]	[✁]	[✁]	[✁]	[✁]
% growth	N/A	[✁]%	[✁]%	[✁]%	[✁]%

Source: Mastercard fully loaded UK P&L accounts

3.32 In other words, if transaction numbers rise significantly in the UK, but global costs do not rise proportionately (because incremental costs of transactions are low), then a cost allocation method based on transaction numbers will reallocate costs from other lower growth regions to the UK. This means that Mastercard would see margins in other regions increase as a result of the transaction growth in the UK (as costs are reallocated from other regions to the UK). This margin increase in other regions should be taken into account when assessing the economic benefits from Mastercard's expansion into UK debit cards, as these are financial benefits that Mastercard (at the overall entity level) derives as a result of the expansion into UK debit cards.

3.33 It is therefore essential that we satisfy ourselves that transaction numbers are the best measure to allocate costs to the UK and that the resulting cost allocations (and consequently margins estimates) to the UK are economically meaningful. This is particularly the case given incremental costs of transactions are low. We do not consider it necessary to do so as part of this market review, given the conclusions we are drawing from this profitability analysis, which do not include a precise finding or quantification of excess profits, and our view that further work would not result in a substantive change to these conclusions.[108]

106 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 3, Section 1.2.2.

107 Based on total number of reported transactions, including consumer, commercial and prepaid.

108 See paragraph 2.12 for more information.

(d) Allocation of revenues to the UK

3.34 Similar considerations to the above apply to the allocation of revenues to the UK activities. Whilst Mastercard has provided us with details of scheme and processing revenues in the fully loaded P&L accounts we have not received a detailed reconciliation of these revenues to the revenues in the European and global accounts in a format that would allow us to assess whether there are other revenues that are also related to scheme and processing services, but are not included in the fully loaded UK P&L.

<u>Mastercard's views</u>

3.35 In its response to our interim report, Mastercard said it disagreed with our view on revenue reconciliation.[109] Mastercard said it provided us with a detailed note setting out a reconciliation of revenues contained in the fully loaded UK P&L accounts with revenues reported in Mastercard's Europe statutory accounts. Mastercard said that the fully-loaded P&L included the UK revenues reported in the Mastercard Europe Statutory Accounts, as well as UK revenues included in other statutory accounts (such as in relation to gateway services and prepaid services). Revenues reported in the Mastercard Europe statutory accounts, together with the revenues for other Mastercard regions and other entities such as Vocalink, Payment Gateway services and Prepaid Management Services, were consolidated in the Statutory Accounts for the ultimate parent company, Mastercard Inc.[110]

<u>Our consideration of Mastercard's views</u>

3.36 We have considered Mastercard's representations. We do not agree with Mastercard's characterisation of its revenue reconciliation. The note, and Mastercard's other submissions to us, did not provide us with revenue reconciliation information in a format that would allow us to assess whether there are other revenues that are also related to scheme and processing services, but are not included in the fully loaded UK P&L accounts. This is, for example, because the revenue reconciliation provided no explanation of the nature of the revenues that were not allocated to the fully loaded UK P&L accounts.

(e) Foreign Exchange conversion revenues

3.37 A particularly significant example of the above consideration is that the fully loaded UK P&L accounts do not include the financial benefits that Mastercard derives from foreign exchange conversion (FX) services where a UK cardholder undertakes a card transaction in a different currency.[111,112] We consider that FX conversion revenues are relevant to our market review as they are an inherent part of a card transaction where currency conversion is required, i.e. they would not arise without a card transaction and form part of the economic benefits Mastercard derive from the UK card scheme operations. Our terms of

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109 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 10-13, Section 2.2.1.

110 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 10, Section 2.2.1.

111 There are also foreign exchange conversion revenues where a non-UK customer makes a transaction at a UK merchant. Mastercard has stated that [✂]. We consider that revenues from foreign exchange conversion are effectively levied on the card issuer rather than the merchant and should therefore be allocated to the location of the issuer, rather than the location of the merchant. As such, foreign exchange conversion income from UK customers should be allocated to UK revenues, even if the transaction takes place abroad.

112 We also note that Mastercard generates very significant revenues in Ireland. We consider that there is a possibility that some of the revenues in Ireland could be economically related to the relevant UK operations (for example, where some transactions with a UK nexus may be routed via Ireland). We have not explored this possibility further as part of this market review. See figure 7, which shows that net revenues in the UK are [✂] and [✂] for Ireland.

reference states that we would examine scheme and processing fees as well as 'other fees and payments relating to Mastercard and Visa's scheme and processing activities'.[113]

3.38 Subsequently Mastercard provided us with FX conversion revenues in the UK (see Table 8 below). Table 8 shows that FX-related revenues are [✂] of Mastercard's UK revenues. This is [✂] – see Figure 2.[114] Mastercard internal documents also show that [✂].[115]

Table 8: Mastercard's UK FX conversion revenues

	2019	2020	2021	2022	2023	Average (2019–23)
Mastercard UK FX revenues (USD, million)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
As % of Mastercard fully loaded UK P&L net revenue (inc. FX revenue)	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%

Source: Mastercard fully loaded UK P&L accounts

Figure 2: Mastercard share of global, debit and credit card markets

[✂]

Mastercard's views

3.39 In its responses to our CWP and interim report, Mastercard said that foreign exchange conversion revenues are out of scope of our market review and that FX income is neither a fee nor a payment.[116,117]

3.40 In its response to our interim report, Mastercard suggested that instead of undertaking a profitability analysis, we should compare its FX rates to rates offered by other providers. Mastercard provided a table showing that its bid-ask spreads were [✂]than those of other providers of foreign exchange conversion services.[118]

Our consideration of Mastercard's views

3.41 We do not agree with Mastercard's assessment that foreign exchange conversion revenues are out of scope of our market review. We are focused on whether Mastercard is able to earn profits that are higher than in competitive markets. Such an assessment would be incomplete if it did not take ancillary revenues into account that arise as a result of operating scheme and processing services and may understate the economic benefits Mastercard derives from operating scheme and processing services. This is because in a competitive market, ancillary revenues form part of the considerations in respect of market entry and pricing decisions. This can be illustrated by the ancillary services in air travel (for example, food sales or luggage fees). Ancillary revenues are not a direct revenue when offering an airline ticket to a consumer. However, they are a key consideration in the

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

114 [✂].

115 [✂].

116 Mastercard response to PSR 1 December 2023 working paper [✂].

117 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Pages 10–13, Section 2.2.1.

118 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Pages 10–13, Section 2.2.1.

pricing decision for airline tickets. Effective competition can be expected to ensure that ancillary revenues are passed on to customers in the form of lower ticket prices insofar as they exceed the costs of offering ancillary services. Equivalently, we would expect that foreign exchange conversion revenues (net of economic costs) would be reflected in lower prices (or higher discounts) for scheme and processing services in a competitive market.

3.42 We do not consider a benchmarking comparison of Mastercard's FX conversion fees with other FX providers should replace our profitability analysis of Mastercard's relevant UK operations or should lead us to remove FX revenues from the profitability analysis. This is because in our profitability analysis we are interested in the economic benefits Mastercard derives from its relevant UK operations overall (which includes FX and all other relevant UK revenues).

(f) Estimates for profitability in 2018

3.43 We consider it is possible that Mastercard's average margins in the fully loaded UK P&L accounts in the 2018-2023 period could have been higher than in the 2019-2023 period. This is because Mastercard provided us with fully loaded UK P&L accounts for the period of 2019–2023. This includes two years that were impacted by COVID-19 (2020 and 2021), which may as a result understate the underlying profitability of Mastercard's UK operations when compared to a margin calculated as an average over the 2018–2023 period. [✂].[119] [✂] Mastercard's internal documents show that net revenue yields (i.e. net revenues divided by transaction value) in 2018 were [✂][120] [✂].

Figure 3: Mastercard presentation: Top markets (profitability and market share trends)

[✂]

<u>Mastercard's views</u>

3.44 Mastercard noted that we cannot conclude that margins would have been higher in 2018 solely on the basis of [✂].[121]

<u>Our consideration of Mastercard's views</u>

3.45 It is possible that there are other factors impacting on 2018 margins. Where this is the case, [✂] alone would not allow us to conclude that operating margins would be higher in 2018. However, we note that Mastercard has not provided any evidence of such other factors (although Mastercard suggested that only preparing the UK P&L for 2018 would allow us to accurately assess the 2018 margins for Mastercard in the UK). In the absence of any evidence of such other factors, we consider that it is plausible that [✂] are suggestive of higher margins in 2018. This is because the cost impacts of incremental changes in net revenue yields are likely to be small due to Mastercard's large fixed and common cost base.[122]

119 [✂]. Source: Mastercard response to PSR working paper dated 1 December 2023 [✂].

120 [✂].

121 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 20-21, Section 2.4.

122 However, we note that, whist we have considered Mastercard's 2018 margins as part of this market review, we have not placed weight on it in coming to our conclusions on Mastercard's profitability in this market review.

(g) The margin reduction may be temporary

3.46 Mastercard's market share in debit cards in the UK has been growing significantly over the period 2019–2022. This growth in market share was associated with upfront investment, for example in the form of incentives and rebates for issuers. We consider that there is therefore a possibility that once the benefits from the expansion into debit cards come into full effect, margins could increase again. For example:

a. Mastercard's internal documents showed that [✂].[123]

b. Another internal document shows that the [✂].[124]

3.47 Figure 4 is from a slide that Mastercard sent to us in response to our CWPs.[125] [✂].

Figure 4: Mastercard presentation: Expected development of profitability and net revenue structure

[✂]

3.48 Figure 5 states that 'the UK core issuing business is [✂]' [emphasis added]. It further states '[✂]%'.[126] As Mastercard's market share increases towards [✂]% at maturity, it might be expected that Mastercard's margins will increase.

Figure 5: Mastercard presentation: Expected development of market share

[✂]

3.49 The fully loaded UK P&L accounts for 2023 show EBIT growth of ca [✂]% (an increase of ca [✂] after a decline of ca [✂] between 2019 and 2022)[127] and a [✂] in the EBIT margins compared to 2022. This suggests that the margin [✂] shown in the fully loaded UK P&L accounts may [✂] and that margins [✂].

<u>Mastercard's views</u>

The impact of credit card rebates and incentives

3.50 Mastercard stated that one of the factors for the margin reduction between 2018 and 2021 was the [✂].[128] Mastercard separately said that one of the reasons for the [✂] was the [✂].[129] More specifically, Mastercard told us that the [✂]. This was because all except one of the contracts in relation to debit cards affected only later years.

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123 [✂].

124 [✂]. See Figure 3.

125 Mastercard response to PSR working paper dated 1 December 2023 [✂].

126 Mastercard response to PSR working paper dated 1 December 2023 [✂].

127 See paragraph 3.27.

128 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 26, Section 3.2.

129 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 25, Section 3.2.

3.51 Mastercard said that [✂], and that its portfolio of credit card contracts was more mature and consisted of a mix of new and renewed contracts. This demonstrated that the rebates and incentives for debit cards were not temporary, but would be maintained even if the portfolio for debit cards matured.[130]

Future development of profitability

3.52 Mastercard said that analysis in its internal documents relating to expected future performance and results was forward-looking and, therefore, by its nature subject to uncertainty.[131] Mastercard said that the slide describing a '[✂]' of [✂]%,[132] was a forward-looking statement and uncertain by nature.[133]

3.53 Mastercard told us that it would be inaccurate to conclude that Mastercard would [✂]. This would implicitly assume that Mastercard would be successful in winning new contracts without losing existing contracts; this was not a realistic assumption. It would also assume that [✂]. On the contrary, [✂].[134] Mastercard said that contracts generally last between five and seven years and without knowing what competing offers the issuers will receive in the future, it is impossible to accurately forecast what the future level of incentives and rebates will be. However, Mastercard noted that data submitted on incentives and rebates to the PSR shows a clear upward trend.[135]

3.54 Mastercard also said that targeting a specific market share suggested that once Mastercard reached a certain market share it would no longer seek to win further contracts. This was inconsistent with a rational, profit-maximising firm which would seek to expand as long as it is profitable to do so. The PSR had suggested in the interim report that the incremental costs of expansion were low, and, if that was correct, it was likely that a profit-maximising firm would seek to continue to expand. Put another way, Mastercard would continue to offer rebates and incentives to win and retain contracts until it is no longer profitable to do so – that was effective competition, in Mastercard's view.[136]

3.55 Mastercard stated that the slide showing [✂] should not be interpreted as suggesting that its [✂], as [✂].[137]

3.56 Mastercard also suggested that the level of rebates and incentives during the period 2022-26 is higher than during the period 2019–21 and can therefore not be considered to be temporary.[138]

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130 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 25, Section 3.2.

131 Mastercard response to PSR working paper dated 1 December 2023 [✂].

132 See the Figure 5.

133 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 25, Section 3.2.

134 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 25, Section 3.2.

135 Mastercard response to PSR working paper dated 1 December 2023 [✂].

136 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 25, Section 3.2.

137 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 27, Section 3.2.

138 Mastercard response to PSR working paper dated 1 December 2023 [✂].

3.57 Mastercard also said that analysis in its internal documents was forward-looking and therefore by its nature subject to uncertainty.[139]

3.58 Mastercard submitted that there is a future competitive threat both from alternative payment methods and other payment card networks and that rebates and incentives are required in order to remain competitive.[140]

Our consideration of Mastercard's views

The impact of credit card rebates and incentives

3.59 Table 9 below shows that Mastercard's debit card transactions [✂], but [✂].

Table 9: Table Mastercard debit and credit card transactions in the UK

	2019	2020	2021	2022	2023
Number of credit card transactions (reported) in m	[✂]	[✂]	[✂]	[✂]	[✂]
Growth in %	N/A	[✂]%	[✂]%	[✂]%	[✂]%
Number of debit card transactions (reported)	[✂]	[✂]	[✂]	[✂]	[✂]
Growth in %	N/A	[✂]%	[✂]%	[✂]%	[✂]%

Note: The figures in Table 9 include commercial and consumer and debit/credit, but exclude prepaid.
Source: Mastercard fully loaded UK P&L accounts.

3.60 We therefore consider it possible that the expansion into debit cards had less of an impact on margins in 2020 compared to 2021 to 2022.

3.61 We note Mastercard's submission that [✂]. We consider that it is not necessary to undertake an analysis of the impact of credit card rebates and incentives on Mastercard's margins in the fully loaded UK P&L accounts as part of this market review. This is based on the conclusions we are drawing from this profitability analysis, which do not include a precise finding or quantification of excess profits, and our view that further work would not result in a substantive change to these conclusions – in particular, that our findings in respect of profitability (together with our separate findings on pricing) would be consistent with our finding of a lack competitive constraints on the acquiring side.[141]

3.62 In taking this decision, we have also had regard to Mastercard's net revenue yields. As can be seen in figure 3, net revenue yields in 2019/2020 are [✂] in the UK compared to Europe (and 'scheme' services revenues account [✂][142]). In comparison, revenue yields in 2021/2022 are [✂] and [✂], respectively. We thus consider, on balance, that it is unlikely that the increased incentives and rebates on credit cards alone would have a significant impact on the margins in the relevant UK operations.

139 Mastercard response to PSR working paper dated 1 December 2023 [✂].

140 Mastercard response to PSR working paper dated 1 December 2023 [✂].

141 See paragraph 2.12.

142 See Table 21.

3.63 This is also because it is possible that margins in 2020 could also have been impacted by COVID-19. We set out below the [✁] in cross-border net revenues in 2020, which are likely at least partially due to COVID-19 and could at least partially explain [✁] (rather than solely being explained by rising rebates and incentives in credit cards).

Table 10: Mastercard cross border revenues ($m) and as a % of total gross revenues

	2019	2020	2021	2022	2023
UK cross-border gross revenues ($m)	[✁]	[✁]	[✁]	[✁]	[✁]
UK cross-border revenues as a % of total gross revenues	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%

Source: PSR analysis of Mastercard's fully loaded UK P&L accounts

Future development of profitability

3.64 Whilst it is correct that it is not possible to forecast the future with certainty, we nevertheless consider that Mastercard's submission does, if anything, support our view that the margin decline in the fully loaded UK P&L account may be temporary. We particularly note – and agree with – its statement that 'a rational, profit-maximising firm which would seek to expand as long as it is profitable to do so'. The fully loaded P&L accounts show a decline of its EBIT [✁] over the period of 2019 to 2022.[143] It would be consistent with Mastercard's own stated strategy of a profit maximising firm that it would not have expanded into debit cards if it had expected that the reduction in EBIT was permanent. We therefore continue to be of the view that there is a possibility that the margin decline up to 2022 may be temporary.[144]

3.65 Mastercard's internal documents show an [✁].[145] The same document also indicates expected additional future benefits that are not captured in the figures in that document.

3.66 Whilst we recognise that the expected [✁], we nevertheless consider that this combined with Mastercard's expectations of strong revenue growth (see paragraph 3.22 and) and Mastercard's operating leverage (see paragraph 3.12), suggests that Mastercard's margins may well increase in the future. We note that margins [✁] in the fully loaded UK P&L accounts in 2023.

(h) The allocation of rebate and incentive costs

3.67 We have not been able to fully assess whether rebates and incentives related to the expansion into UK debit cards have been allocated in a way that best reflects the economic benefits associated with these payments. Mastercard explained, and provided illustrative examples, of how incentive payments are accounted for in its accounts, and how the adopted approach aligned with the economic benefit that can be derived from the incentives. But this information was not sufficiently detailed to assess how Mastercard has capitalised and depreciated incentive payments that are shown in the fully loaded UK P&L accounts.

143 See Table 5 .
144 We note in this context that the fully loaded UK P&L accounts for 2023 show [✁].
145 See paragraph 3.47 and Figure 4.

3.68 It is possible that relatively higher rebate and incentive costs have been allocated in the early years of a new contract, when revenues are still relatively low, but relatively lower costs are allocated to later years, when revenues could more fully reflect the benefits of the expansion into debit cards. This could be the result of two effects:

a. It is possible that not all costs that should be capitalised and depreciated from an economic perspective are treated in this way under the accounting rules that Mastercard has applied when compiling the fully loaded UK P&L accounts.[146]

b. Mastercard said that it employed a straight-line depreciation approach to those incentive costs that it capitalises. This indicates that more costs are allocated (as a proportion of revenues) to the early years of a contract compared to later years, which may not reflect the economic utility of the rebates when assuming growing revenues from the contract.[147]

3.69 Mastercard, in response to the interim report, said it had assessed the impact on the operating margins in its fully loaded UK P&L accounts when allocating them based on revenues instead of using a straight-line method. Mastercard said it based this analysis on the debit card contracts signed in 2018-2022.[148,149] Our view is that this analysis shows that choosing a different depreciation profile for incentive payments can have a significant impact on the profit margins in the fully loaded UK P&L accounts (see Table 11 below).[150] Table 11 shows that EBIT margins are [✂] when using a depreciation profile based on revenues rather than a straight line depreciation profile.

Table 11: EBIT margins (%) in the fully loaded UK P&L accounts using different depreciation profiles for upfront incentive payments[151]

	2019	2020	2021	2022
Straight line depreciation	[✂]	[✂]	[✂]	[✂]
Depreciation in line with revenues	[✂]	[✂]	[✂]	[✂]

Source: Mastercard
Notes: The analysis was conducted for the following contracts: [✂]

3.70 Mastercard's EBIT in the fully loaded UK P&L has [✂]. In our view, this implies [✂].[152] We note however, that there is a possibility that the future benefits from these investments may not necessarily directly benefit Mastercard's relevant UK operations. For example,

146 Call with Mastercard 21 February 2024 [✂].

147 [✂].

148 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 23–24, Section 3.1.

149 Mastercard said that its analysis shows that [✂] and that when allocating incentives based on revenues, the downward trend in margins does not change. Mastercard also said that its analysis was a conservative assessment which overestimated the impact because a) The same adjustment would have to be applied to all existing contracts and b) the time value of money should also be taken into account of as most incentive payments are made at the start of the contract.

150 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 23-24.

151 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 23-24, Section 3.1.

152 Mastercard told us that a rational, profit-maximising firm would seek to expand as long as it is profitable to do so (Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 23).

Mastercard told us that it [✁]. [153] In this case, we consider that it would be appropriate, from an economic perspective, to either allocate some of the margins from the future sales of these other products to the relevant UK operations (which would increase future margins in those operations), or to reallocate some of the rebates and incentives from the fully loaded UK P&L accounts to these other product lines. In the former case this would suggest that margins may increase again in the future and in the latter case it would suggest that [✁].

a. Mastercard's internal documents also indicate that [✁]. Specifically Figure 4[154] indicates that [✁]. This again suggests that at least a proportion of rebate and incentive payments to gain market share with issuers could potentially be attributed to products and services that are out of scope of our market review (for example, open banking services or account-to-account services) or may be related to expected revenues in later periods.
b. [✁].

<u>Mastercard's views</u>

3.71 Mastercard told us that rebates and incentives have not been overstated in the fully loaded UK P&L accounts because in Mastercard's systems a large proportion of rebates and incentives granted to issuers (around [✁]%) are accounted for in line with revenues.[155]

<u>Our consideration of Mastercard's views</u>

3.72 We understood Mastercard's response to mean that around [✁]% of the rebates and incentives it provides are [✁]. See Table 12 below.

Table 12: % of rebates and incentives offset against net revenues in Mastercard's fully loaded UK P&L accounts

	2019	2020	2021	2022	2023
Rebates & incentives offset against net revenues as a % of total R&I	[✁]	[✁]	[✁]	[✁]	[✁]

Source: PSR analysis of Mastercard's fully loaded UK P&L accounts.

3.73 We do not consider the fact that some rebates are netted off gross revenues means that they cannot, from an economic perspective, be allocated to different services or different time periods. For example, Mastercard may be prepared to offer higher rebates in relation to its scheme and processing services (and that are netted off gross revenues) in order to promote cross selling of a larger set of services to an issuer, some of which may not be part of scheme and processing services (e.g., A2A services or consultancy services). Another example is where rebates are higher when a client first joins but are then lower when the contract is renewed.

153 [✁].

154 Mastercard response to PSR 1 December 2023 working paper [✁].

155 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 23, Section 3, 3.1.

(i) The accounting treatment of incentive costs

3.74 Mastercard has included a proportion of customer incentives as a cost item, rather than a reduction in revenues in its fully loaded UK P&L accounts. This has the effect of reducing the UK margins and is different to how Mastercard reports its incentives in its audited global accounts. See also paragraph 3.122 for more details.

Mastercard's views

3.75 Mastercard said that the treatment of certain incentive payments as costs in the fully loaded UK P&L is appropriate as it is consistent with how Mastercard publicly reports under Belgian GAAP. This is also consistent with how certain incentive payments are treated in Mastercard's UK accounts (part of Mastercard Europe).[156]

Our consideration of Mastercard's views

3.76 We note from Mastercard's submissions that different accounting standards may allow for a different treatment of certain incentive payments that Mastercard makes to its customers. This does not affect Mastercard's reported EBIT, but can have an impact on net revenues and consequently the EBIT margin. We do not think it is necessary for us to identify which of the accounting treatments is more appropriate for the purpose of our market review.

3.77 Rather we consider that whatever accounting treatment is chosen should be consistent between Mastercard and Visa and the comparators. This is because we derive Mastercard's margins for the relevant UK operations primarily to compare them to similar companies operating in competitive markets. We note that our comparator group reports under US GAAP (PayPal) and Australian GAAP (eftpos and OFX). Under US GAAP all incentive payments are netted off against revenues rather than shown as cost items. The treatment under Australian GAAP (which follows IFRS, the International Financial Reporting Standards), is unclear.[157] It may therefore be possible that Australian GAAP is similar to Belgian GAAP (which is how Mastercard reports its fully loaded UK P&L and European accounts) in that it reports some incentive payments as costs.

3.78 We have undertaken a sensitivity analysis for eftpos and OFX, where we provide illustrative estimates of their margins assuming that some incentive payments are reported as costs in their financial statements.[158] The resulting sensitised margins are shown below.

156 Mastercard response to PSR working paper dated 1 December 2023 [✁].

157 IFRS states that incentive payments that relate to a specific activity performed by the customer, on behalf of the supplier, should be reported as a cost – like any other goods or services purchased from other suppliers; IFRS Foundation, IFRS 15 Revenue from Contracts with Customers paragraphs 70 and 71, September 2015.

158 Neither eftpos nor OFX report the level of incentive payments in their published accounts. We therefore based our sensitivity analysis on re-classifying those costs items in their reported P&L accounts that are most likely to include incentive payments.

Table 13: OFX and eftpos EBIT margins

	2018	2019	2020	2021	2022	2023	Average (2018–23)
OFX EBIT margin	17%	19%	13%	21%	19%	19%	18%
OFX EBIT margin netting promotional expenses against revenue	20%	21%	15%	24%	21%	21%	20%
eftpos EBIT margin	5%	11%	21%	10%	N/A	N/A	12%
eftpos EBIT margin netting P&L[159] against revenue	8%	15%	28%	13%	N/A	N/A	16%

Notes: eftpos margins are based on data from 2018–2021 as data for 2022 and 2023 is not available. OFX margins are based on a financial year end in March (for example, 2022 data is based on March 2023 accounts).
Source: OFX and eftpos financial statements, PSR calculations.

3.79 We note that the revised margin estimates may overstate the impact of removing incentive payments as the costs lines we have removed to perform this estimate may also include costs other than incentive payments.

3.80 Table 13 shows that under this conservative assumption margins for eftpos and OFX could be 4% and 2% higher, respectively. We note that using this alternative benchmark margin estimate for eftpos and OFX would not significantly change the comparator benchmark margin range of 12% to 18% that we have estimated in Section 6. We have therefore not considered it necessary to undertake a more detailed assessment as part of this market review, noting that the impacts estimated above are conservative estimates and that a slightly higher benchmark margin range as implied by the sensitised analysis above would not significantly alter the conclusions we reach in respect of Mastercard's profitability in this market review.

Sensitivity analysis

3.81 In order to assess the possible impact of some of the factors set out above, we have undertaken sensitivity analysis using Mastercard's fully loaded P&L accounts provided to us by Mastercard on 12 January 2024 and 22 July 2024.[160] The purpose of this analysis was primarily to test the sensitivity of the profitability shown in the fully loaded UK P&L accounts to assumptions made in the allocations of cost and revenues.[161]

3.82 In our analysis we have made changes to the following key assumptions:[162]

a. [✁].

b. [✁]

   1. [✁][163]

159 Product and implementation expenses.

160 Mastercard response to PSR 13 December 2023 working paper [✁] and Mastercard response to PSR questions dated 22 July 2024 [✁].

161 We did not aim to identify the 'correct' cost and revenue allocations with this analysis.

162 We have not separately assessed a cost allocation sensitivity based on net revenues. This is because doing so would result in the same margin estimate as using the margins in the European and global accounts. We have instead reviewed separately the suitability of margins in the European and global accounts for understanding UK margins.

163 [✁].

2. [✂]
3. [✂]
4. [✂]

c. [✂]

3.83 Undertaking this sensitivity analysis shows that making these different cost and revenue allocation assumptions has a significant impact on the margins in the fully loaded UK P&L accounts.

Table 14: Incremental impact of sensitivity analysis on Mastercard's EBIT margin

	2019	2020	2021	2022	2023	Average (2019–23)
Mastercard fully loaded UK P&L accounts	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%
Δ [✂]	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%
Δ [✂]	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%
Δ [✂]	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%
Δ [✂]	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%
Δ [✂]	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%
Total change in EBIT margin	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%
Mastercard sensitised fully loaded UK P&L accounts	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%

Source: Mastercard fully loaded UK P&L accounts, PSR calculations
Note: The percentage changes shown above should be read as percentage point changes. Each change shown is the incremental impact of the change in addition to the previous changes. The individual percentage point changes for each adjustment above may be different if the sequence is changed, although the cumulative change of all individual changes would not be

3.84 Table 14 shows that flexing a number of assumptions results in an average margin of [✂]% over the period of 2019–2023 (compared to an average of [✂]% in Mastercard's fully loaded UK P&L accounts), demonstrating a significant level of sensitivity of the results to the revenue and cost allocation assumptions made.

3.85 This analysis is not intended to identify the 'correct' margins for Mastercard's relevant UK operations, but rather to identify the sensitivity of the margins in the fully loaded UK P&L accounts to the assumptions made.

3.86 We note that our assumptions do not currently include a reallocation of incentive payments to future time periods or to products outside of scheme and processing services. If we had made adjustments for these considerations, there could have been a further increase in the margins shown above. We also note that alternative cost allocation assumptions could result in higher or lower margins.

Mastercard's views

3.87 Mastercard argued that some of the cost drivers (which Mastercard referred to as 'allocation keys' in its response to the interim report) we had used in the sensitivity analysis in our interim report were not reflective of activity-based costing.[164] Mastercard said that it was not clear how the choice of cost drivers in our sensitivity analysis could be justified. In particular:[165]

a. [✂].

b. [✂].

c. [✂].

3.88 Mastercard told us that the impact on margins in our sensitivity analysis from using our alternative cost drivers is relatively limited (between [✂]). The change was even smaller if more appropriate cost drivers than those chosen by the PSR had been used in the sensitivity analysis. This showed that the fully loaded UK P&L accounts submitted by Mastercard were prepared in line with good practice, in its view.[166]

3.89 Mastercard also said that our sensitivity analysis did not take factors into account that would lower the margins, such as:[167]

a. litigation costs

b. the cost of the early roll-out of new services in the UK ahead of other markets

3.90 Mastercard argued that we had overstated the impact of deducting all incentives from gross revenues (rather than treating some incentives as costs) in our sensitivity analysis.[168]

3.91 Mastercard submitted that the PSR implicitly assumed that it derived an operating margin of 80% for FX activities. Mastercard said that, given the competitive nature of the rates offered by Mastercard, this was clearly unrealistically high.[169] Mastercard said FX-related costs consisted of operating expenses, the costs of hedging positions, losses, risks taken and the use of capital. Mastercard said it took an additional risk by guaranteeing an exchange rate at the time of authorisation while the actual settlement took place later. These costs had not been included in the fully loaded UK P&L accounts. Quantifying the costs and allocating these to the UK would require substantial work.[170]

Our consideration of Mastercard's views

3.92 We note that Mastercard has suggested alternative assumptions for our sensitivity analysis, which would result in a lower sensitised margin than the one we have identified. However, the purpose of our sensitivity analysis was not to identify the 'ideal' or 'correct' cost driver, but rather to illustrate that margins can differ significantly when using different assumptions.

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164 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 2, section 1.2.1.

165 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 17–19, section 2.3.

166 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 2, section 1.2.1.

167 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 17–19, section 2.3.

168 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 17–19, section 2.3, FN54.

169 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024,) Annex 2, Pages 10–13, Section 2.2.1.

170 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Pages 10–13, Section 2.2.1.

3.93 In order for us to find an 'ideal' set of sensitivities, we would need to undertake a fuller review of how Mastercard incurs costs in order to allow us to derive the most appropriate cost allocation metrics for the sensitivity analysis. This would likely include cost drivers that are not transaction-related, given the low incremental costs associated with incremental transactions. We set out in paragraph 3.174 that we do not consider it necessary to derive our own view of a robust spot estimate for the margins in the relevant UK operations as part of this market review – for example, by making adjustments to the financial model used by Mastercard to derive the fully loaded UK P&L accounts. We therefore do not consider that it is necessary for us to undertake a more detailed sensitivity analysis, in particular considering that a fuller assessment would likely require us to review whether cost drivers other than transaction numbers should be included in the sensitivity analysis.

3.94 We also note that there are other sensitivities that we could have tested, but that we have not included in our sensitivity analysis, which would likely have resulted in higher margins in the sensitivity analysis. For example, we could have included a sensitivity where some of the incentive costs are allocated to other products that benefit from cross-selling opportunities, or the allocation of some incentive costs to future time periods. We consider that this shows that even if it were the case that some of the sensitivities we have used are less relevant, further analysis using alternative approaches are unlikely to result in a lower range of margins in the sensitivity analysis.

3.95 We note Mastercard's comments that we have not included factors that could lower margins in our sensitivity analysis. We did not consider that it would be necessary to run a 'low' scenario for the sensitivities as this would result in an even wider range for the possible margins in the fully loaded UK P&L accounts and, as such, would not change our view that we currently cannot rely on the fully loaded UK P&L accounts to assess Mastercard's margins in the relevant UK operations. We also do not think that combining factors that increase and decrease margins would be particularly informative as these would not provide information on the full range of possible margins in a sensitivity analysis.

3.96 Mastercard has not provided us with their calculations for the impact of deducting all incentives from gross revenues (rather than treating some incentives as costs) in our sensitivity analysis. However, we note that the incremental impact of any step in the sensitivity analysis can vary depending on the sequence in which they are performed.

3.97 We do not agree that a level of FX conversion spreads (or fees) that is similar or lower than that offered by other providers necessarily means that the associated margins must be low. For example, if Mastercard sells FX conversion as an 'add-on' to an underlying payment transaction, then the associated incremental costs of offering FX conversion may plausibly be low. We note that whilst Mastercard has provided us with information about the types of costs that are associated with FX conversion revenues, it has not provided any quantitative evidence to support its view that our assumption of costs being 20% of revenues that we used in our sensitivity analysis is incorrect. We also note that the 'use of capital' would likely not be appropriate to include as a cost item when undertaking a margin benchmark analysis.[171]

171 This is because in a margin benchmarking analysis we compare EBIT margins of Mastercard to comparable companies. The cost of the 'use of capital' would be expected to reflect interest costs and returns to shareholders, which are not included in the EBIT measure.

Additional sensitivity analysis

3.98 As noted above at paragraph 3.50, In response to our interim report, Mastercard said that it had [✂] in the period of 2019-2021.[172] In order to assess the impact of the increased incentives and rebates on the margins in Mastercard's fully loaded UK P&L account, we have undertaken an additional sensitivity analysis where we assume that Mastercard's costs in the fully loaded UK P&L accounts grow in line with the global average growth in costs (adjusted for acquisitions and litigation costs), and an analysis where we assume growth in line with European costs (adjusted for MESL and litigation costs). This can help illustrate how far the margin decline in the fully loaded UK P&L accounts is due to increases in incentives and rebates compared to increases in costs. In order to be comparable, we show margins assuming that all incentive payments are offset against revenues when using cost growth in the global accounts (but not when using the European accounts). We remove cost growth from acquisitions in the global accounts, with our assumption being that Mastercard's acquisitions mainly relate to services outside the scope of our market review (e.g., A2A services).[173] Table 15 shows that margins in each scenario would result in a higher and more stable margin compared to the fully loaded UK P&L accounts. This shows that part of the reduction in Mastercard's margins in the fully loaded UK P&L accounts is due to costs rising faster than in the global (and European) accounts, rather than being solely driven by increases in rebates and incentives.

Table 15: Sensitivity using global cost growth

	2019	2020	2021	2022	2023	Average (2019–23)
UK costs per fully loaded UK P&L accounts (USDm) – excl incentive costs	[✂]	[✂]	[✂]	[✂]	[✂]	
Cost growth in the global accounts adjusted for acquisitions and litigation costs		-4.8%	13.9%	6.2%	8.6%	6.0%
UK costs in fully loaded UK P&L accounts if grown in line with global costs adjusted for acquisitions and litigation costs (USDm)	[✂]	[✂]	[✂]	[✂]	[✂]	
UK revenues with incentive costs netted off (USDm)	[✂]	[✂]	[✂]	[✂]	[✂]	
… resulting EBIT margins	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%
EBIT margin fully loaded UK P&L (with incentives netted off revenues)[174]	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%

172 Mastercard response to MR22/1.9 (21 May 2024,) Annex 2, Page29, Section 3.2.

173 For example, in 2022 4% of Mastercard's global operating expenses growth was due to acquisitions and in 2021 (2020) this was 7% (4%), Source: Mastercard Annual report 2022, page 55 and 2021, page 52. The largest acquisition was the accounts to accounts (A2A) business of Nets Denmark A/S in March 2021 (Source: Annual reports).

174 The last row shows the margins in the fully loaded UK P&L accounts with all incentives being netted off revenues (instead of being included in costs). This is to allow a like for like comparison of the sensitised margin in this Table 15 with the margins in the fully loaded UK P&L accounts.

Table 16: Sensitivity using European cost growth

	2019	2020	2021	2022	2023	Average (2019–23)
UK costs per fully loaded UK P&L accounts (EURm) incl. incentive costs	[✁]	[✁]	[✁]	[✁]	[✁]	
cost growth Europe adjusted for MESL and litigation costs		-1.6%	17.7%	11.8%	12.0%	10.0%
UK costs in fully loaded UK P&L accounts if grown in line with European costs adjusted for MESL and litigation costs (EURm)	[✁]	[✁]	[✁]	[✁]	[✁]	
UK revenues (EURm)	[✁]	[✁]	[✁]	[✁]	[✁]	
… resulting EBIT margins	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%
EBIT margin fully loaded UK P&L	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%

Acquiring margin estimates

3.99 We have found in Annex 6 of the final report (Descriptive Data Analysis) that Mastercard generates [✁]% of net revenues on the acquiring side ([✁]). In order to contextualise this observation, we performed an additional hypothetical sensitivity analysis assuming that the acquiring side is run as a separate division from the issuing side with costs split equally between them.

3.100 We did not ask Mastercard to provide us with estimates of profitability separately for issuers and acquirers. However, Mastercard provided us with gross revenues, rebates and net revenues, split by issuer and acquirer. This, together with Mastercard's fully loaded UK P&L accounts and a number of cost allocation assumptions, allowed us to derive a broad estimate for the EBIT margins that Mastercard derives from acquirers and issuers.

Table 17: Mastercard's UK EBIT margins by customer assuming 50/50 cost split (%)

Mastercard EBIT margins	2019	2020	2021	2022	2023	Average (2019–23)
Acquirers, cost allocated based on 50/50 share with issuers	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
Issuers, cost allocated based on 50/50 share with acquirers	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
Mastercard fully loaded UK P&L	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]

Note: The calculation of issuer margins can be impacted by low net revenues on the issuing side (for example, high negative margins result from costs being divided by low levels of net issuing revenues)
Source: Mastercard fully loaded UK P&L accounts, PSR calculations

3.101 Table 17 shows that average margins on the acquiring side (circa. [✂]%) are higher compared with the overall margins ([✂]%) and [✂] than the margins on the issuing side, and [✂].[175]

Mastercard's views

3.102 Mastercard argued that our assessment of acquirer margins did not make sense from an economic or business perspective and was inconsistent with the characteristics of two-sided markets. This was because:[176]

a. Mastercard ran a two-sided network with positive externalities. As the number of issuers and acquirers on the platform increased it became more attractive to both sides

b. Mastercard did not run the acquiring side as a separate division nor did it assess the profitability of its acquiring and issuing activities separately in its normal course of business

Our consideration of Mastercard's views

3.103 We set out in paragraph 3.99 that our acquiring margin analysis is a hypothetical exercise based on very broad assumptions. We note Mastercard's reference to the complexity of assessing profitability separately for each side of the market in two-sided markets. We nevertheless found the analysis informative as it provides context to our findings that most net revenues are generated on the acquiring side. It also provides an indication of how overall costs are recovered from each side of the market and is informative on which side of the market (in this case the acquirer side) makes the greater contribution to Mastercard's overall profitability.

Findings on Mastercard's UK margins based on the fully loaded UK P&L accounts

3.104 We currently do not have sufficient information to fully assess whether Mastercard's fully loaded UK P&L accounts are a reliable reflection of the profitability of the relevant UK operations for the purpose of our market review.

3.105 Our analysis of Mastercard's fully loaded UK P&L has shown that the margins in the fully loaded UK P&L accounts can vary very significantly, depending on what assumptions are made in relation to the allocation of common costs and revenues. For example, average margins in Mastercard's fully loaded UK P&L accounts are [✂]% but rise to [✂]%[177] in our sensitivity analysis (on average for the period of 2019–2023).

3.106 Our analysis also indicates that Mastercard's analysis of its margins for the relevant UK operations as presented in the fully loaded UK P&L accounts may underestimate the economic benefits that Mastercard derives from its relevant UK operations. This is mainly due to:

a. [✂].

175 We note that this analysis is based on the fully loaded UK P&L accounts provided to us by Mastercard without any the sensitivity adjustments identified in paragraph 3.25.

176 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 21-22, Section 2.5.

177 We note that this figure could be higher or lower depending on the alternative cost and revenue allocation assumptions made. See also paragraph 3.85 to 3.86.

b. [✂].

c. [✂].

d. [✂].

3.107 We therefore do not think that we can currently derive an estimate of Mastercard's profitability in the relevant UK operations from the fully loaded UK P&L accounts that is suitable for the purposes of assessing whether market outcomes are consistent with a competitive market. We further note that because Mastercard does not report financial performance for its UK business, we are currently not in a position to effectively monitor its financial performance in the UK.

3.108 In the next two sections we set out a review of Mastercard's European and Global accounts and consider whether these could be relevant in understanding the margins Mastercard earns in the relevant UK operations.

Estimating UK EBIT margins based on Mastercard's published European accounts

3.109 Mastercard publishes audited regional accounts that mainly include European operations (Mastercard Europe SA – MES or European accounts). Mastercard told us that the MES accounts contain the vast majority of UK external revenues. UK costs are captured in a number of UK entities including Mastercard UK Management Services Limited (MEPUK) and Mastercard European Services Limited (MESL).

3.110 Table 18 below shows the reported EBIT margins for MES.

Table 18: EBIT margins for Mastercard in the published European accounts (%)

Mastercard EBIT margins	2018	2019	2020	2021	2022	2023	Average (2018–23)
Mastercard Europe SA (as reported) – MES	17.3	27.0	25.3	26.0	27.7	28.3	25.3

Source: Mastercard European financial statements

3.111 [✂].[178]

3.112 When assessing whether the European accounts are an appropriate basis to estimate the margins for the relevant UK operations, we have considered the following factors.

3.113 The MES accounts include costs for the purchase of services from other parts of the Mastercard group. MES does not consolidate all European entities. These purchases are likely to generate EBIT for Mastercard as a whole, which is not reflected in the European accounts[179], even though they are generated from activities in Europe (and by implication the UK). These costs are significant.

178 The percentage figures are the average over the period of 2019–2023.

179 Either because they are not consolidated or accrue in other parts of the Mastercard group.

3.114 For example, the MES accounts show EBIT margins of on average 25% (see Table 18). Another Mastercard entity – MESL – receives revenues from MES and shows EBIT margins of around 70%.[180]

3.115 Adjusting the MES EBIT margins for the profits made by MESL increases the MES margins by approximately 25 percentage points to approximately 51%. See Table 19 below.

Table 19: EBIT margins for Mastercard in the published European accounts (%)

Mastercard EBIT margins	2018	2019	2020	2021	2022	2023	Average (2018–23)
Mastercard Europe SA (as reported) – MES	17.3	27.0	25.3	26.0	27.7	28.3	25.3
MES – adjusted for intercompany transfers to MESL	29.2	50.9	46.8	49.4	54.9	54.0	47.5

Source: Mastercard European financial statements, PSR calculations

3.116 MES has intercompany transactions in addition to the example provided above. [✂].

3.117 We have taken the view that intercompany profits form part of the economic benefits that Mastercard derives from the European operations and should be removed from costs when assessing the profitability of Mastercard's relevant UK operations. This is because they are not a cost that Mastercard (as a group) has to pay to provide services in the UK. Equally, we note that Mastercard has not allocated any intercompany profits to the costs in the fully loaded UK P&L accounts.

3.118 If, in the alternative, we were to consider the use of intercompany transactions as a basis on which to generate UK profit estimates, then:

a. The intercompany transactions would need to be reflective of competitive market conditions. Mastercard have told us that its intercompany agreements are supported by transfer pricing studies, based on a comparison of equivalent market transactions, prepared by third-party partners. However, profitability and other relevant information to confirm the appropriate valuation of intercompany transactions for MES are not publicly available.[181] We are therefore not able, for example, to assess whether profitability in the intercompany transactions are higher than would be expected in competitive markets.

b. The profitability assessment would also need to take into account that, because a number of services are effectively provided by notional third parties, the business model for an entity with significant intercompany transactions would be different to Mastercard's overall operations (and by implication the relevant UK operations). For example, where Mastercard notionally outsources the provision of technology and operations for scheme and processing services in the UK (or Europe), then the UK operations would effectively become resellers of scheme and processing services, rather than providers of such services. This could impact on the asset intensity of the

180 In the period of 2018–2022.

181 Mastercard confirmed that the fully loaded UK P&L accounts do not include costs related to intercompany transactions. Mastercard has not provided information about the profitability of intercompany transactions in relation to the European accounts.

operations and could require benchmark margin comparators that are not similar to Mastercard's actual relevant UK operations. We consider that it would be disproportionate to undertake this additional analysis when the alternative of adding back intercompany profits is a feasible option.

3.119 Mastercard includes significant costs related to litigation in the European accounts. It may be appropriate to exclude these costs when assessing profitability for the purpose of our market review. This is because, for example: the costs may be related to past activities; the costs could, in themselves, be a result of Mastercard benefiting from lack of effective competitive constraints; the costs may be related to the level of interchange fees (which are out of scope of our market review)[182]; the costs may be recoverable from third parties (for example, through insurance); and because, notwithstanding the long timespan over which these litigation-related costs have accrued, they may not be part of the ordinary course operation of the business (for example, they are one-off costs and/or non-operational costs). We note that Mastercard removes litigation cost provisions when reporting its adjusted performance to its shareholders and has not included these costs in the fully loaded UK P&L accounts.[183]

3.120 Mastercard said that litigation costs are not one-off items, rather they are ongoing costs and these do not result from market power, in its view. Mastercard also said that the CMA had partially included litigation costs when assessing profitability in the digital advertising market investigation.[184, 185]

3.121 We did not consider that it was necessary for us to come to a final conclusion on whether these costs should be excluded from the fully loaded UK P&L accounts for the purpose of our market review, noting that Mastercard has not included litigation costs in the fully loaded UK P&Ls and noting that we have not excluded litigation costs when deriving the margin range for Mastercard.[186]

3.122 Mastercard uses a different way to account for some of the customer incentives in the European accounts compared with the global accounts, which are prepared in line with accounting principles generally accepted in US accounting standards (US GAAP). In the European accounts, Mastercard includes some incentive payments as costs, rather than offsetting them from revenues, which mathematically means that the same levels of costs, revenues, incentives and rebates results in a higher margin under US GAAP.[187,188] See paragraphs 3.75 to 3.77 for more details.

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182 See, for example: Sainsbury's Supermarkets Ltd and others (Respondents) v Visa Europe Services LLC and Mastercard and others (Appellants) (supremecourt.uk).

183 Mastercard Q2 2023 Earnings presentation deck, page 12.

184 Mastercard response to PSR 1 December 2023 working paper [✁].

185 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 14–15, Section 2.2.2.

186 We note that the proportion of litigation costs as a percentage of net revenue is low in Mastercard's global accounts, which form the upper end of the margin range we identified for the relevant UK operations.

187 Mastercard response to PSR questions 13 July 2023 [✁]

188 Mastercard explained that the UK&I revenues, rebates and incentives are recorded in the Mastercard Europe SA entity, and its statutory accounts are generated in accordance with the Belgium accounting framework (Belgian GAAP). Mastercard noted that rebates are treated in the same way under Belgian GAAP and US GAAP. The relevant difference is for incentives, some of which are treated as costs under Belgian GAAP and as contra-revenues under US GAAP. Oxera confirmed that in global terms under US GAAP, this would be classed as a rebate, but in Belgium GAAP it is treated as a cost. PSR-Mastercard Expert Level Meeting 31 July 2023.

3.123 We therefore consider that Mastercard's European accounts are likely to understate the EBIT margins in Europe that Mastercard derives on an economic basis. As such, we consider that using Mastercard's EBIT margins for Europe as an estimate for the relevant UK operations would likely also understate the economic benefits that Mastercard derives from the relevant UK operations.

3.124 However, we note that Mastercard's European margins (even when only partially adjusted for intercompany transactions by only making adjustments for MESL) are higher than the margins shown in Mastercard's fully loaded UK P&L accounts. See table 20 below.

Table 20: EBIT margins for Mastercard (%)

Mastercard EBIT margins	2018	2019	2020	2021	2022	2023	Average (2018–23)
Mastercard fully loaded UK P&L accounts	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Mastercard Europe (adjusted for intercompany transfers to MESL)	29.2	50.9	46.8	49.4	54.9	54.0	47.5

Source: Mastercard European financial statements, PSR calculations

Mastercard UK margins relative to the European margins

3.125 Using the European EBIT margins to estimate Mastercard's UK margins also requires an assessment whether the margins in the UK are likely to be at, above or below the EBIT margins at the European level (adjusted for MESL).

3.126 When assessing Mastercard's margins in the relevant UK operations relative to the margins in the European accounts (adjusted for MESL), we have considered the following factors:

a. Mastercard's scheme yields in the UK compared to Europe
b. the impact of COVID-19
c. the cost of expanding into debit cards in the UK
d. other factors

Mastercard's scheme yields in the UK compared to Europe

3.127 Figure 6 below shows that Mastercard's UK scheme yields (shown on the right side of Figure 6 in the black line)[189] [✂].[190]

189 We have assumed that yields shown in this figure are calculated as net revenues divided by payment values.
190 [✂].

Figure 6: Mastercard presentation: Recent trend of profitability and market share

[✁]

3.128 Mastercard told us in response to our interim report that one of the 'factors' for the [✁] was because it had increased its incentives and rebates on credit cards.[191] Mastercard also said in response to our interim report that the expansion into debit cards did not account for the [✁]. This was because all except one of the contracts in relation to debit cards affected only later years.[192]

3.129 We consider that it is plausible to assume that the further significant [✁] in 2021 and 2022 was primarily due to the expansion into debit cards. For example, [✁]. We consider that the reference to 'flips' is related to contract switches by issuers from Visa to Mastercard for debit cards, given that Mastercard significantly increased its share in debit cards during that period, and given Mastercard's high share in credit cards in the UK.

3.130 However, we note that Figure 6 above only includes scheme revenues. The fully loaded UK P&L accounts show that the [✁], with margins in 'processing' services and 'other' services (which together account for [✁]% of Mastercard's revenue in the relevant UK operations) remaining [✁] (see Table 21 below). This suggests that looking at scheme yields in isolation may overstate the difference in profitability in the fully loaded UK P&L accounts and the European accounts.

Table 21: Scheme revenues and margins compared to processing and other (%)

		2019	2020	2021	2022	2023	Average (2019–23)
Scheme	EBIT margin	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
	Revenue as a % of total revenues	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
Processing	EBIT margin	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
	Revenue as a % of total revenues	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
Other	EBIT margins	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
	Revenue as a % of total revenues	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]

Source: Mastercard fully loaded UK P&L accounts

3.131 Thus, Figure 6 above indicates that Mastercard's significant investment in expanding its presence in UK debit cards (with the associated rebates and incentives resulting in [✁]) could have resulted in [✁]. For example, this could be the case where the associated [✁] result in [✁], whereas the cost base stays largely fixed.

191 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 26, Section 3,2 and page 24-25.

192 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 25, Section 3.2.

3.132 We note Mastercard's submission in relation to the impact on net revenue yields of increased incentives and rebates for credit cards. Figure 6 above shows that net revenue yields are [✁] (and [✁]). We thus consider that the increased incentives and rebates on credit cards alone would not indicate that margins in the relevant UK operations are significantly lower than the European average.

The impact of COVID-19

3.133 Evidence submitted by Mastercard indicates that it is possible that its relevant UK operations could have been more affected by COVID-19 than its overall European operations. This is because Mastercard has a higher share of credit cards in the UK ([✁]%) compared with Europe [✁](%), and [✁](% [✁])%.[193] Credit card revenues (and in particular commercial credit cards) could have been more impacted by COVID-19 than debit cards, which is likely because credit cards are used more in travel than debit cards. As such it is possible that Mastercard's profitability in the UK could have been lower than in Europe during COVID-19. However, Mastercard's submissions in response to our CWP and interim report indicated that Mastercard did not consider that COVID-19 had a significant impact on the relevant UK operations.[194, 195, 196] Mastercard, in its response to the interim report, also said that the proportion of cross-border credit card transactions (compared with domestic transactions) was higher in Europe than in the UK. This was because Mastercard had a relatively low market share in domestic transactions in some European countries. This affected unit revenues since the fees applicable to domestic transactions were lower than the fees for cross-border transactions.[197] We therefore consider that COVID-19 effects (in so far as they are impacting the relevant UK operations more than the European operations) are not a strong reason to assume that UK margins are lower than European margins.[198, 199]

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193 [✁] See also Figure 2.

194 In its response to the CWP, Mastercard said: 'There are various reasons why a reduction in card transaction volumes may not lead to a similar reduction in operating profits. Indeed, despite decreases in gross revenues (due to lower transaction volumes) there was only a relatively small reduction in the operating margins of Mastercard Inc. and Mastercard Europe in 2020 and 2021'. Source: Mastercard response to PSR working paper dated 1 December 2023 [✁].

195 Mastercard also said that we had overestimated the impact of COVID-19 on its UK margins. More precisely, Mastercard said that the PSR had (i) misrepresented the reduction in transaction volumes in the UK during the period 2020–21 and (ii) not properly assessed the impact of varying transaction volumes on operating margins, Mastercard response to PSR working paper dated 1 December 2023 [✁].

196 Mastercard response to IR, Annex 2, Section 2, section 2.4.

197 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, page 30.

198 We also consider, in the alternative, that COVID-19, insofar as it has a disproportionate effect on Mastercard's relevant UK operations, could be treated similarly to a one-off exceptional cost item that would normally be excluded from a profitability analysis in the context of a market review. We note that the macroeconomic consequences of the COVID-19 pandemic are complex and recognise that COVID-19 may have, and continue to have, an effect on parts of Mastercard's business. However, we consider it likely that COVID-19 no longer has a net negative effect on Mastercard's business.

199 We did not consider it necessary to further assess the precise level of the impact of COVID-19 on the UK operations as both of the proxies we use to estimate Mastercard's margins (global and European accounts) for the relevant UK operations include the effect of COVID-19 and given Mastercard's submission suggested that the impact of COVID-19 on the relevant UK operations was relatively small. Mastercard's submission explained that COVID-19 had a limited impact on transaction volumes, and that a slight decrease in Mastercard Inc. and Mastercard Europe operating margins were observed in 2020 and 2021.

The cost of expanding into debit cards

3.134 In respect of the costs of expansion into the UK debit card market, we have noted above that:

a. it is possible that these investments are only having a temporary effect on Mastercard's profitability in the UK (see paragraphs 3.46 to 3.49)

b. some of the expansion costs may be more appropriately allocated to different time periods or products outside of those subject to this market review (see paragraphs 3.67 to 3.70)

c. Mastercard's cost allocation method may over-allocate costs to the incremental transactions generated by the growth in debit cards (see paragraphs 3.24 to 3.29)

3.135 It is therefore plausible that, from an economic perspective, the costs of expanding into debit cards do not have a very significant impact on the profitability of the relevant UK operations, or that the effect on Mastercard's margins in the relevant UK operations is significantly less than shown in the fully loaded UK P&L accounts.

Other factors

3.136 A number of internal documents from Mastercard indicate that its profit margins in the UK may [✁]. These are:

a. [✁].[200] [✁].[201] Therefore, as a business that is largely characterised by fixed and common costs, we see no strong prima facie reasons for cost allocations relative to revenues for the UK to be higher than for other European markets. This can be illustrated by considering that, in competitive markets, where incremental costs are low, larger customers can often negotiate better prices than smaller customers.[202]

Figure 7: Mastercard net revenue by market

[✁]

b. [✁][203] [✁]. For example:

1. Mastercard's internal documents show [✁].[204] [✁].[205] [✁].[206]
2. Mastercard documents show that [✁].
3. [✁].
4. Mastercard told us in response to the CWP that [✁].

200 [✁].

201 See also paragraph 3.146.

202 For example, if Mastercard bought technology services from a third party in competitive markets, it is highly likely that it would pay a lower unit cost for larger transaction volumes where the technology services have low incremental costs.

203 Contribution margin is the margin after the allocation of directly attributable costs.

204 We used the revenues set out in figure 7 for this calculation.

205 [✁].

206 [✁].

Table 22: Contribution margins (scheme) (%)[207]

	2018	2019	2020	2021	2022	Average (2018–22)
[✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
[✁][208]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
[✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
[✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
[✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]

Source: Mastercard internal documents and PSR calculations

5. We note that contribution margins in the UK did not decline in 2021 despite the [✁] shown in Figure 6.

c. It is also possible that Mastercard's FX related revenues (which are not included in scheme revenues) are proportionately higher in the UK than in Europe as the eurozone is likely to generate relatively lower levels of foreign currency transactions, as travel within the eurozone would not be expected to generate FX conversion revenues. Should this be the case then this factor would suggest that margins in the relevant UK operations could be higher than the European average.

Assessment of the factors in the round

3.137 We note that a number of factors set out in the section above point in opposite directions. We have not been able to quantify the potential impact of each factor. On balance we consider that the evidence set out above suggests that margins in the fully loaded UK operations could be similar to those in the European operations when excluding the effect of the expansion into debit cards. This is because the yield differences between the UK and Europe are relatively modest (before the impact of the expansion into debit cards) and a number of factors point to [✁], including the higher contribution margins and the relative size of the UK operations:

a. We further consider that, given that the margins in Mastercard's European accounts may not fully reflect the economic benefits that Mastercard derives from its European operations, it is possible that margins in the relevant UK operations (when excluding the impact of the expansion into debit cards) could be higher than the margins in Mastercard's European accounts (adjusted for intercompany transfers to MESL).

b. We have set out in paragraph 3.26 that it is possible that the incremental operating costs associated with the expansion into debit cards are relatively low. Therefore, the additional revenues associated with the expansion into debit cards may generate high margins, even if these are heavily discounted. As such there is a possibility that even with the expansion into debit cards, margins are not or only moderately impacted in the UK.

207 [✁].

208 The UK margin has been calculated assuming a revenue share of Ireland as set out in Figure 7 and by assuming the UK to Ireland revenue ratio detailed in Figure 7 applies across the five years.

c. We also note Mastercard's submission that its domestic market share in Europe is relatively low.[209] It is, therefore, plausible that the [✂] is related to the very significant change in business mix in the UK following the growth in debit card transactions, rather than a reflection of declining margins in the UK.

d. Furthermore, we note that contribution margins in the UK have [✂].

3.138 There is, therefore, a possibility that the expansion into debit cards has a more limited impact on Mastercard's margins in the fully loaded UK P&L accounts than suggested by the [✂]. Thus we consider there is a possibility that European margins could be reflective of the economic benefits that Mastercard derives from the relevant UK operations, even when including the effect of the expansion into debit cards in the UK.

Mastercard's views

3.139 Mastercard said there were differences in unit revenues, unit rebates and incentives, and unit costs between its UK, Europe and global business. This was due to differences in market conditions and fee levels, as well as the mix of services provided.[210]

3.140 Mastercard said that its unit revenues in Europe were [✂]. A reason for this was that Europe had [✂]. This was explained by Mastercard's relatively [✂]. Mastercard said [✂].[211]

3.141 Mastercard said that if Europe had similar levels of fees, a similar mix of services and a similar level of rebates and incentives as in the UK, then the margin for Europe would be similar to the margins in the fully loaded UK P&L accounts.[212]

Our consideration of Mastercard's views

3.142 We note Mastercard's comment that [✂] and that if Europe had similar unit revenues and business mix as the UK then margins in Europe would be at the same level as in the UK. The statement does not reference unit costs. Figure 7 shows that the UK market is [✂] European market for Mastercard. [213] It is, therefore, possible that unit costs could be lower in the UK than in Europe (see, for example, paragraph 3.20) and therefore margins in the UK could be similar or higher than European margins, even if unit revenues in the UK were lower than in Europe.

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209 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, Page 30, Section 4.1.

210 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, page 3–4, Section 1.2.3.

211 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, page 30, Section 4.1.

212 Mastercard response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Annex 2, page 3–4, Section 1.2.3, and Main response, page 74–75.

213 See Figure 7: Mastercard net revenue by market [✂].

Findings on Mastercard’s UK margins based on the European accounts

3.143 The evidence we have reviewed indicates that margins in the relevant UK operations for Mastercard (excluding the cost of expanding into the UK debit card market) are unlikely to be lower than the European average. This is because of the [✂].[214]

3.144 We recognise that Mastercard’s investment in debit cards is likely to reduce margins in the relevant UK operations. We have not been able to quantify this impact. However, we consider it is possible that these costs may have a relatively limited impact on margins in the relevant UK operations in the period covered by the fully loaded UK P&L accounts, because the:

a. economic (rather than accounting) costs of the expansion into debit cards may be limited as set out in paragraph 3.134

b. the yield differences[215] between the UK and Europe are relatively modest (before the impact of the expansion into debit cards) and a number of factors point to [✂] in the relevant UK operations compared to Europe, including [✂]

3.145 We therefore consider that, taking all evidence in the round, Mastercard’s European margins (adjusted for the profit share with MESL) can be informative in understanding the margins in the relevant UK operations, even when taking into account the expansion into debit cards in the UK. Table 23 below shows Mastercard’s European EBIT margins (adjusted for the profit share with MESL).

Table 23: Mastercard’s European EBIT margins (adjusted for the profit share with MESL) (%)

	2018	2019	2020	2021	2022	2023	Average (2018–23)
Mastercard Europe (adjusted for MESL)	29.2	50.9	46.8	49.4	54.9	54.0	47.5

Source: Mastercard European financial statements, PSR calculations (Mastercard margins for Europe are adjusted for the profit share with MESL*)*.

Estimating UK EBIT margins based on Mastercard’s published global accounts

3.146 Mastercard publishes consolidated audited global financial statements that include the relevant UK operations. These are the only audited financial statements that include all of the relevant UK operations for Mastercard. The relevant UK operations represent approximately

214 Mastercard submitted that the results of this analysis are inconsistent with the results of its own analysis of net revenue yield as set out in Annex 9 of the final report (Revenue Generation). In Annex 9 we summarise the results of Mastercard’s own analysis of net revenue yield which indicates that the UK [✂], as well as [✂]. As indicated in Annex 9, we do not endorse this methodology as an approach to analysing profitability (see FN19 and paragraph 9.26).

215 See paragraph 3.62 and [✂].

[✁]% of Mastercard's global operations ([✁]). This figure would be higher, representing approximately [✁]%, if FX conversion revenues are included in the UK revenues.[216]

3.147 The global accounts can form an appropriate stating point to estimate the economic benefits that Mastercard derives from the global (and therefore implicitly the relevant UK) operations. This is mainly because Mastercard is a global operation with significant global common costs.[217] Furthermore, the global accounts are consolidated accounts, removing the effects from intercompany transfers and include all relevant revenues, including FX-related revenues. The global accounts also show all rebates and incentives as a deduction from gross revenues (rather than partially as a cost item), in line with US GAAP.

3.148 However, the global accounts also include a significant proportion of services and/or costs that are either not offered in the UK or are outside of our frame of reference. For example, 'other' revenues account for around 20% for Mastercard's global revenues. These other revenues may not be part of the relevant UK operations and may have different margins compared to the services offered in the relevant UK operations. See the Table 24 below.

Table 24: 'Other' services as a % of total gross revenues

	2018	2019	2020	2021	2022	2023	Average (2018–23)
Mastercard Inc	15.3	16.5	20.0	20.9	20.2	20.6	18.9

Source: Mastercard global financial statements, PSR calculations
Note: Gross revenues for 2022 are based on PSR calculations as Mastercard has not published them

3.149 Another example are litigation costs, which account for around 2% of total global net revenues for Mastercard (see Table 25 below). Litigation costs could differ significantly between the relevant UK operations and the global average. However, we set out above that we do not think that litigation costs should necessarily be included in the assessment of the profitability of the relevant UK operations in the context of our market review.

Table 25: 'Litigation provisions' services as a % of net revenues (2018–2023)

	2018	2019	2020	2021	2022	2023	Average (2018–23)
Mastercard Inc	7.5	0.0	0.5	0.5	1.6	2.1	2.0

Source: Mastercard global financial statements, PSR calculations

3.150 Mastercard's global accounts make a number of adjustments to certain cost items to facilitate an understanding of its operating performance and to provide a meaningful comparison of its results between periods. Those items impacting on EBIT include, for example (in addition to litigation costs):

a. Russia/Ukraine charges
b. Indirect taxes

216 The percentage figures are the average over the period of 2019-2023.
217 Mastercard response to PSR questions dated 21 November 2022 [✁].

3.151 However, we note that the net impact on operating margins from these other items for Mastercard have been low historically.[218] The above examples are not an exhaustive list and there could be other P&L items that could be considered for adjustments. This could, for example, relate to the cost of expanding into new business areas that are not scheme and processing services and associated research and development expenses. Another example is that Mastercard owns Vocalink in the UK, which is reporting EBIT margins that are [✁]. We note, though, that Mastercard states that lower margin businesses may only account for a small proportion of global revenues.

3.152 We note that it would be difficult to identify and quantify a comprehensive list of required adjustments to global margins to allow for a more detailed like-for-like comparison with the margins for the relevant UK operations. We have therefore made the assumption that global margins without any adjustments for the factors set out above are the most appropriate starting point for estimating EBIT margins for the relevant UK operations based on the global accounts. We think this is a proportionate approach, in particular when considering that the specific examples set out above, for example, other revenues and non-operating expenses represent a relatively small proportion of global revenues (even when including litigation provisions) and that there is some evidence that the margins in other business areas could be lower than the margins for card services (which could mean that global margins are a conservative estimate for Mastercard's card related profitability). It also takes into account that Mastercard has a high proportion of costs that are global common costs and that the incremental cost of additional transactions is relatively low.

3.153 We therefore think that the reported global margins are a basis to derive an estimate of the margins for Mastercard's relevant UK operations.[219] This is mainly because for Mastercard the global accounts address some of the factors that have a reducing impact on margins at the European level (for example, intercompany profits and the accounting treatment of incentive payments) and at the UK level (for example, the absence of FX-related income and the accounting treatment of incentive payments), because litigation costs as a percentage of revenue are relatively small in most years and because the impact other operations and non-operational items seems to be relatively small.

Mastercard UK EBIT margins relative to the global margins

3.154 Using global EBIT margins to estimate the margins for the relevant UK operations also requires an assessment of whether the margins in the UK are at, above or below the EBIT margins at the global level.

3.155 We consider that some of the factors that we took into account when assessing the relative margins of the relevant UK operations and the European operations also apply when undertaking the same assessment at the global level. We have considered the following factors when assessing the relative margins of the relevant UK operations and the global accounts:

a. First, Mastercard [✁]. We have set out above that we have not been able to quantify the impact of the costs of expanding into UK debit cards. We have also set out in paragraph 3.134 above that it is plausible that some of these costs only have a

218 The largest net impact in the period of 2018–2023 was in 2021 at ca 0.4% of global revenues, with an average impact of less than 0.2% of global revenues on average during this period.

219 Albeit a potentially conservative estimate if Mastercard's non-card services have lower profitability than its card related services

temporary effect on Mastercard's profitability in the UK and that an economic review of these costs may indicate that at least some of these costs may appropriately be allocated to future time periods or non-scheme- and processing-related products (for example, account-to-account payments). As such, whilst this suggests that margins in the relevant UK operations are lower than the global average, the extent to which this is the case is currently uncertain.

b. Second, other factors point to margins in the UK being higher than the global average. [✁], indicates that Mastercard's relevant UK operations may benefit from lower unit costs compared to other regions. See paragraph 3.20 for more detail.

c. Finally, Mastercard provided us with a reconciliation of costs between the fully loaded UK P&L accounts and the global accounts. This allowed a calculation of global contribution margins. Table 26 below shows the global contribution margins compared to the contribution margins in the fully loaded UK P&L accounts. [✁]

Table 26: Mastercard UK and global contribution margins

Contribution margins	2019	2020	2021	2022	2023	Average (2019–23)
Fully loaded UK P&L accounts	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%
Global accounts	[✁]%	[✁]%	[✁]%	[✁]%	N/A[220]	[✁]%

Source: Mastercard fully loaded UK P&L accounts, Mastercard global financial statements

Mastercard's views

3.156 Mastercard argued that global margins do not provide a good proxy for the UK, as the UK payment services sector is one of the most sophisticated and developed in the world, and the UK has a very well-developed e-commerce market. This results in a different transaction mix, [✁] and [✁], as well as differences in costs. There are also differences in the introduction and adoption of new technology, services and services enhancements.[221]

3.157 Mastercard was of the view that there was therefore no objective or rational basis for the PSR to assume that Mastercard's global accounts provide a more accurate view of its UK margin than the fully loaded UK P&L accounts.

Our consideration of Mastercard's views

3.158 We have set out above the reasons why we do not think that it would be appropriate for us to rely on the margins as currently presented in fully loaded UK P&L accounts.

3.159 We do not consider that global accounts are necessarily a precise proxy for Mastercard's UK operations. However, in the absence of a robust estimate based on the fully loaded UK P&L accounts, we consider that Mastercard's global accounts provide informative data for us to estimate a range for the margins of Mastercard's relevant UK operations, on the assumption that the costs of expanding into UK debit cards has only [✁].[222]

220 Mastercard did not provide global contribution margins for 2023.

221 Mastercard response to PSR working paper dated 1 December 2023 [✁].

222 See paragraph 3.134 to 3.135, and for more details.

Findings on Mastercard's UK margins based on the global accounts

3.160 We consider that, when excluding the effects of the expansion into debit cards, Mastercard's margins in the UK can be proxied by the global margins. This is because of [✂] and because Mastercard's global operations may include businesses with lower margins that do not operate scheme and processing services.

3.161 We note, however, that there are fewer factors pointing towards UK margins being above the global average compared to the European accounts. It is therefore possible that when including the effects of the expansion into debit cards the margins in the relevant UK operations could be below the global average, although we also note that we have not been able to quantify the extent to which this may be the case.

3.162 However, we also consider it plausible that the impact on Mastercard's margins from the debit card expansion could be a temporary effect or may be significantly smaller than indicated if the related costs are economically most appropriately allocated to future time periods or different products. Assuming that these are temporary effects or of only moderate significance (for example, because the related costs are more appropriately allocated to future periods or different products or regions), then the global margins can be informative in understanding the margins in the relevant UK operations.

3.163 Table 27 below shows Mastercard's global margins, compared to the UK and European margins.

Table 27: Mastercard's UK, European, global margins (%)

	2018	2019	2020	2021	2022	2023	Average (2018–23)
Mastercard fully loaded UK P&L accounts	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Mastercard Europe (adjusted for MESL)	29.2	50.9	46.8	49.4	54.9	54.0	47.5
Mastercard Global	48.7	57.2	52.8	53.4	55.2	55.8	53.9

Source: Mastercard fully loaded UK P&L accounts and Mastercard global and European financial statements (Mastercard margins for Europe are adjusted for the profit share with MESL)

Approach to estimating margins for Mastercard's relevant UK operations

3.164 In this section we set out our views on how best to estimate the profitability of Mastercard's relevant UK operations on the basis of the evidence discussed above.

3.165 We would ideally have used audited UK accounts covering only the relevant UK operations as the starting point for our analysis of Mastercard's relevant UK operations. In the absence of this data, we have spent considerable time seeking and reviewing Mastercard's fully loaded UK P&L accounts against criteria set out in the February 2023 working paper. We have supplemented this analysis with a review of Mastercard's European and global accounts.

3.166 In assessing the available data, we have also had regard to internal documents and a sensitisation of Mastercard's fully loaded UK P&L account using alternative assumptions. We note that following circulation of our December 2023 working papers, on 12 January 2024, Mastercard shared the financial models used to derive their EBIT margins in the fully loaded UK P&L accounts. Our review of the models and sensitivity analysis was therefore conducted in a relatively limited time period prior to the publication of our interim report. In finalising this profitability analysis, we considered whether it was necessary to undertake a more detailed review. We have decided that it is not, taking into account, in particular, the conclusions we are drawing from this profitability analysis (see paragraph 2.12).

3.167 We consider that we currently cannot derive an estimate of Mastercard's profitability for the relevant UK operations from the fully loaded UK P&L accounts that would be suitable for the purposes of assessing whether market outcomes are consistent with a competitive market. This is primarily because the margins for the relevant UK operations as presented in the fully loaded UK P&L accounts are likely to be an underestimate of the economic benefits that Mastercard derives from its relevant UK operations and because our sensitivity analysis shows that making different assumptions on revenue and cost allocations can lead to significantly higher estimates for the margins for Mastercard's relevant UK operations (indicating a wide possible range for the margins in the fully loaded UK P&L accounts depending on the assumptions made).[223]

3.168 We consider that the European accounts (adjusted for MESL) can be relevant in understanding the profitability of Mastercard's relevant UK operations. This is taking into account that the cost of expansion into UK debit cards may reduce margins in the relevant UK operations [✁].[224] It also takes into account factors that indicate that the margins in the European accounts may underestimate the overall economic benefit Mastercard derives from its European operations (e.g. the presence of intercompany transactions other than MESL, the inclusion of litigation costs and the treatment of some incentives as a cost item rather than netting incentive payments off revenues). Further there are some factors that indicate that margins in the relevant UK operations could be higher than shown in the European accounts, in particular [✁] in the UK compared to Europe and [✁] compared to other European regions.

3.169 We consider that global margins can be informative in understanding the margins in the relevant UK operations. This is particularly the case when assuming that margin reductions associated with the expansion into UK debit cards are temporary (because the effects [✁]) or because Mastercard benefits from the expansion into debit cards in other parts of its overall activities (for example, due to cross selling opportunities). We consider this to be a plausible scenario because [✁]. Further, we also consider that it is possible that the financial impact of the expansion into debit cards may be overstated in the fully loaded UK P&L accounts. This could be because these costs may economically benefit future time periods and may also benefit services outside the scope of our market review. We also consider it plausible that the incremental costs of providing the additional transactions gained from the debit card expansion could be lower than set out in the fully loaded UK P&L accounts, given that Mastercard has confirmed that [✁].

223 See paragraph 3.83.

224 Although we note that those costs may reduce from the levels reported in the fully loaded UK P&L accounts if it were appropriate to allocate them to different time periods or different services.

3.170 We therefore consider that an estimate of Mastercard's margins by reference to the global accounts is also a plausible approach to assessing the profitability of the relevant UK operations.

Our conclusions on Mastercard's margins for the relevant UK operations

3.171 We have estimated a range for Mastercard's margins for the relevant UK operations by looking at Mastercard's fully loaded UK P&L accounts, Mastercard's European accounts and Mastercard's global accounts.

3.172 In developing the fully loaded UK P&L accounts, Mastercard needs to make many assumptions about allocations of common costs, which can have significant impacts on the level of costs allocated. Some of the allocations may not be appropriate in the context of a market review, where the purpose of the profitability analysis is to understand profitability from an economic perspective. Some allocations may result in margin estimates that are less reflective of the economic profitability than others.

3.173 We have identified a number of factors, either in the way the UK P&L accounts were constructed or in the way costs have been allocated (where cost allocation information was available) that make them less likely to be representative of the economic benefits that Mastercard derives from the relevant UK operations. These factors are likely to lead to an underestimate of the EBIT margins in the fully loaded UK P&L accounts.

3.174 We consider the information we have obtained so far is not sufficient for us to derive an estimate for the profitability of Mastercard's relevant UK operations from the fully loaded UK P&L accounts provided to us by Mastercard for the purposes of our market review. This is mainly because of the wide range of margins that can be generated in the fully loaded UK P&L accounts due to the sensitivity of the underlying financial model to making relatively small changes to the cost allocation assumptions and because we did not consider it necessary, for the purpose of this market review, to derive our own view of a robust spot estimate for the margins in the relevant UK operations, for example by making adjustments to the financial model used by Mastercard to derive the fully loaded UK P&L accounts. In light of this, we have also reviewed profitability estimates based on Mastercard's reported European and global margins.

3.175 We conclude that both Mastercard's European margins (adjusted for MESL) and Mastercard's global margins provide relevant information to estimate a range for Mastercard's margins in the relevant UK operations. Within this we consider that the European margins (adjusted for MESL) provide relevant information for the margins of Mastercard in the relevant UK operations [✂] and the global margins provide relevant information for the margins of Mastercard in the relevant UK operations on an underlying basis (that is, without the impact of the expansion into UK debit cards or where some of these costs are more appropriately allocated to different time periods or products).

3.176 The data we have reviewed results in a wide range of the average margins for Mastercard's relevant UK operations from [✂]% (fully loaded UK P&L accounts) to 54% (Mastercard's global accounts).[225, 226] See Table 28 below.

Table 28: Mastercard's UK, European and global margins (%)

	2018	2019	2020	2021	2022	2023	Average (2018–23)
Mastercard fully loaded UK P&L accounts	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Mastercard Europe (adjusted for MESL)	29.2	50.9	46.8	494	54.9	54.0	47.5
Mastercard Global	48.7	57.2	52.8	53.4	55.2	55.8	53.9

Source: Mastercard fully loaded UK P&L accounts, Mastercard global and European financial statements (Mastercard margins for Europe are adjusted for the profit share with MESL)

3.177 We did not consider it necessary, for the purpose of this market review, to conclude where exactly within this range Mastercard's margins for the relevant UK operations are likely to lie, save to note that the fully loaded UK P&L accounts are likely to understate the economic benefits Mastercard derives from the relevant UK operations and that consequently margins are likely higher than indicated by the lower end of the range.

225 We note that Mastercard's fully loaded UK P&L accounts do not include a figure for 2018 and the average therefore represents the five-year average over the period of 2019 to 2023.

226 We note that this range is also broadly consistent with [✂].

4 Assessing Visa's profitability

4.1 In this section we set out our assessment of Visa's profitability in the relevant UK operations. We also set out how we have taken into account the submissions we have received from Visa in response to the CWP and our interim report on Visa's profitability, and our response to them.[227]

Datasets used to assess Visa's profitability

4.2 We have looked at the following data sources to estimate Visa's profitability of the relevant UK operations:

a. the fully loaded UK P&L accounts submitted by Visa[228]

b. Visa's audited European financial statements (European accounts)

c. Visa's audited global financial statements (global accounts)

4.3 Table 29 shows the unadjusted[229] EBIT margins from each of the datasets.

Table 29: Visa's UK, European, global margins (%)

	2018	2019	2020	2021	2022	2023	Average (2018–23)
Visa fully loaded UK P&L accounts	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Visa fully loaded UK P&L accounts – [✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Visa Europe	57.5	60.7	53.6	60.2	67.0	65.1	60.7
Visa Global	62.9	65.3	64.5	65.6	64.2	64.3	64.4

Sources: Visa fully loaded UK P&L accounts; Visa global and European financial statements.

4.4 Below we assess the suitability of each data source in turn and then set out our view of Visa's profitability in the relevant UK operations.

Estimating UK EBIT margins based on Visa's fully loaded UK P&L accounts

4.5 Visa provided us with two sets of fully loaded UK P&L accounts.[230] One version [✂] and one version [✂]. Visa only provided fully loaded UK P&L accounts including [✂] for 2021, 2022 and 2023.

227 Visa response to PSR working paper dated 1 December 2023 [✂].

228 Visa initially provided fully loaded UK P&L accounts which did not allocate FX conversion revenues to the UK. Subsequently Visa prepared a bespoke UK allocation of FX conversion revenues [✂], and provided an updated version of UK P&L accounts incorporating this information. Visa informed us [✂].

229 That is, the EBIT margins as reported in each dataset without any adjustments.

230 The first set was in response to our November 2022 s81 request (Visa response to PSR questions dated 23 November 2022 [✂]). The second set was subsequently submitted by Visa in response to the PSR working paper dated 1 December 2023 [✂]and updated by Visa's response to PSR questions dated 19 July 2024 [✂].

4.6 The EBIT margins in these accounts are set out in Table 30 below.

Table 30: Visa's UK EBIT margins (%)

	2018	2019	2020	2021	2022	2023	Average (2018–23)
Visa fully loaded UK P&L accounts[231]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
Visa fully loaded UK P&L accounts – [✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
Difference	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]

Source: Visa fully loaded UK P&L accounts [✁].

4.7 We provided guidance in our November 2022 s81 notice that all revenues and costs should be attributed on a consistent basis when requesting the fully loaded UK accounts. The accounts provided to us were based on allocation methods chosen by Visa, taking this guidance into account. To prepare these accounts, Visa utilised pre-existing analysis that was the basis for Visa's audited financial statements prepared in connection with Visa's reporting obligations under the IFR.[232]

4.8 We have therefore assessed whether the fully loaded UK P&Ls provided by Visa reflect the considerations for the allocation of revenues and common costs set out in our approach section above.

4.9 Using the considerations set out in paragraph 2.34 above we have reviewed whether it is likely that the cost allocation in the fully loaded UK P&L is based on a FAC basis using activity-based costing principles:

a. **Disaggregation and attribution:** We received descriptions from Visa as part of the responses (which we received on 11 January 2023 for Visa) to our s81 notices on financial analysis (which we provided on 9 November 2022 for Visa). These provided a relatively high-level overview and were not accompanied by all the associated calculations. Following further interactions during 2023, the CWP was provided to Visa for comment on 1 December 2023; following its response to the CWP [✁], we received further details for the calculations on 19 January 2024, which Visa offered to provide following its response to our CWP. However, these additional submissions did not include all the underlying calculations, which meant that there was a limit to the level of detail at which we can assess the disaggregation and attribution choices made by Visa in preparing the fully loaded UK P&L accounts.

b. **Cost types:** We asked Visa for information about incremental costs it incurs in providing scheme and processing services. On 15 August 2023, we asked Visa a question in relation to incremental cost estimates. On 14 September 2023, Visa provided a qualitative response. This stated, among other things:[233]

231 References to Visa's fully loaded UK P&L accounts should be read as the accounts excluding FX income, unless expressly stated otherwise.

232 Under the Interchange Fee Regulation (IFR) Visa is required to produce financial accounts separating scheme and processing services.

233 Visa response to PSR questions dated 15August2023 [✁].

1. A distinction between fixed and variable costs is not made in the ordinary course of preparing management information.[234] It is therefore very difficult to provide a quantitative response to the PSR's questions on incremental costs. There are also challenges in providing a meaningful qualitative analysis.[235]
2. Each business function will have an individual level of capacity, beyond which additional investment is required to maintain performance (e.g., technology or staff) and each business function is likely to be at different levels of capacity at any point in time.[236]
3. Intercompany fees will be affected by transaction volumes, but would likely not increase at the same rate as business activity.[237]
4. There is no clear link between personnel (including corporate IT)[238] as well as marketing costs and business-as-usual variations in transaction value and volume. There is not a well-defined link between client acquisition activity and the volume and value of transactions.[239]
5. Operations and infrastructure costs are likely to be partially driven by transaction volumes, but also by the number and type of new clients.[240]
6. Cybersecurity costs are likely to be partially driven by transaction volumes and values, but also by developments in cybersecurity threats.[241]
7. Other costs (administrative costs, professional fees, depreciation of non-technology assets and changes in provision) are unlikely to be influenced by business-as-usual fluctuations in transaction volumes or values.[242]

c. **Attribution drivers, cost allocation methods and reconciliation:** Visa's fully loaded UK P&L accounts, as amended on 19 January 2024 allow a reconciliation between the fully loaded UK P&L accounts and Visa's European accounts. However, we did not have sufficient information to assess the suitability of the allocation metrics chosen by Visa to allocate European costs to the UK for the purpose of this market review.[243]

d. **Sensitivity testing:** Visa provided us with its underlying calculations on 19 January 2024, which allowed us to undertake sensitivity analysis on the assumptions that were used to allocate revenues and common costs in the fully loaded UK P&L accounts.

Our assessment of Visa's fully loaded UK P&L accounts

4.10 We have performed a review of Visa's fully loaded UK P&L accounts to consider whether these are an appropriate reflection of the margins for the relevant UK operations.

234 Ibid [✂].
235 Ibid [✂].
236 Ibid [✂].
237 Ibid [✂].
238 Ibid [✂].
239 Ibid [✂].
240 Ibid [✂].
241 Ibid [✂].
242 Ibid [✂].
243 We did not request this information from Visa. This is because we do not consider it necessary to do so as part of this market review, given conclusions we are drawing from this profitability analysis (as discussed in paragraph 2.12).

4.11 We find that:

a. we currently do not have sufficient information to fully assess whether Visa's fully loaded UK P&L accounts can be considered a reliable reflection of the profitability of the relevant UK operations for the purpose of our market review

b. the fully loaded UK P&L accounts may be understating the economic benefits Visa receives from its relevant UK operations

4.12 This is because:

a. we would require more details on how closely a chosen cost allocation metric relates to how common costs are incurred in providing scheme and processing services

b. Visa did not provide a quantitative response to a question on the level of incremental costs of its UK operations for additional transaction values and volumes

c. we identified a number of factors that indicate that the fully loaded UK P&L accounts may understate the economic benefits that Visa derives from the relevant UK operations

4.13 We set out below examples of where we did not have sufficient information to fully assess the fully loaded UK P&L accounts and, where appropriate, why we think Visa's fully loaded UK P&L accounts may understate the economic benefits it derives from the relevant UK operations. These are:

a. intercompany costs

b. cost allocation based on gross revenues

c. the calculation of costs associated with 'additional UK activity'

d. other cost allocation choices

e. the allocation of revenues to the relevant UK operations

Intercompany costs

4.14 Visa's fully loaded UK P&L account [✂]. Visa has told us that [✂].[244] We think this therefore overstates the economic cost allocated to the relevant UK operations and understates the EBIT margins of the relevant UK operations. This is because [✂]. See also our more detailed views on [✂] in paragraphs 4.47 and 4.48.

Cost allocation based on gross revenues

4.15 Visa told us that it [✂].[245]

4.16 As set out above, an allocation based on gross revenue may not be consistent with activity-based costing principles unless there are no input or output-based allocation methods. There may be other cost allocation methods that more appropriately reflect the fixed cost nature of the cost base, for example, the number of acquirers or the number of merchants or cards in issue. When we requested underlying financial model data from Visa, it [✂].[246] We also set out above that where revenues are the most appropriate cost driver, net revenues appear to be a more appropriate driver than gross revenues (see paragraph 2.44).

244 Visa response to PSR questions dated 15 August [✂].

245 [✂] % [✂].

246 We note that [✂].

4.17 Using [✂] results in a relatively high allocation of costs to the UK, because [✂].

Figure 8: Client incentives as a % of gross revenue

[✂]

Source: PSR analysis of Visa financial statements and Visa fully loaded UK P&L accounts.

4.18 Using a cost attribution method that allocates a disproportionate share of costs to the UK is unlikely to reflect the economic benefits that Visa obtains from its relevant UK operations. For example, Visa's allocation methodology does not reflect that the UK market is [✂].[247] [✂].[248] Visa's comments [✂].[249,250]

4.19 Table 31 below shows Visa revenues in the UK and other global markets in 2018.

Table 31: Visa Europe Net Revenues by Country ($m)[251]

Visa Net Revenues by Country	2018 (September YTD)
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]
[✂]	[✂]

Source: Visa internal documents.

247 [✂].

248 [✂].

249 [✂] In this document, [✂].

250 For example, if Visa bought technology services from a third party in competitive markets, it is highly likely that it would pay a lower unit cost for larger transaction volumes where the technology services have low incremental costs. Or, similarly, if the various countries that Visa is serving were buying wholesale services from Visa headquarters on an arm's length basis, we would expect the largest countries to be able to negotiate a better rate. A simple pro-rata allocation of common costs to the UK does not reflect this dynamic.

251 [✂].

The calculation of costs associated with 'additional UK activity'

4.20 When attributing costs for [✁] to the UK on the basis of [✁], Visa has excluded [✁]. However, Visa has not excluded [✁]. This suggests that [✁]. Visa provided us with the European IFR accounts[252], which confirmed this to be the case in 2021, 2022 and 2023 (see Table 32 below).

Table 32: Visa Europe Limited Scheme and Processing IFR EBIT margins (%)

	Scheme	Processing	Unregulated	Total VEL
2021	[✁]	[✁]	[✁]	[✁]
2022	[✁]	[✁]	[✁]	[✁]
2023	[✁]	[✁]	[✁]	[✁]

Source: VEL Financial Statements under EU IFR 2021, 2022.

4.21 There is therefore a possibility that Visa has [✁]. Or, in other words, [✁].

Other cost allocation choices

4.22 Visa allocates some expenses [✁] by reference to [✁].[253] However, in Visa's response to our question on incremental costs, it indicated that [✁].[254] This indicates that [✁].

4.23 Visa has allocated [✁] to the UK based on Consumer Expenditure Value (CEV).[255] [✁].

4.24 Visa allocates [✁] % of its European litigation cost provisions to the UK. It may not be appropriate to include these costs for the purpose of assessing whether profitability is higher than can be expected in a competitive market. This is because:

a. These costs may be related to historic events that are unlikely to recur and are therefore not a reflection of business costs today.

b. High litigation costs themselves may, in our view, be a consequence of a lack of effective competitive constraints, given Visa's market position.

c. Litigation costs may not be incurred in relation to scheme and processing fees, but may be related to interchange fees, which are outside the scope of our market review.[256,257]

d. Litigation costs may be recoverable from third parties.[258]

e. We have not been provided with evidence as to why such expenses should be seen as a 'cost of doing business' in card services, for example whether such costs would affect competitive entry decisions. Indeed, in the UK IFR accounts, Visa states: [✁].[259]

f. Visa, in its global accounts, describes litigation costs as not representative of its continuing operations.[260]

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252 [✁].

253 [✁].

254 See paragraph 4.9b.5. We understand that [✁].

255 [✁].

256 Visa told us that [✁], Source: Visa response to PSR question dated 16 February 2024 [✁].

257 See, for example: Sainsbury's Supermarkets Ltd and others (Respondents) v Visa Europe Services LLC and Mastercard and others (Appellants) (supremecourt.uk case ID: UKSC/2018/0154)

258 Visa told us that [✁]. Source: Visa response to PSR question dated 16 February 2024 [✁].

259 [✁].

260 Visa 10K 2022, page 33.

The allocation of revenues to the relevant UK operations

4.25 Similar considerations to the above apply to the allocation of revenues to the UK activities. One such example is foreign exchange (FX) conversion revenues. These arise where a UK cardholder undertakes a card transaction in a different currency.[261,262]

4.26 We consider that foreign exchange conversion revenues are relevant to our market review.[263] We note that Visa has not objected to our view that FX conversion revenues are part of the economic benefits that Visa derives from the provision of scheme and processing services.[264]

4.27 Visa has provided us with details of FX conversion revenues in the fully loaded UK P&L for 2021 to 2023; we have not been provided this information for 2018–2020. Visa also provided the FX conversion revenues for its European operations for 2018-2022.[265] This shows that FX revenues accounted for approximately [✂]% of its European net revenues in the period of 2018–2022 and that the proportion of UK net revenues appears to be broadly similar in the period of 2021–2023 (see Table 33 below).

Table 33: Visa FX revenues

	2018	2019	2020	2021	2022	2023	Average[266]
Visa Europe Limited (VEL) FX revenues (EURm)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂][267]	[✂]
As a % of VEL net revenues	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Visa fully loaded UK P&L FX revenues (EURm)				[✂]	[✂]	[✂]	[✂]
As a % of UK net revenues				[✂]	[✂]	[✂]	[✂]

Source: Visa European financial statements and Visa fully loaded UK P&L accounts.

Sensitivity analysis

4.28 In order to assess the possible magnitude of the impact of some the factors set out above, we have undertaken sensitivity analysis using Visa's fully loaded P&L accounts.[268.] In this analysis we have used, as a starting point, Visa's fully loaded UK P&L accounts excluding FX conversion revenues.

261 There are also foreign exchange conversion fees where a non-UK customer makes a transaction at a UK merchant. However, we consider that revenues from foreign exchange conversion are effectively levied on the card issuer rather than the merchant and should therefore be allocated to the location of the issuer, rather than the location of the merchant. As such foreign exchange conversion income from UK customers should be allocated to UK revenues, even if the transaction takes place abroad.

262 We also note that Visa generates [✂] revenues in Ireland. We consider that there is a possibility that [✂]. We have not explored this possibility further as part of this market review. See Table 31, which shows that in 2018 [✂].

263 See paragraph 3.37 for more detail.

264 Note for record of PSR-Visa meeting 17/01/2024, [✂].

265 Visa response to PSR questions dated 13 July 2023 [✂]. In this document Visa [✂].

266 The average for VEL is for 2018–2022 and for the fully loaded UK accounts it is 2021–2023.

267 We have not requested VEL's FX revenues in 2023.

268 We used Visa's fully loaded UK P&L accounts (source: Visa response to PSR questions dated 23 November 2022 [✂]) supplemented by Visa's response to PSR working paper dated 1 December 2023 [✂] and Visa's response to PSR questions dated 19 July 2024 [✂]).

4.29 We made changes to the following key assumptions:[269]

a. [✂].

b. [✂].

c. [✂].

d. [✂].

e. [✂].

Table 34: Incremental impact of sensitivity analysis on Visa's margin

		2018	2019	2020	2021	2022	2023	Average (2018–23)
Visa fully loaded UK P&L accounts EBIT margin		[✂] **%**	[✂] **%**	[✂] **%**	[✂] **%**	[✂] **%**	[✂] **%**	[✂] **%**
Δ	**[✂]**	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %
Δ	**[✂]**	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %
Δ	**[✂]**	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %
Δ	**[✂]**	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %
Δ	**[✂]**	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %
Total change in EBIT margin		[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %
Visa margins – sensitised fully loaded UK P&L accounts		[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %	[✂] %

Note: The percentage changes shown above should be read as percentage point changes. Each change shown is the incremental impact of the change in addition to the previous changes. The individual percentage point changes for each adjustment above may be different if the sequence is changed, although the cumulative change of all individual changes would not be different.
Note: [✂].
Source: Visa fully loaded UK P&L accounts, PSR calculation.

4.30 Table 34 shows that flexing a number of assumptions results in average margins over the period of 2018–2023 of [✂]%, showing a significant level of sensitivity of the results to the revenue and cost allocation assumptions made.

4.31 We note in this context that we have not sensitised all cost allocation assumptions and that alternative cost allocation assumptions could result in higher or lower margins. However, this analysis is not intended to identify the 'correct' margins for Visa's relevant UK operations, but rather to identify the sensitivity of the margins in the fully loaded UK P&L accounts to the assumptions made.

269 We have not separately assessed a cost allocation sensitivity based on net revenues. This is because doing sowould result in the same margin estimate as using the margins in the European and Global accounts. We have instead reviewed separately the suitability of margins in the European and global accounts as a proxy for UKmargins.

Acquiring margin estimates

4.32 We've found in Annex 6 of the final report (Descriptive Data Analysis) that Visa generates over [✁]% of net revenues on the acquiring side [✁]. In order to contextualise this observation, we performed an additional hypothetical sensitivity analysis assuming that the acquiring side is run as a separate division from the issuing side with costs split equally between them.

4.33 We did not ask Visa to provide us with estimates of profitability separately for issuers and acquirers. However, Visa provided us with gross revenues, rebates and net revenues, split by issuer and acquirer. This together with Visa's fully loaded UK P&L accounts and a number of cost allocation assumptions, allowed us to derive a broad estimate for the EBIT margins that Visa derives from acquirers and issuers.

Table 35: Visa's margins by customer assuming 50/50 cost split (%)

	2018	2019	2020	2021	2022	2023	Average (2018–23)
Acquirers, cost allocated based on 50/50 share with issuers [✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
Issuers, cost allocated based on 50/50 share with acquirers [✁]	[✁]	[✁]	[✁][270]	[✁]	[✁]	[✁][271]	[✁]
Visa fully loaded UK P&L [✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
Acquirers, cost allocated based on 50/50 share with issuers [✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
Issuers, cost allocated based on 50/50 share with acquirers [✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]
Visa fully loaded UK P&L accounts [✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]	[✁]

Note: Margins [✁]. Average issuer margins have been calculated based on total revenues and total EBIT over the five-year period. The calculation of issuer margins can be impacted by low (or negative) net revenues on the issuing side (for example, high negative margins result from costs being divided by low levels of net issuing revenues).[272]
Source: Visa fully loaded UK P&L accounts, PSR calculations.

270 [✁].

271 [✁].

272 We have calculated the margins for issuers by using information that Visa provided to us as part of our s81 requests. This included net revenue allocations to acquirers and issuers (and other revenue). Net revenues for issuers are significantly lower than for acquirers [✁]. We have allocated costs on an estimated 50/50 basis between issuers and acquirers. Given that net revenues for issuers are much lower than for acquirers, using this approach means that issuers have negative EBIT (and therefore negative margins) in most years. When issuing revenues are very low, the negative issuing margins can appear to be very large. This is because issuer costs, relative to issuing revenues are comparatively high in these instances. We have not placed weight on the margin level on the issuer side in this analysis, other than to note that profitability on the acquiring side is significantly higher than on the issuing side. The purpose of this analysis is to understand in broad terms how profitability differs between the acquiring and issuing side, given the high-level assumptions made around cost allocation. This analysis is not used to infer an actual margin for the acquiring or issuer side. We note that this analysis shows that profitability is higher on the acquiring side compared to the issuer side.

4.34 Table 35 above shows that average margins on the acquiring side ([✂] [✂]%) are [✂] compared with the overall margins ([✂]% [✂]) and [✂] compared with the margins on the issuing side, and [✂].[273] We note that the calculation of margins on the issuing side can be impacted by low (or negative) net revenues on the issuing side (for example [✂]).

Findings on Visa's UK margins based on the fully loaded UK P&L accounts

4.35 We currently do not have sufficient information to fully assess whether Visa's fully loaded UK P&L accounts are a reliable reflection of the profitability of the relevant UK operations for the purpose of our market review. We have not had sufficient information from Visa to fully assess the cost categorisation and cost allocation choices made in preparation of the fully loaded UK P&L accounts.

4.36 Our analysis of Visa's fully loaded UK P&L has shown that the margins in the fully loaded UK P&L accounts can vary very significantly depending on the assumptions in relation to the allocation of common costs and revenues. For example, the margins in Visa's fully loaded UK P&L accounts (excluding [✂]) are [✂]% but rise to c. [✂]%[274] in our sensitised view (on average for the period of 2018–2023).

4.37 Our analysis also indicates that Visa's view of its margins for the relevant UK operations as presented in the fully loaded UK P&L accounts may underestimate the economic benefits that Visa derives from its relevant UK operations. This is mainly due to:

a. [✂]

b. [✂]

c. [✂]

d. the increase in the profitability shown in the fully loaded UK P&L accounts when changing some of the assumptions made for the allocations of costs

4.38 We therefore do not think that we can currently derive an estimate of Visa's profitability in the relevant UK operations from the fully loaded UK P&L accounts that is suitable for the purposes of assessing whether market outcomes are consistent with a competitive market.

4.39 We further note that because Visa does not report financial performance for its UK business, we are currently not in a position to effectively monitor its financial performance in the UK.

4.40 In the next two sections we set out a more detailed review of Visa's European and Global accounts and consider whether these could be relevant in understanding the margins Visa earns in the relevant UK operations.

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273 We note that this analysis is based on the fully loaded UK P&L accounts provided to us by Visa [✂].

274 We note that this figure could be higher or lower depending on the alternative cost and revenue allocation assumptions made. See also paragraph 4.31.

Estimating UK EBIT margins based on Visa's published European accounts

4.41 Visa publishes audited regional accounts that mainly include European operations including the UK (Visa Europe Limited – VEL or European accounts). Visa told us that the European accounts contain [✂] their relevant UK activities. There are no audited accounts that include the relevant UK operations that cover a smaller number of countries than the European accounts. This means the European accounts are the most granular level for which published accounts containing the relevant UK operations are available.

4.42 Table 36 below shows the reported EBIT margins in Visa's European accounts.

Table 36: EBIT margins for Visa in the published European accounts (%)

	2018	2019	2020	2021	2022	2023	Average (2018–2023)
Visa Europe Limited (VEL)	57.5	60.7	53.6	60.2	67.0	65.1	60.7

Source: Visa European financial statements.

4.43 The fully loaded UK P&L accounts contribute approximately [✂]% of Visa Europe's net revenue in the period of 2018–2023. This figure is [✂]% on average in 2021 to 2023 when [✂] are included.

4.44 When assessing whether the European accounts are an appropriate basis to estimate the margins for the relevant UK operations, we have considered the following factors:

a. intercompany transactions
b. litigation costs

Intercompany transactions

4.45 The European accounts include costs for the purchase of services from other parts of the Visa group and are not consolidated. These purchases are likely to generate profit (EBIT) for Visa as a whole (for example, in other parts of the Visa group), which is not reflected in the European accounts[275], even though they are generated from activities in Europe (and, by implication, the UK).

4.46 Visa has confirmed that Visa Europe purchases services from other parts of the Visa group. For example, VEL in 2022 incurred €510m in intercompany expenses under a framework agreement with Visa Inc, including, for example, fees for IT network infrastructure, license fees and royalties.[276]

4.47 We have taken the view that intercompany profits form part of the economic benefits that Visa derives from the European operations and should be removed from costs when assessing the profitability of Visa's European operations. This is because they are not a cost that Visa (as a group) has to pay to provide services in the UK.

275 Either because they are not consolidated or accrue in other parts of the Visa group.
276 VEL Annual report 2022, Note 27.

4.48 If in the alternative, we were to consider the use of intercompany transactions as a basis on which to generate UK profit estimates, then we would also need to consider the following:

a. The intercompany transactions would need to be reflective of competitive market conditions. However, profitability and other relevant information for such an analysis for VEL are not publicly available.[277] We are therefore not able, for example, to assess whether profitability in intercompany transactions is higher than would be expected in competitive markets.

b. The profitability assessment would also need to take into account that, because a number of services are effectively provided by notional third parties, the business model for an entity with significant intercompany transactions would be different to Visa's overall operations (and by implication the relevant UK operations). For example, where Visa notionally outsources the provision of technology and operations for scheme and processing services in the UK (or Europe), then the UK operations would effectively become resellers of scheme and processing services, rather than providers of such services. This could impact the asset intensity of the operations and could require different benchmark margin comparators than comparators that are similar to Visa's actual relevant UK operations. It may be disproportionate to undertake this additional analysis when the alternative of adding back intercompany profits is a feasible option.

Litigation costs

4.49 Visa includes significant litigation-related costs in the European accounts. It may be appropriate to exclude these costs when assessing profitability for the purpose of our market review. This is for the same reasons as set out in paragraph 4.24 above. We consider the fact that Visa removes litigation costs provisions when reporting its adjusted performance to its shareholders in its published global accounts further suggests that it may be appropriate to exclude litigation costs when assessing the economic benefits that Visa derives from its relevant UK operations.[278]

4.50 We therefore consider that Visa's European accounts are likely to understate the EBIT margins in Europe that Visa derives on an economic basis. As such, using EBIT margins for Europe as an estimate for the relevant UK operations would probably also understate the economic benefits that Visa derives from the relevant UK operations.

Visa UK margins relative to the European margins

4.51 Using the European EBIT margins to estimate Visa's margins for the relevant UK operations also requires an assessment of whether the margins in the UK are at, above or below the EBIT margins of the European level.

4.52 Visa has provided us with internal documents that indicate the [✂].

277 [✂]. Source: Visa response to PSR questions dated 15 August 2023, as supplemented in September 2023[✂].
278 VEL considers litigation costs to [✂].

4.53 An internal document from July 2020 includes:

a. A line and bar chart headed: [✁]. This [✁].[279]

b. The chart is sub-headed '[✁]'. The operational expenditure to income ratio (which we interpreted to be similar to the inverse of contribution margins, i.e. margins [✁]) shown in that chart are set out below. [✁][280]

Figure 9: Visa operational expenditure to income ratio in its top 10 countries by net revenue (FY19)

[✁]

Source: Visa internal documents.

4.54 This indicates that in FY19, Visa's margins in the relevant UK operations could [✁].[281] This is because a large proportion of Visa's costs are common costs, which implies that countries with higher contribution margins (and higher overall revenues) make a larger contribution to the overall profitability of an organisation and thus can be considered to be more profitable.

4.55 Visa also reports internally [✁]. These documents show that [✁][282] [✁].[283]

Table 37: Visa contribution margins for UK&I and UK only (assuming 100% Irish margin)

	2018	2019	2020	2021	2022	Average (2018–2022)
UK only (assuming 100% Irish margin)	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%
UK & Ireland	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%	[✁]%

Source: Visa internal documents[284], PSR calculations.

4.56 Visa has told us that [✁].[285] However, [✁] was not able to provide us with UK contribution margins on a stand-alone basis. We have therefore calculated implied UK contribution margins assuming that margins in Ireland are 100%, which is the most conservative assumption possible. This results in a lower bound estimate for the UK contribution margin of around [✁]% on average over the period of 2018–2022 (see Table 37 above).

4.57 Visa's internal documents also included information about contribution margins[286] in other European regions. See Table 38 below.

279 That is by implication, as no other European market is [✁].
280 [✁].
281 [✁].
282 Visa told us that [✁].
283 [✁].
284 [✁].
285 Visa response to PSR working paper dated 1 December 2023 [✁].
286 Visa told us that [✁].

Table 38: Visa contribution margins in different European regions

	2018 FY (Full year)	2019 FY (Full year)	2019 (September)	2020 (September)
[✂]	[✂]%	[✂]%	[✂]%	[✂]%
[✂]	[✂]%	[✂]%	[✂]%	[✂]%
[✂]	[✂]%	[✂]%	[✂]%	[✂]%
[✂]	[✂]%	[✂]%	[✂]%	[✂]%
[✂]	[✂]%	[✂]%	[✂]%	[✂]%
[✂]	[✂]%	[✂]%	[✂]%	[✂]%
[✂]	[✂]%	[✂]%	[✂]%	[✂]%
[✂][287]	[✂]%	[✂]%	[✂]%	[✂]%
[✂]	[✂]%	[✂]%	[✂]%	[✂]%
[✂]	[✂]%	[✂]%	[✂]%	[✂]%
[✂]	[✂]%	[✂]%	[✂]%	[✂]%

Source: Visa internal documents, PSR calculations.

4.58 This shows that Visa UK margins [✂].

4.59 We note that contribution margins do not allow a direct read-across to EBIT margins on a FAC basis. However, we consider that where costs are largely fixed common costs, contribution margins can nevertheless provide an indication of relative profitability. As set out above in paragraph 4.18, we may not necessarily expect a proportionately higher allocation of common costs to the relevant UK operations given that [✂]. We note in this context that Visa's internal document did not suggest that [✂]. Visa also told us that [✂].

Findings on Visa's UK margins based on the European accounts

4.60 The evidence we have reviewed indicates that [✂]. This is because:

a. [✂].

b. Internal documents indicate that [✂].

Estimating UK EBIT margins based on Visa's published global accounts

4.61 Visa publishes consolidated audited global accounts that include the relevant UK operations. These are the only audited consolidated accounts that include all of the relevant UK operations for Visa. The relevant UK operations represent approximately [✂]% of Visa's global operations over the period of 2018–2023 (when measured in net revenue terms excluding [✂]). This figure is [✂]% on average in 2021 to 2023 when [✂] are included.

287 [✂].

4.62 The global accounts can form an appropriate starting point to estimate the economic benefits that Visa derives from the global (and therefore implicitly the relevant UK) operations. This is mainly because Visa is a global operation with significant global common costs. Furthermore, the global accounts are consolidated accounts, removing the effects from intercompany transfers; and include all relevant revenues, including all FX conversion revenues. However, the global accounts also include a significant proportion of services and/or costs that are either not offered in the UK or are outside of our frame of reference. For example, 'other' revenues account for around 5% of Visa revenues. These other revenues may not be part of the relevant UK operations and may have different margins compared to the services offered in relevant UK operations. See Table 39 below.

Table 39: 'Other' services as a % of total gross revenues – Visa

	2018	2019	2020	2021	2022	2023	Average (2018–23)
Visa Inc	3.6	4.5	5.0	5.2	5.0	5.5	4.8

Source: Visa global financial statements, PSR calculations.

4.63 Another example is litigation costs, which are around 1.8% of total global net revenues for Visa (see Table 40 below). Litigation costs could differ significantly between the relevant UK operations and the global average. Further, we set out above in paragraph 4.24 that we do not think that litigation costs should necessarily be included in the assessment of the profitability of the relevant UK operations in the context of our market review.

Table 40: 'Litigation provisions' services as a % of net revenues – Visa

	2018	2019	2020	2021	2022	2023	Average (2018–2023)
Visa Inc	-2.9	-1.7	-0.1	0.0	-3.0	-2.8	-1.8

Source: Visa global financial accounts, PSR calculations.

4.64 Visa's global accounts identify a number of cost items as not representative of its continuing operations, as they may be non-recurring or have no cash impact, and may distort its longer-term operating trends. Those items impacting on EBIT include, for example (in addition to litigation costs):

a. amortisation of acquired intangible assets
b. acquisition-related costs
c. Russia-Ukraine charges
d. indirect taxes

4.65 The net impact on Visa's operating margins from adjusting for these other items is shown in Table 41 below.

Table 41: Adjustments to operating expenses, excluding litigation provision (Visa)

	2018	2019	2020	2021	2022	2023	Average (2018–23)
USD million	195	10	63	224	249	266	N/A
As a % of net revenues	0.95	0.04	0.29	0.93	0.85	0.81	0.65

Source: Visa global financial accounts, PSR calculations.

4.66 The above examples are not an exhaustive list and there could be other P&L items that could be considered for adjustments. This could, for example, relate to the cost of expanding into new business areas, e.g. R&D.

4.67 We note that it would be difficult to identify and quantify a comprehensive list of required adjustments to global margins to allow for a more detailed like-for-like comparison with the margins for the relevant UK operations. This is not least because detailed global revenue and cost information data is not publicly available. We have therefore made the assumption that global margins without any adjustments for the factors set out above are the most appropriate starting point for assessing Visa's UK EBIT margins based on the global accounts. We think this is a proportionate approach, in particular when considering that the specific examples set out above, i.e. other revenues and non-operating expenses, represent a relatively small proportion of global revenues (even when including litigation provisions). It also takes into account that Visa has a high proportion of costs that are global common costs and that [✂].[288]

4.68 We therefore think that the reported global margins can be a basis to derive an estimate of the margins for Visa's relevant UK operations. This is mainly because for Visa the global accounts address some of the factors that have a reducing impact on margins at the European level (e.g., intercompany profits) and at the UK level (e.g., intercompany profits and absence of [✂]) and because the impact of other operations and non-operational items seem to be relatively small.

Visa UK EBIT margins relative to the global margins

4.69 Using global EBIT margins to estimate the margins for the relevant UK operations also requires an assessment of whether the margins in the UK are at, above or below the EBIT margins at the global level. We consider that some of the factors that we took into account when assessing the relative margins of the relevant UK operations and the European operations also apply when undertaking the same assessment at the global level.

4.70 As set out at paragraph 4.53, [✂]. This suggests that Visa's margins in the UK are higher than the global average.

4.71 In paragraph 4.59, we set out that, whilst contribution margins do not allow a direct read across to EBIT margins on a FAC basis, we nevertheless consider that where costs are largely fixed common costs, contribution margins can provide an indication of relative profitability and that this is supported by the UK [✂], implying an allocation of common costs (relative to net revenues) that is at least not higher than for other global markets.

288 As set out in paragraph 4.18.

Visa's views

4.72 In its response to our interim report, Visa said there is no reasonable basis to consider that Visa's published global accounts are likely to present a more reliable estimate of Visa's UK margins than the fully loaded UK P&L accounts provided to the PSR.[289] These submissions were consistent with Visa's representations on the CWP, where it stated that:

a. There are strong reasons for why UK margins are lower than the global average, including that [✂]. Visa said this is also consistent with profitability in the fully loaded UK P&L accounts, which are in part based on audited IFR accounts.[290,291]

b. It is wrong to assert a strong relationship between a profit margin after attribution of direct costs and a profit margin after allocation of common cost, and therefore to rely on Visa's internal documents showing [✂]. It does not follow as a matter of logic that the level of common costs allocated should be in proportion to direct costs incurred. For example, one cluster may have very low marketing costs (which are direct expenses) but have very high transaction volumes, so it would not follow that the level of marketing (direct costs) would lead to a similar level of common costs being generated (if, for example, common costs were allocated based on transaction volumes).[292,293]

Our consideration of Visa's views

4.73 We have set out above the reasons why we do not think that it would be appropriate for us to rely on the margins as presented in fully loaded UK P&L accounts. We consider that, whilst the audited IFR accounts can be a starting point for a profitability analysis, we would still need to consider whether they provide the appropriate basis for assessing the economic benefits that Visa derives from its relevant UK operations. For example, the IFR accounts are based on specific regulatory requirements and have been prepared for that specific purpose. Any profitability estimate derived from these accounts would need to be assessed against relevant criteria and may need to be adjusted for the purpose of an economic assessment of profitability.

4.74 We also set out in paragraph 4.86 that we considered that it is not necessary, for the purpose of our market review, to derive our own view of the fully loaded UK P&L accounts that would address the issues we have identified.

4.75 We do not consider that Visa's global accounts are necessarily a precise proxy for Visa's UK operations. However, in the absence of a robust estimate based on the fully loaded UK P&L accounts, we consider that Visa's global accounts provide informative data for us to estimate a range for the margins of Visa's relevant UK operations. We have mainly referred to the internal documents to assess whether it is likely that Visa's margins in the UK are relatively higher or lower than the global margins. These documents show that [✂] and that [✂]. We have not seen internal documents that would provide an indication that [✂]). Visa has not provided any further documentary evidence to support its view that [✂], other

289 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraphs 2.37-2.38.

290 Visa response to PSR working paper dated 1 December 2023 [✂].

291 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraphs 2.37-2.38.

292 Visa response to PSR working paper dated 1 December 2023 [✂].

293 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraphs 2.38.

than to point to the fully loaded UK P&L accounts, [✂]. We note in this context that the UK is [✂] and that the UK accounts for circa [✂]% of VEL revenues.

Findings on Visa's UK margins based on the global accounts

4.76 The evidence we have reviewed suggests that Visa's global accounts can be informative in understanding the margins for the relevant UK operations. [✂].

Approach to estimating margins for Visa's relevant UK operations

4.77 In this section we set out our views on how best to estimate the profitability of Visa's relevant UK operations on the basis of the evidence discussed above.

4.78 We would ideally have used audited UK accounts covering only the relevant UK operations as the starting point for our analysis of Visa's relevant UK operations. In the absence of this data, we have spent considerable time seeking and reviewing Visa's fully loaded UK P&L accounts against criteria set out in the February 2023 working paper. We have supplemented this analysis with a review of Visa's European and global accounts.

4.79 In assessing the available data, we have also had regard to internal documents and a sensitisation of Visa's fully loaded UK P&L accounts using alternative assumptions. Following circulation of our December 2023 working papers, on 19 January 2024 and 9 February 2024, Visa shared the financial models used to derive the EBIT margins in the fully loaded UK P&L accounts. We subsequently did not consider it necessary to undertake a more detailed review as part of this market review given the conclusions we are drawing from this profitability analysis (see also paragraph 2.12) which do not include a precise finding or quantification of excess profits, and our view that undertaking this analysis would not result in a substantive change to these conclusions.

4.80 We consider that we currently cannot derive an estimate of Visa's profitability in the relevant UK operations from the fully loaded UK P&L accounts that is suitable for the purposes of assessing whether market outcomes are consistent with a competitive market. This is primarily because Visa's view of its margins for the relevant UK operations as presented in the fully loaded UK P&L accounts could be an underestimate of the economic benefits that Visa derives from its relevant UK operations and because our sensitivity analysis shows that making different assumptions on revenue and cost allocations can lead to significantly higher estimates for the margins for Visa's relevant UK operations (indicating a wide possible range for the margins in the fully loaded UK P&L accounts depending on the assumptions made).

4.81 We consider that the European accounts are likely to understate the margins for Visa's relevant UK operations. This is taking into account that Visa's European accounts are not consolidated and may therefore contain costs that are recorded as profits in other parts of the Visa group. Visa also records significant litigation costs in the European accounts, which we consider may not be relevant for an assessment of the economic benefits that Visa derives from the relevant UK operations. Further, Visa's internal documents show that [✂].[294]

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294 However, we note that Visa's European EBIT [✂] than the EBIT margins in the fully loaded UK P&L. This further supports our view, that the EBIT margins in Visa's fully loaded UK P&L accounts may underestimate the EBIT margins for the relevant UK operations.

4.82 We consider the global margins can be informative in understanding Visa's margins in the relevant UK operations. This is because the global accounts include FX conversion revenues, are fully consolidated (i.e., they are not affected by intercompany profits), and are less impacted by litigation related costs. Internal documents (see paragraph 4.53) show that [✁]. We therefore consider using global margins is a potentially [✁] of Visa's profitability for the relevant UK operations.

Our conclusions on Visa's margins for the relevant UK operations

4.83 We have estimated a range for Visa's margins for the relevant UK operations by looking at Visa's fully loaded UK P&L accounts, Visa's European accounts and Visa's global accounts.

4.84 In developing the fully loaded UK P&L accounts, Visa needs to make many assumptions about allocations of common costs, which can have significant impacts on the level of costs allocated. Some of the allocations may not be appropriate in the context of a market review, where the purpose of profitability analysis is to understand profitability from an economic perspective. Some allocations may result in margin estimates that are less reflective of the economic profitability than others.

4.85 We have identified a number of factors, either in the way the fully loaded UK P&L accounts were constructed or in the way costs have been allocated (where cost allocation information was available), that make them less likely to be representative of the economic benefits that Visa derives from the relevant UK operations. These factors are likely to lead to an underestimate of the EBIT margins in the fully loaded UK P&L accounts.

4.86 We consider the information we have obtained so far is not sufficient for us to derive an estimate for the profitability of Visa's relevant UK operations from the fully loaded UK P&L accounts provided to us by Visa for the purposes of our market review. This is mainly because of the wide range of margins that can be generated in the fully loaded UK P&L accounts due to the sensitivity of the underlying financial model to making relatively small changes to the cost allocation assumptions and because we did not consider it necessary, for the purpose of this market review, to derive our own view of a robust spot estimate for the margins in the relevant UK operations, for example by making adjustment to the financial model used by Visa to derive the fully loaded UK P&L accounts.

4.87 In light of this, we have also reviewed profitability estimates based on Visa's reported European and global margins.

4.88 We conclude that Visa's global margins provide relevant information, [✁], to estimate the margins in the relevant UK operations for Visa. We considered the global accounts to be more suitable as a proxy than the European margins. This is mainly due to the possibility that the European accounts include costs that are profits in other Visa entities and because it includes litigation costs that may not necessarily form part of the economic costs for the relevant UK operations.

4.89 The data we have reviewed shows a wide range of the average margins for Visa's relevant UK operations from [✂]% (based on the fully loaded UK P&L accounts) to 64% (based on Visa's global accounts).[295,296] See Table 42 below.

Table 42: Visa's UK, European and global margins (%)

	2018	2019	2020	2021	2022	2023	Average (2018–23)
Visa fully loaded UK P&L accounts [✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Visa fully loaded UK P&L accounts [✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Visa Europe Limited (VEL)	57.5	60.7	53.6	60.2	67.0	65.1	60.7
Visa Global	62.9	65.3	64.5	65.6	64.2	64.3	64.4

Source: Visa fully loaded UK P&L accounts; Visa European and global financial statements.
Note: figures in italics are PSR calculations, where FX revenues for 2018 and 2019 are assumed to be the same ratio of total net revenues as in 2022 and for 2020 the same as for 2021. This is based on the assumption that COVID-19 impacts on travel are most similar in the respective years.

4.90 We did not consider it necessary, for the purpose of this market review, to conclude where exactly within this range Visa's margins for the relevant UK operations are likely to lie, other than to note that the fully loaded UK P&L accounts are likely to understate the economic benefits Visa derives from the relevant UK operations and that consequently margins are likely higher than indicated by the lower end of the range.[297,298]

295 We note that Visa's fully loaded UK P&L accounts do not include [✂] for 2018 to 2020.

296 [✂].

297 We note, however, the existence of internal documents suggesting that Visa's UK profit margin [✂] compared with the global average margins. However, we have not undertaken analysis to reach a firm view for the purposes of this final report.

298 However, we interpret the upper end of the range with a degree of caution, given that global accounts can only serve as a proxy for UK profitability.

5 Expected future margins

5.1 One further consideration in a profitability analysis is whether the margins that have been calculated based on historical data are likely to continue in the future. For example, if margins are projected to fall significantly in the future, for example due to new market entry, then this may indicate that any potential harm that may be associated with high margins may not persist and may therefore not require a remedy.

5.2 We therefore set out below our assessment of whether Mastercard's and Visa's margins that we have estimated for the relevant UK operations are likely to be significantly different in the future from the levels we have identified in our analysis above. We also set out how we have taken into account relevant submissions we have received from Mastercard and Visa in response to the CWP and interim report.[299,300]

Mastercard

5.3 We have set out in paragraph 3.47 that Mastercard's internal documents indicate that its [✁]. However, they also indicate that there is a possibility that Mastercard may refrain from [✁].

5.4 Our competitive assessment indicates that significant new market entry into scheme and processing services in the UK is unlikely in the short to medium term[301] and that Mastercard may benefit from a lack of effective competitive constraints in respect of the fees it charges to acquirers.[302]

5.5 Mastercard's global margins have remained above the historic average since 2023 (see Table 43 below).

Table 43: Mastercard's global EBIT margin (%)

	2018	2019	2020	2021	2022	2023	Jan-Sept 2023	Jan-Sept 2024	Average (2018-23)
Mastercard Global	48.7	57.2	52.8	53.4	55.2	55.8	57.3	56.3	53.9

Source: Mastercard global financial statements.

299 Mastercard response to PSR working paper dated 1 December 2023 [✁]. Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024).

300 Visa response to PSR working paper dated 1 December 2023 [✁]. Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024).

301 See final report Chapter 4: *'Competitive constraints on the acquiring side'*, Chapter 5: *'Competitive constraints on the issuing side'* and Annex 1: *'Competition with other payment methods'*.

302 See final report Chapter 4: *'Competitive constraints on the acquiring side'*, Annex 2: *'Bargaining positions of acquirers and merchants'*.

5.6 In an internal document from 2021, Mastercard stated [✂].[303] Another internal document shows that Mastercard is expecting that [✂] (see paragraph 3.47). We have not seen internal documents that would suggest Mastercard's margins in the UK will decline in the future.

5.7 Thus we have not seen compelling evidence to suggest that Mastercard's margins in the relevant UK operations are going to decline significantly in the future. We also note that margins may even increase if the costs associated with the entry into debit cards (e.g. higher rebates and incentives) are recouped in later years.

5.8 We note that the margins presented in Mastercard's fully loaded UK P&L accounts have declined from ca [✂]% in 2019 to ca [✂]% in 2022 and have increased slightly in 2023 to [✂]%. Our views on the trajectory of future margins for Mastercard's relevant UK operations should be considered in that context, i.e. that the data we have seen does not indicate a significant [✂].[304] However, we have set out in Section 3 above that the margins in Mastercard's fully loaded UK P&L accounts may understate the economic benefits that Mastercard derives from its relevant UK operations. Should related adjustments result in higher margin estimates for the relevant UK operations,[305] we would still consider that the evidence we have reviewed would not indicate a significant expected reduction from this adjusted level. This is because the reasons for the potential understatement are cost and revenue allocation choices in the fully loaded UK P&L accounts that mostly apply to both historic and future fully loaded UK P&L accounts.[306] For example, we would expect that the inclusion of FX conversion revenues would apply to both historic and future margin calculations.

5.9 The evidence from Mastercard's recent financial statement does not indicate an expected significant decline in Mastercard's global margins. This is further supported by evidence from analyst reports for Mastercard Inc. This data, presented in Table 44 below, shows that the market is expecting Mastercard's margins to remain stable or rise at the global level in the short and medium term.

Table 44: Mastercard – Bloomberg consensus forecasts – EBIT margin (%)

	2023 (actual)	2024 (actual)	2025 (forecast)	2026 (forecast)	2027 (forecast)
EBIT margin Global	56	55	58	59	60

Source: Bloomberg consensus data and PSR calculations.

303 [✂].

304 We note in paragraph 3.46 that there is also a possibility for margins to increase in the fully loaded UK P&L accounts.

305 See, for example, paragraph 3.13.

306 We note that this may not necessarily be the case for all adjustments as some allocation choices may impact differently on margins in different time periods, in particular the capitalisation and amortisation of rebates and incentives.

Mastercard's views

5.10 Mastercard said that the evidence we looked at when assessing its future margin development did not support our view that its margins in the relevant UK operations were not going to decline significantly in the future. In particular Mastercard said:[307]

a. [✂]

b. [✂]

c. [✂]

d. [✂]

e. [✂]

f. [✂]

Our consideration of Mastercard's views

5.11 We have set out our assessment of the potential trajectory of Mastercard's margins in paragraphs 5.3 to 5.9 above. We note that Mastercard has not provided any evidence, for example in the form of internal documents, that would, in our view, suggest that margins in the fully loaded UK P&L accounts would [✂] from the levels in 2022 and 2023. Mastercard did not provide any evidence that margins are expected to [✂] in the global accounts in the short to medium term.

Our conclusions on Mastercard's future margins

5.12 We are not persuaded that Mastercard's margins in the relevant UK operations are going to decline significantly in the short to medium term. We note that its margins may increase (see paragraph 5.7) and have increased slightly in the fully loaded UK P&L accounts in 2023 (see paragraph 5.8).

Visa

5.13 Visa provided us with internal documents suggesting that it [✂]. A document from 2021 shows that margins are expected to [✂].[308]

Figure 10: 2021 slide extract

[✂]

Table 45: Visa's EBIT margin projections[309]

	2021	2022	2023	2024	2025	2026
Visa Europe	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%	[✂]%

307 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 2, section 4.2.

308 [✂].

309 Table 45 shows the operating margins calculated from figure 10 – using net revenues as set out in the blue bar chart and operating cost (OpEx) as set out in the yellow bar chart.

A document from May 2022 again shows [✁].[310]

Figure 11: 2022 slide extract

[✁]

5.14 Whilst we note that the internal information above shows [✁].

5.15 Our competitive assessment indicates that significant new market entry into scheme and processing services in the UK is unlikely in the short to medium term[311] and that Visa may benefit from a lack of effective competitive constraints in respect of the fees it charges to acquirers.[312]

5.16 Visa's global margins have continued to increase since 2023 (see the Table 46 below) and Visa Europe's margins remain above historic averages.

Table 46: Visa's EBIT margins at European and global level (%)

	2018	2019	2020	2021	2022	2023	2024	Average (2018–23)
Visa Europe	57.5	60.7	53.6	60.2	67.0	65.1	63.5	60.7
Visa Global	62.9	65.3	64.5	65.6	64.2	64.3	65.7	64.4

Source: Visa European and global financial statements.

5.17 We also looked at evidence from analyst reports for Visa Inc. – see Table 47 below. Table 47 shows that the market is expecting Visa's margins to remain stable or increase at the global level in the short and medium term.

Table 47: Visa – Bloomberg consensus forecasts – EBIT margin (%)

	2024 (actual)	2025 (forecast)	2026 (forecast)	2027 (forecast)	2028 (forecast)
EBIT margin Global	66	68	68	68	69

Source: Bloomberg consensus estimates.

Visa's view

5.18 Visa said that we appeared to be determining a forward-looking measure of profitability based on past results by assuming certain costs are non-recurring. Visa argued that, at the same time, we had not considered a forward-looking view of competitive dynamics. It pointed out that the UK payments sector was undergoing a period of great dynamism and change with significant market entry driving greater choice in the ways of making payments. If we used past profitability as a proxy for what Visa's margins might be in the future, then, in Visa's view, this needed to acknowledge and assess how the market would change in the coming years.[313]

310 [✁].

311 See final report Chapter 4: *'Competitive constraints on the acquiring side'*, Chapter 5: *'Competitive constraints on the issuing side'* and Annex 1: *'Competition with other payment methods'*.

312 See final report Chapter 4: *'Competitive constraints on the acquiring side'*, Chapter 5: *'Competitive constraints on the issuing side'* and Annex 2: *'Bargaining positions of acquirers and merchants'*.

313 Visa response to PSR working paper dated 1 December 2023 [✁].

5.19 Visa said that there was no basis to assume that historical profitability was a good indicator for Visa's likely future profitability, particularly in the next three to five years.[314] In particular:

a. There was a likelihood of strong entry and expansion of alternative payment methods during this period.[315]

b. Visa's internal documents from 2021 and 2022 that we had looked at when assessing future margins did not provide sufficient evidence, for example, because [✂] and because the documents did not [✂] to profitability.[316]

Our consideration of Visa's views

5.20 We interpret Visa's views as suggesting that its margins in the relevant UK operations may decline in the future and that we have therefore overestimated its profitability for the purpose of this market review.

5.21 Our competitive assessment indicates that significant new market entry into scheme and processing services in the UK is unlikely in the short to medium term[317] and that Visa may benefit from a lack of effective competitive constraints in respect of the fees it charges to acquirers.[318] Thus we consider that significant new market entry into scheme and processing services in the UK is unlikely in the short to medium term.

5.22 We do not agree with Visa that its internal documents cannot be useful when making an assessment of the likely future margins. First, it is widely recognised that companies use internal documents to develop strategic plans and make informed decisions around running a business. Furthermore, it is commonplace for economic regulators and competition authorities to use internal documents when undertaking market reviews. Second, an assessment of future margins is by nature uncertain and we will therefore need to assess the available evidence in the round. Third, Visa has not provided any documents showing an expectation of [✂]. Fourth, Visa's internal documents indicate [✂] for its European operations.[319] We therefore consider it reasonable to conclude, on the basis of the evidence that was provided to us (and set out above), that there is insufficient evidence to suggest that its margins are likely to decline significantly in the short to medium term.

Our conclusions on Visa's future margins

5.23 We are not persuaded that Visa's margins in the relevant UK operations are going to decline significantly in the short to medium term. Visa's internal documents suggest that it [✂] and Visa's global margins are expected to remain stable.

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314 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), paragraph 2.39.

315 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), paragraph 2.39.

316 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraph 2.40.

317 See final report Chapter 4: *'Competitive constraints on the acquiring side'*, Chapter 5: *'Competitive constraints on the issuing side'* and Annex 1: *'Competition with other payment methods'*.

318 See final report Chapter 4: *'Competitive constraints on the acquiring side'*, Chapter 5: *'Competitive constraints on the issuing side'* and Annex 2: *'Bargaining positions of acquirers and merchants'*

319 We note Visa's submission that its margins in FY2022 were [✂]. We consider that it is possible that these figures may not be fully comparable. For example, figure 10 (which was included in a Visa document from May 2021) shows margins for Visa Europe for 2021 of [✂]%, when reported margins for Visa Europe in that year were [✂]%.

6 Comparator benchmark margin analysis

Introduction

6.1 As set out above, we are interested in how Mastercard's and Visa's profitability in the relevant UK operations compares to the profitability that would be expected if Mastercard and Visa were operating in competitive markets in the relevant UK operations.

6.2 We do this by comparing the profit margins of Mastercard's and Visa's relevant UK operations to the profit margins of appropriate benchmark comparators, that can be considered to be operating in competitive markets – that is, those where there is limited market concentration,[320] and no other features indicating a lack of effective competitive constraints, such as high barriers to entry. See paragraphs 2.52 and 2.54 for more detail.[321]

6.3 In this section we set out how we have identified the competitive profit benchmark margin, or at least its upper or lower bound, for Mastercard's and Visa's relevant UK operations, for the purpose of our market review (the 'comparator benchmark margin'). We then compare this to the profitability estimates for Mastercard and Visa as set out in the previous sections.

6.4 We have identified in our analysis of Mastercard's and Visa's margins for the relevant UK operations that:

a. The documents we have reviewed show EBIT margins for Mastercard in a range from [✁]% to 54% on average over the period of 2018–2023. We consider that the margins that best reflect the economic benefits Mastercard derives from the relevant UK operations are likely higher than indicated by the lower end of this range.

b. The documents we have reviewed show EBIT margins for Visa in a range from [✁]% to 64% on average over the period of 2018–2023. We consider that the margins that best reflect the economic benefits Visa derives from the relevant UK operations are likely higher than indicated by the lower end of the range.

6.5 We have noted in our February 2023 working paper that undertaking a comparator benchmark margin analysis is not without its challenges – the main one being identifying comparators to allow us to assess the level of profitability objectively.[322]

320 Market concentration would be considered to be present where market shares are concentrated between a small number of firms.

321 We are mindful that a 'perfectly competitive' market does not exist in practice. We consider that competitive markets are those that are subject to effective competitive constraints. We have reflected this in our comparator analysis by assessing whether the comparator companies operate in 'sufficiently' competitive markets.

322 MR 22/1.5 *Approach to profitability analysis working paper* (February 2023) paragraph 1.7.

6.6 As part of our benchmark margin analysis, we were not able to identify a very close comparator to Mastercard's and Visa's relevant UK operations, mainly because there are no comparators that have very similar business operations to Mastercard and Visa, and that can be considered to operate in competitive markets. Instead, we identified a number of what we consider to be sufficiently similar comparators.[323] We note that Mastercard and Visa only agreed with one of the three sufficiently similar comparators we identified (PayPal), but only under conditions that certain adjustments are made to the margin calculations.

6.7 We nevertheless consider that the comparators we identified are sufficiently similar to Mastercard and Visa and can be considered to operate in sufficiently competitive markets to provide an indication of the competitive benchmark margin.

6.8 This section is structured as follows:

- First, we outline the purpose of the comparator benchmark margin analysis.
- Second, we set out how we have selected the most appropriate benchmark comparators.
- Third, we outline the profitability of the selected comparators.
- Fourth, we set out supplementary analysis conducted to cross-check our findings.
- Fifth, we set out our views on the margins Mastercard and Visa could expect to earn in the relevant UK operations in competitive markets.

6.9 Within each section we also set out how we have taken into account relevant submissions we have received from Mastercard and Visa in response to the confidential working paper (CWP) and interim report.[324,325]

Purpose of our comparator benchmark margin analysis

6.10 Benchmarking the profitability of Mastercard's and Visa's relevant UK operations against the profitability of comparable companies that are operating in competitive markets is a way of exploring the outcomes in a market, including identifying what level of profitability would be expected if Mastercard and Visa were operating in a competitive market in the relevant UK operations. This also includes assessing whether the profits that Mastercard and Visa earn are higher than those available in competitive markets.

6.11 Combined with other evidence gathered in this market review, profits that are higher than those available to similar companies in competitive markets may indicate that Mastercard and/or Visa benefit from a lack of effective competitive constraints. We are assessing the results from our comparator benchmark margin analysis alongside other evidence.

323 See paragraph 6.114.

324 Mastercard response to PSR working paper dated 1 December 2023 [✂]. Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024).

325 Visa response to PSR working paper dated 1 December 2023 [✂]. Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024).

Selection of comparators

6.12 We set out below our approach to selecting appropriate comparators to Mastercard's and Visa's relevant UK operations.

6.13 The ideal comparator only provides services that are very similar to the relevant UK operations of Mastercard and Visa, and operates in the same geographic region. Such a comparator is most likely to have a level of risk and capital intensity that is very similar to that of Mastercard's and Visa's relevant UK operations. This is important because risk and capital intensity are likely to affect the level of margins a company would be expected to earn in competitive markets.

6.14 As set out previously, the ideal comparator should also operate in a competitive market.[326,327] For example, the comparator should not have a large market share, or benefit from high barriers to entry.

6.15 Mastercard's and Visa's relevant UK operations include domestic and international card payment services (both inbound and outbound). The ideal comparator would therefore have a meaningful presence in the UK and would also offer both domestic and international card-based payment services.

6.16 We have considered whether Mastercard and Visa could be used as a comparator for one another. However, Mastercard and Visa together account for a very large proportion of the combined total of UK debit and credit card payments both by volume and value in the UK. Our assessment of the relative competitive constraints that Mastercard and Visa face found that, on the acquiring side, Mastercard and Visa do not face effective competitive constraints in the provision of core scheme services, core processing services and some optional services.[328] Further, as both companies are subject to this market review, it would be circular to include them as comparators. We therefore do not think they are suitable as comparators.

6.17 Mastercard's and Visa's very high combined UK market share makes it unlikely that there are other providers of very similar services to Mastercard and Visa in the UK. We therefore do not think that it will be possible to identify an ideal comparator for the comparator benchmark margin analysis.

Sufficiently similar comparators

6.18 Where there is no ideal comparator, companies whose operations are sufficiently similar, and are operating in sufficiently competitive markets, can be suitable comparators ('sufficiently similar comparators'). In this case the comparators should share as many features with Mastercard's and Visa's relevant UK operations as possible, recognising that there will not be an exact mirroring of operations.

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326 See paragraph 2.55.

327 One example of a like-for-like comparator is the retail energy market investigation where the CMA compared margins achieved in selling energy to large business customers in the UK with the margins achieved in selling energy to retail customers in the UK. See [FR Appendix 9.13: Retail profit margins (publishing.service.gov.uk), paragraph 14].

328 See final report Chapter 4: 'Competitive constraints on the acquiring side'.

6.19 In identifying sufficiently similar comparators, we have considered whether companies' operations overlap with those of Mastercard's and Visa's relevant UK operations and are comparable in a number of other aspects. This helps us to identify comparators that have a broadly similar risk exposure to Mastercard's and Visa's relevant UK operations, but also have sufficiently similar business operations that allow a meaningful comparison of profit margins. This included whether possible comparators:[329]

a. are payment system operators in (multiple) domestic and/or international markets (that are ideally card based) and provide similar value-added services to Mastercard's and Visa's relevant UK operations[330], ideally with limited additional services that are different from the services offered by Mastercard's and Visa's relevant UK operations

b. provide services in the UK or in a country with a comparable business environment to the UK

c. are for-profit organisations

d. operate similar business models (e.g., use similar resource inputs) with similar size and maturity to Mastercard's and Visa's relevant UK operations

e. provide sufficient financial information in publicly-available format to estimate their profit margin

6.20 An additional consideration for the sufficiently similar comparators is that they should be operating in a competitive market.[331]

6.21 To identify the best comparators for Mastercard and Visa's relevant UK operations we began by considering comparators that offer services as payment system operators[332] or payment service providers within the following categories:

a. Domestic and international card-based payments.

b. Domestic and international payments that are not card-based.

c. Domestic card-based payments.[333]

d. International non-card-based payments.[334]

6.22 Within these categories we identified the following potential comparators that have operations that are most similar to those of Mastercard's and Visa's relevant UK operations:

a. Domestic and international card based payments: American Express (Amex) and Discover.

b. Domestic and international payments that are not card based: PayPal.

329 When selecting the comparators we are not expecting that a sufficiently similar comparator overlaps with Mastercard's and Visa's relevant UK operations in all of the aspects set out here, but rather that the comparator, in the round, is as similar to Mastercard's and Visa's relevant UK operations as possible.

330 That is services that are similar to those offered by payment service providers.

331 This criterion is important as it helps to select benchmark comparators that are making normal returns, rather than supernormal profits. This in turn will provide us with a margin benchmark that reflects returns in competitive markets.

332 For the purpose of our market review, we consider that payment system operators are providers that are involved in the authorisation, clearing and settlement of payment transactions – in particular providers that own and maintain the rules and standards of the system and may offer related ancillary services. We also considered providers that may only perform parts of these activities.

333 With no or limited international payments.

334 With no or limited domestic payments.

c. Domestic card based payments: eftpos.

d. International non-card based payments: OFX.

6.23 We also considered whether payment system infrastructure operators should be included in our consideration of potential comparators. An example of a payment system infrastructure operator is Vocalink. On balance, we considered that payment system operators and payment service providers have closer overall similarity with the relevant UK operations of Mastercard and Visa. This is because payment system operators and payment service providers are likely to also operate their own payment system infrastructure (at least to some extent), but also offer other services that overlap with the services offered by Mastercard and Visa in the relevant UK operations and as such provide a broader overlap with Mastercard's and Visa's relevant UK operations than payment system infrastructure providers.

6.24 We did not identify any other potential comparators that have greater similarities with Mastercard's and Visa's relevant UK operations and that can be considered to be operating in sufficiently competitive markets.

6.25 We assess whether each of these potential comparators are sufficiently similar comparators for Mastercard's and Visa's relevant UK operations in more detail below. For each we first assess the overlap of their business model with Mastercard's and Visa's relevant UK operations, followed by an assessment of whether they are likely to be operating in competitive markets.

American Express (Amex) and Discover

6.26 There are only a small number of international card-based payment system operators for which sufficient financial information is available. These are:[335]

a. Amex

b. Discover

Overlap of business model

6.27 Amex and Discover both process payments and are card-based payment system operators in multiple domestic and international markets. While Amex is relatively widely used and accepted in the UK (although less than Mastercard and Visa), Discover has only a very small market share in the UK.[336]

6.28 Both Amex and Discover have a significantly different business model from Mastercard's and Visa's relevant UK operations. Most importantly, both have a significant financial services offering. For example, in 2019[337] c.20%[338] of Amex's net revenue was net interest income (i.e., interest income less interest expense); for Discover this share was c.83%.[339] Both companies also make significant provisions for credit/loan losses. Around

335 We also considered UnionPay and JCB but insufficient financial information is available to perform a margin estimate.

336 See Annex 1, paragraphs 1.308 and 1.309.

337 We found it appropriate to consider 2019 for the purpose of this comparison, which is the year before the pandemic, and which we considered represented a more typical year.

338 American Express Company Form 10-K 2021.

339 Discover Annual Report 2021.

10%[340] of Amex expenses and c.42%[341] of Discover expenses are provisions for such losses. Another example is that, in 2019, Amex's net interest income (after provision for credit losses) accounted for 60% of its pre-tax income. Neither Mastercard nor Visa offer credit services (these are provided by the issuers).

6.29 The difference in the business model also means Discover and Amex are likely to have a different capital intensity and different risk exposure compared to Mastercard's and Visa's relevant UK operations. For example, as illustrated by provisions for losses, they will be exposed to retail and business customer defaults, whereas Mastercard's and Visa's relevant UK operations are not. We note that Amex and Discover have consumer receivables that account for 74% and 76% of total assets, respectively in 2019.

6.30 Consequently, the EBIT margins Amex and Discover would require to earn their respective costs of capital are likely to be different from that of Mastercard's and Visa's relevant UK operations.

6.31 In addition, given the significant level of interest income, calculating an EBIT margin for Amex and Discover may not result in a meaningful margin benchmark. We note that credit services providers, such as banks, are usually assessed on a return on equity (ROE) basis rather than on EBIT margins.

6.32 Mastercard suggested that Discover's payment services division could serve as a comparator instead of Discover's overall operations, as it was separately identified in Discover's segment reporting.[342, 343, 344] However, while Discover reports segment profits for payment services, we do not know how costs are allocated between segments. Further, the annual report states that '[c]orporate overhead is not allocated between segments; all corporate overhead is included in the Digital Banking segment'.[345] This indicates that not all relevant costs are allocated to the payment services division, which likely results in an underestimate of the cost of operating the payment services division for the purpose of our market review. We are not able to estimate from the publicly-available information how significant this underestimation is. We also note that even if all relevant costs were allocated to the payment services division by Discover in the published financial statements, we would still need to consider whether the common cost allocations chosen by Discover to the payments services division would be economically meaningful (e.g., whether costs are allocated based on activity-based costing principles).

Competitiveness of the market

6.33 We have assessed whether Amex and Discover are likely to be operating in competitive markets. We do this separately for Amex and Discover below.

340 American Express Company Form 10-K 2021.

341 Discover Annual Report 2021.

342 This was because this division includes the PULSE ATM network, the Diners Club card network, as well as payment transaction processing and settlement services on the Discover Global Network.

343 Mastercard response to PSR working paper dated 18 December 2023 [✁].

344 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3 pages 21 to 23.

345 Discover Annual report 2022, Section 22. Segment Disclosures.

Amex

6.34 In respect of card services, we note that Amex has a relatively small overall share of the cards market in the UK.[346] Nevertheless there may be certain sectors, such as corporate travel and hospitality expenditure, where Amex may have a larger share[347] and where it is possible that it could benefit from a 'must-take' status. We also note that Amex is widely accepted in the US.[348] It is therefore possible that Amex may benefit from a lack of effective competitive constraints when setting prices for merchants, at least in certain use cases and/or certain geographies.

6.35 However, we also consider that it is possible that competitive pressures in the issuing side may mean that higher prices on the acquiring side could be competed away by competition for credit card customers (e.g., through cardholder benefits)[349] as well as banking customers (e.g., through an acceptance of higher risk customers). We do not have sufficient information to assess the net effect of these factors.

6.36 Thus, even assuming Amex provided only card services (and no credit services), we consider that it would be prudent to exclude Amex from the set of comparators given these potential concerns.

Discover

6.37 Given the very high share of interest income in Discover's revenues we have not considered it necessary to assess the competitiveness of the market that Discover operates in, as we consider that, even if we find that Discover is operating in competitive markets, its business model is not sufficiently comparable to Mastercard and Visa for it to serve as a sufficiently similar comparator.

6.38 We have nevertheless considered whether Discover's payment services division could be considered to be operating in competitive markets. We consider that it is possible that Discover's payment services may benefit from a lack of effective competitive constraints when setting prices for merchants, at least in certain geographies. This is, for example, because Discover is widely accepted in the US.[350] It is also possible that, as a card scheme, Discover may be able to indirectly benefit, should prices set by Mastercard and/or Visa be higher than what would be available in competitive markets, at least to some degree. However, we also consider that it is possible that competitive pressures in the issuing side may mean that any higher prices on the acquiring side could be competed away by competition for credit card and debit card customers (for example, through cardholder benefits), as well as for banking customers (for example, through an acceptance of higher risk customers). We do not have sufficient information to assess the net effect of these factors, but consider it prudent to exclude Discover's payment services division on a stand-alone basis from the set of comparators given these potential concerns.

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346 See also Annex 1 (Competition with other payment methods), paragraph 1.308 and 1.309.

347 See Chapter 4, paragraph 4.60.

348 https://www.americanexpress.com/us/merchant/accept-the-card.html.

349 As discussed in Chapter 4, paragraph 4.61, Amex compensates for the more limited acceptance with larger financial incentives to cardholders.

350 Where are Discover Credit Cards Accepted? | Discover.

Mastercard's views

6.39 Mastercard said that it was possible to calculate a margin for Discover's payment services division that takes into account that corporate overheads are not included in the divisional financial information.[351] This could be done by allocating an estimate of its corporate overhead costs to the payments services division.[352] Mastercard also said that the unallocated proportion of costs is likely to be small. This was because US GAAP requires a public entity to report a measure of segment profit or loss that the chief operating decision-maker ('CODM') uses to assess segment performance and make decisions about allocating resources.[353]

6.40 Mastercard said it was not clear how from the fact that 'Discover is widely accepted in the US' it could be inferred that Discover's payment services may 'benefit from a lack of effective competitive constraints'. Mastercard also said that we had acknowledged that 'it is possible that competitive pressures in the issuing side may mean that higher prices on the acquiring side could be competed away by competition for credit card and debit card customers'.[354]

Visa's views

6.41 Visa said that Amex and Discover both provide domestic and international card-based payments and have more comparable risk profiles to Visa than our selected comparators.[355,356] While credit-related services for Amex and Discover made up a greater proportion of their businesses, this difference was less substantial than the difference between Visa and the selected comparators, in Visa's view.[357]

6.42 Visa argued that the PSR's assertion that the margins of Amex and Discover might not be representative of a competitive level had no evidential basis. Visa said that the fact they are widely accepted (either in the US or for specific merchant segments) was an indication of competition working well and merchants exercising choice.[358]

Our response

6.43 We have set out in paragraph 6.29 that Amex's and Discover's credit services are likely to lead to a difference in capital intensity and risk exposure compared to Mastercard and Visa. Visa has not put forward any evidence[359] as to why the capital intensity and risk profile of the credit services provided by Amex and Discover are similar to that of payment system operators. See paragraphs 6.61 onwards, 6.91 onwards, 6.109 onwards for our assessments of Visa's representations in respect of the similarity of its relevant UK

351 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, page 5 and Annex 3, page 7 (1.3.2, point 4), 21-22. See also Mastercard response to PSR working paper dated 18 December 2023 [✂].

352 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, Annex 3, page 22.

353 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, Annex 3, page 20.

354 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, Annex 3, page 23.

355 Visa response to PSR working paper dated 18 December 2023 [✂].

356 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraph 2.28.

357 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), paragraph 2.28.

358 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), paragraph 2.28.

359 We note that we have not specifically requested such data from Visa.

operations to our selected comparators. Visa also has not provided any suggestion on how a benchmark EBIT margin for Amex and Discover would be best calculated when considering their significant interest income and expense.

6.44 Mastercard's suggested approach to the estimation of the margins for Discover's payment services division requires two key assumptions: first, the level of corporate overheads; and second, the most appropriate allocation method. The margins for Discover's payment services division could be significantly impacted by these assumptions and result in significantly different margin estimates for Discover's payment services division.

6.45 It also requires an assumption that the payment services division is not affected by any value transfers between the payment services division and the other financial services offered by Discover. For example, it may be that some of the profits in the payment service division get competed away as part of incentives that are offered on the issuing (or credit) side of Discover's operations.

6.46 We note Mastercard's view that the use of US GAAP by Discover, when reporting the financial results of the payment services division, implied that it is likely that the proportion of unallocated cost is small. However, we note that there is no certainty that this is the case and that a reallocation of even a small proportion of the costs of Discover's digital Banking Division could have a significant impact on the margins in the payment services division, given the large relative size of the digital banking division. We ultimately did not consider it necessary to review whether it is possible to derive an approximate estimate for Discover's payment services margins by making assumptions for its overhead allocations. Apart from the risk that such an analysis could produce incorrect results, as set out in paragraph 6.44, we cannot exclude the possibility that Discover may benefit from a lack of effective competitive constraints in the payment services division or that Discover's divisional financial results could be impacted by value transfers between the different divisions.[360]

6.47 We do not consider that 'wide acceptance' is sufficient evidence of competition working well. Indeed, we found in Chapter 4 of our final report that, on the acquiring side, Mastercard and Visa are widely accepted in the UK and yet do not face effective competitive constraints.

Overall assessment

6.48 We do not consider that Amex, Discover (overall), or Discover's payment services division are sufficiently close comparators.

6.49 For Amex, this is because the calculation of a meaningful EBIT margin would be challenging for Amex, given the significant levels of interest income. We also cannot exclude the possibility that Amex may benefit from a lack of effective competitive constraints in at least some of the use cases and/or geographies.[361] Further, Amex's banking services are likely to differ significantly in terms of risk exposure and capital requirements to card schemes. That means even though the presence of banking services may mitigate the financial effects of a lack of effective competitive constraints from the

360 For example, whilst it is possible that a lack of competitive constraints may be competed away on the issuing side of the business, this may not be reflected in the financial results of the payment services division. For example, revenues from the payment services division may be used to pay for customer benefits on the issuing side, without being reflected in the financial results of the payment services division.

361 See also Annex 1 *'Competition with other payment methods'*, paragraphs 1.322 and 1.323.

card operations, it may do this with a business unit that has profit margins that could be quite dissimilar to margins expected in a competitive market for card services.

6.50 For Discover overall this is because banking services account for the significant majority of its operations and as such the profitability of Discover largely reflects the profitability of its banking services, which are likely to have a different risk profile and capital requirements compared to Mastercard's and Visa's relevant UK operations.

6.51 For Discover's payment services division, 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 making an adjustment based on an estimate of those costs would need to rely on significant assumptions) and because we cannot exclude the possibility of value transfers between the payment services and digital banking division that are not reflected in the financial statements. It is also 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.

PayPal

6.52 We have considered whether PayPal, is sufficiently similar to Mastercard's and Visa's relevant UK operations to be used as a comparator for the purpose of our market review.

Overlap of business model

6.53 Like Mastercard and Visa, PayPal provides domestic and international payment services in the UK and offers a number of value-added services that are similar to those of Mastercard, and Visa's relevant UK operations.[362] For example, for some transactions PayPal provides international and domestic payment processing and settlement services based on its own payment system infrastructure.[363] It also offers fraud protection services.[364]

6.54 PayPal also provides services in addition to those offered by Mastercard's and Visa's relevant UK operations. We consider that the risk exposure and capital requirements for these additional services are likely to be relatively similar to those of Mastercard's and Visa's relevant UK operations, as many of these services are related to the wider payment ecosystem.

Competitiveness of the market

6.55 We consider that we cannot exclude the possibility that PayPal may benefit from a lack of competitive constraints in some of its service offering. For example, PayPal operates a digital wallet that charges merchants for transactions. Users decide which payment method to use to fund transactions to merchants when using their digital wallet. We note that merchants may have limited choice in whether to accept the use of the payment system chosen by the customer once the payment system has reached a critical mass of users, at least in some use cases and/or geographies. It is also possible that, as a competitor to card schemes, PayPal may be able to indirectly benefit, should prices set by Mastercard and/or Visa be higher than what would be available in competitive markets, at least to some degree. However, we also consider that it is possible that any supernormal

362 We note that some of PayPal's customers use Mastercard and Visa issued cards in order to fund PayPal transactions.

363 PayPal 2022 Annual Report, page 3.

364 PayPal 2022 Annual Report, page 5.

profits on the merchant side could be competed away by competition for PayPal customers (e.g., through customer benefits). We do not have sufficient information to assess the net effect of these factors.

6.56 However, PayPal is not only offering services as a digital wallet operator. It also offers a number of other services, for example gateway and payment processing services. When offering its Braintree, PayPal Card Unbranded Card Processing or Zettle by PayPal services, PayPal engages third-party acquirers that are the entities formally providing acquiring services to merchants.[365] We consider it to be likely that these other services are largely operating in competitive markets, given the large number of alternative providers.

6.57 Should PayPal benefit from a lack of effective competitive constraints as a payment system operator, then this could affect its revenues and EBIT margins and could consequently overstate the comparator benchmark margin derived from PayPal. However, we consider that these effects are to some extent mitigated by PayPal's exposure to more competitive markets in its other business operations.

<u>Mastercard's and Visa's views on PayPal as a comparator</u>

6.58 Mastercard said that PayPal is in principle a relevant comparator, but that we had underestimated its EBIT margin[366], which is more appropriately estimated as being 30%[367,368] rather than 15%. In particular:

a. Interchange and network fees should be excluded from revenues and costs (increasing PayPal's margins by circa 10 percentage points). This was because the vast majority of large acquirers present their revenues net of interchange and network fees. Focusing on gross revenues and including interchange and network fees as operating costs would distort a comparison of operating margins. Furthermore, if the PSR wanted to use PayPal as a non-card-based payment method, this also meant that interchange and network fees needed to be excluded from the operating margin calculation.[369,370]

b. PayPal's acquiring services should be excluded from the margin calculation (increasing PayPal's margins by circa. 5 percentage points). Mastercard said that, over the last five years, publicly listed acquirers had achieved operating margins of approximately 10%, ranging from 7% in 2018 to 12% in 2020.[371]

c. PayPal's comparable margins were even higher than indicated by Mastercard's sensitised margins when looking at transactions that are not funded by credit or debit cards as these transactions do not incur interchange or network fees.[372,373]

365 [✂].
366 Mastercard response to PSR working paper dated 18 December 2023 [✂].
367 Mastercard response to PSR working paper dated 18 December 2023 [✂].
368 See Mastercard response to interim report, Annex 3, pages 17 to 20.
369 Mastercard response to PSR working paper dated 18 December 2023 [✂].
370 Mastercard response to PSR working paper dated 18 December 2023 [✂].
371 Mastercard said this average was based on the operating margins of 11 publicly-listed acquirers from Europe and North America: Adyen, Worldline, Nexi, Fiserv, Global Payments, Block, Shift4 Payments, Nuvei, Evo Payments, Paysafe and Priority Technologies; Source: Mastercard response to 18 December 2023 working paper [✂].
372 Mastercard response to PSR working paper dated 18 December 2023 [✂].
373 Mastercard response MR22/1.9 (21 May 2024), Annex 3, page 18–19.

6.59 Mastercard argued that we had not explained why the fact that PayPal's acquiring business is likely to operate in a competitive market means that it would be inappropriate to remove PayPal's acquiring business from its margin estimate in the sensitivity analysis.[374]

6.60 Visa agreed that PayPal is not an ideal comparator, but said that it is more suitable comparator than eftpos and OFX.[375] Visa also said that PayPal uses a different accounting treatment of R&D to Visa which understates PayPal's margin by about 12 percentage points.[376,377] Visa subsequently said on 19 February 2025[378] that in its view the appropriate range for PayPal's margins was 30% to 45%, as it would be appropriate to adjust PayPal's margins for the different accounting treatment for R&D as well as the adjustments suggested by Mastercard (excluding interchange and network fees from revenues and costs and excluding PayPal's acquiring services, see paragraph 6.58 above), which we had noted in the May 2024 (interim report) version of this profitability analysis.[379]

<u>Our response on PayPal as a comparator</u>

6.61 We note Mastercard's reference to PayPal's acquiring business, which we assume is referring to PayPal's gateway and payment processing services. We do not agree that it would be appropriate to remove these services from the margin estimate, for the reasons set out in paragraph 6.55 to 6.57. In addition, this is also because it requires assumptions both for the proportion of PayPal's revenues that are associated with acquiring services and the margins that PayPal achieves on these services. In the absence of publicly available detailed financial information for PayPal's different business units, it is likely that different assumptions lead to significantly different margin estimates, meaning that the benchmark margins could be primarily driven by the assumptions made rather than the profitability of the underlying business operations.

6.62 This is also a reason why we do not consider that we should be looking solely at the margins of PayPal's transactions that are not funded by debit/credit cards in order to establish the competitive benchmark margins for our market review.[380]

6.63 Whilst we note that we have not identified acquirers as sufficiently similar comparators for Mastercard and Visa, we do consider that there could potentially be a case for making adjustments to PayPal's financial statements to make them more comparable to Mastercard's and Visa's relevant UK operations. The clearest example is likely to be interchange fees as Mastercard and Visa do not show interchange fees in their revenues or costs (even though interchange fees are incurred as part of a card transaction). The inclusion of interchange fees in PayPal's revenues and costs could therefore potentially make PayPal's accounts less comparable to Mastercard's and Visa's accounts. We have therefore calculated a sensitised margin for PayPal, where we have removed transaction

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374 Mastercard response MR22/1.9 (21 May 2024), Annex 3, page 19.

375 Visa main response to PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (30 July 2024), Technical Annex 2, paragraph 2.27.

376 Visa response to PSR working paper dated 18 December 2023 [✂].

377 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), paragraph 2.34, 2.27.

378 [✂].

379 See PSR 'Market review of scheme and processing fees Interim Report' MR22/1.9 (21 May 2024), Annex 10, paragraph 6.120.

380 An additional reason for not looking at just the transactions not funded by debit/credit cards is set out in paragraph 6.57.

expenses, which includes interchange fees, but also other fees. As such this sensitivity overstates the effect of removing interchange fees.

6.64 Table 48 below shows the resulting adjusted PayPal margins.

Table 48: PayPal margins (2018–2023)[381]

	EBIT margin (min)	EBIT margin (simple average)	EBIT margin (max)
PayPal (as reported)	14%	16%	18%
PayPal (excluding transaction costs)	22%	26%	33%

Source: PayPal financial statements, PSR calculations.

6.65 Table 48 above shows that PayPal margins would be c.10 percentage points higher if all transaction expenses are removed.

6.66 However, we note that the above is only making an adjustment for one possible factor that could make PayPal's margins more comparable to those of Mastercard's and Visa's relevant UK operations. We consider that before we could place significant weight on a sensitised margin for PayPal, we would need to consider in more detail what other factors could be considered for adjustment, some of which may operate in opposite directions. For example, we would need to consider whether it would be appropriate to only adjust for a proportion of transaction expenses, rather than the full amount. For example, further analysis may indicate that only a part of transaction expenses should be adjusted for, which would result in a lower sensitised margin for PayPal than shown above.

6.67 We have not considered it necessary to undertake this fuller assessment as part of this market review. This is because our analysis shows that there is only [✁] of the range of Mastercard's margins in the relevant UK operations with the sensitised PayPal margins. As such a higher benchmark margin as implied by the sensitised analysis for PayPal would not significantly change our assessment of Mastercard's profitability in this market review considering that Mastercard's margins are likely higher than indicated by the lower end of the range.

6.68 In its response to our CWP, Visa stated that PayPal uses a different accounting treatment for R&D which understates its margin by about 12 percentage points.[382] In its response to the interim report, Visa referred to these 'necessary adjustments' resulting in an 'average PayPal margin of 27% over the five-year period under review. In addition, Visa notes that 'Mastercard also proposes adjustments to PayPal's margin...which may increase PayPal's by 10pp and 5pp respectively'.[383] Visa subsequently indicated, in February 2025, that PayPal's margin range should be 30-45%, with the lower end of the range reflecting an adjustment for the treatment of R&D expenditure and the upper end of the range including additional adjustments for interchange and network fees and a removal of the acquiring

381 All data has been sourced from companies' published annual reports. Where a financial year end was not in December, we have used the nearest year when calculating the margin in each year. See Annex A for more details.

382 Visa response to PSR working paper dated 18 December 2023 [✁].

383 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response to interim report, paragraph 2.34.

business as suggested by Mastercard in response to the CWP.[384] We do not agree with Visa because:

a. As explained above in paragraph 6.61, we do not consider it would be appropriate to make an adjustment for PayPal's acquiring business.

b. We have considered a potential adjustment to PayPal's margins for transaction expenses in paragraph 6.63 to 6.65, this results in an increase to PayPal's margin of up to 26%.

c. We do not consider that it would be appropriate, at this stage, to also include an adjustment for the treatment of R&D. This is because the suggested adjustments by Visa for the capitalisation of R&D expenditure do not appear to take into account that capitalised R&D would also need to be amortised in PayPal's accounts. It is therefore possible that any such adjustment (if appropriate) would have a relatively small net effect once amortisation expenses are taken into account. We have set out in paragraph 6.67 why we have not considered it necessary to undertake a fuller assessment of PayPal's margins as part of this market review.

<u>Mastercard's views on PayPal's sensitised margins</u>

6.69 In its response to our interim report, Mastercard said that, instead of undertaking a sensitised margin analysis for PayPal, we should have instead adopted the adjusted margins from that analysis as part of our chosen benchmark margin range, which it estimated to be around 30%.[385] It said that it was incorrect that a comprehensive analysis of PayPal's margins would not significantly change our assessment of Mastercard's profitability.[386]

6.70 Mastercard also said that we should not just base PayPal's sensitised margins on a removal of interchange fees. Rather the sensitised margins should be based on a removal of all transaction expenses. This was because some acquirers excluded both interchange and network fees from the margin calculations in their annual reports and the PSR's approach in CAMR separated both scheme fees and interchange fees from acquirer net revenue.

6.71 Mastercard said that we had not set out what other adjustments could be made to PayPal's margins that could impact on the sensitised margins.[387]

<u>Visa's views on PayPal's sensitised margins</u>

6.72 Visa said that PayPal was a more suitable comparator than eftpos and OFX, but that any like-for-like comparison between PayPal and Visa's margins must account for the differences between their business models.[388] Visa said that we had not adjusted PayPal's margins despite its and Mastercard's submissions in response to the CWP setting out a rationale for doing so. Visa said, in particular, that in our assessment of these points in our

384 [✂].

385 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, Annex 3, Page 16 and Annex 3, table 3.1.

386 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, Annex 3, Page 16–18.

387 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, Annex 3, Page 17–18.

388 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response to interim report, paragraph 2.27.

interim report, we had not explained what other potential adjustments may operate to lower PayPal's margins.[389]

Our response on PayPal's sensitised margins

6.73 We have set out in paragraph 6.67 why we do not consider it necessary to undertake a fuller analysis of the most appropriate approach to estimating PayPal's margins as part of this market review. However, even if PayPal's margin levels were adjusted for all transaction costs (as set out in our sensitivity analysis in Table 48) with adjusted margins being as high as at around 30%, it is unlikely that our assessment in paragraph 7.22 to 7.27 would change. This is because in such a hypothetical scenario the new benchmark margin range (12–30%) would still be very different to the margin range that we identified for Visa and Mastercard (see paragraph 7.8 and 7.9, where we also set out that the economic benefits Mastercard and Visa derive from the relevant UK operations are likely higher than indicated by the lower end of their margin range).

6.74 Further, we note that paragraph 6.66 states that should we make adjustments to PayPal's margins in our comparator analysis, we would also need to review whether other adjustments should be made, including those that reduce PayPal's margins. We have not identified such additional factors, as we do not consider it necessary to undertake such a fuller assessment. However, we note that the sensitised PayPal margins remove all transaction expenses, which we consider to be a conservative assumption (e.g., because some transaction expenses may be appropriately included). As such, a fuller assessment could result in a lower sensitised margin for PayPal than shown in our sensitivity analysis above.

Overall assessment

6.75 We consider that PayPal has sufficiently similar operations to Mastercard's and Visa's relevant UK operations to be used as a comparator for the purpose of our market review, recognising that there are no like-for-like comparators. This is because, whilst we recognise that we cannot exclude the possibility that some of PayPal's payment services may be benefiting from lack of effective competitive constraints, we consider this risk is mitigated by PayPal's presence in a number of different payment-related markets, some of which are likely to be competitive markets. We consider that these different payment-related markets are broadly similar to Mastercard's and Visa's relevant UK operations, which mitigates the risk that these markets differ significantly in terms of risk exposure and capital intensity from Mastercard's and Visa's relevant UK operations.

6.76 To the extent that PayPal benefits from a lack of effective competitive constraints in at least some of its service offering, this may indicate that using it as a comparator would result in a conservative estimate of the margins that Mastercard and Visa would be able to achieve in a competitive market for the relevant UK operations.

6.77 We therefore consider that PayPal is a sufficiently similar comparator to Mastercard and Visa's relevant UK operations for the purpose of our market review.

389 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response to interim report, paragraph 2.34.

6.78 We have carefully considered Mastercard's and Visa's representations suggesting adjustments to PayPal's margins. We consider that further work would be required before we could conclude whether such adjustments would be appropriate, but did not find it necessary to do so for the purpose of this market review, for the reasons set out in paragraph 6.67. We have therefore based our margin benchmark analysis on PayPal's unadjusted margins.

eftpos

6.79 We have considered whether eftpos is sufficiently similar to Mastercard's and Visa's relevant UK operations to be used as a comparator for the purpose of our market review.

<u>Overlap of business model</u>

6.80 eftpos is an Australian domestic card-based payment system operator.[390]

6.81 We consider that eftpos shares a number of key features with Mastercard and Visa's relevant UK operations. Key similarities of eftpos to Mastercard's and Visa's relevant UK operations are that eftpos is also operating a card-based payment system. In Australia, eftpos is in direct competition with Mastercard and Visa (e.g., processing debit card payments in Australia). Its costs[391] and risks should therefore be largely similar to Mastercard and Visa's relevant UK operations.

6.82 We considered whether being an Australia-only provider could lead to any dissimilarities in risks faced by eftpos compared to Mastercard's and Visa's relevant UK operations. Our view is that there are prima facie credible reasons to consider that the risks are comparable. For example, Australia and the UK both have similar developed, market-based economies with similar approaches to economic regulation. In addition, the operators in the Australian payment market are similar to those in the UK (e.g., Visa, Mastercard, PayPal and Amex all have a presence in Australia).

6.83 We note that eftpos does not offer international payment services and does not offer credit cards and as such its risk exposure may most closely mirror Mastercard's and Visa's domestic payment services and less so Mastercard's and Visa's international payment services offered in the relevant UK operations.

390 eftpos is now part of Australian Payments Plus Ltd, following a merger approved in September 2021: eftpos Australia (auspayplus.com.au).

391 We also note that analysis of eftpos, Mastercard Inc and Visa Inc 2019 annual reports (i.e. latest pre-COVID annual reports) indicates that key expense lines, as a percentage of total expenses, incurred by eftpos are broadly similar to Mastercard and Visa.

Competitiveness of the market

6.84 eftpos has a sizeable share of card transactions in the Australian payment card market, with a 40% share of debit transactions in 2020, although it does not offer credit cards.[392] We nevertheless consider that it is less likely that eftpos is benefiting from economic profits as eftpos' prices are significantly below those charged by Mastercard and Visa in Australia.[393]

6.85 Further, in an October 2021[394] paper the Reserve Bank of Australia (RBA) noted that a potential exit from the market of eftpos would result in a significant lessening of competitive pressure in the debit market due to its status as the lowest-cost network, when compared to the international card schemes (such as Mastercard and Visa).[395] This suggests that eftpos actively competes with the international schemes for domestic transactions in Australia, making it less likely that eftpos is benefiting significantly from a lack of effective competitive constraints.

6.86 We note that eftpos is owned by its members, who are issuers and acquirers in Australia. This could imply that eftpos may set prices that are not risk reflective (i.e. higher or lower than in competitive markets). We note that its owners are a diverse set of organisations with differing incentives. We therefore consider that eftpos' margin is likely to incorporate a risk-reflective rate of return. This is because it is plausible that some owners would favour lower prices whilst others would favour higher prices. A risk-reflective margin is best placed to balance the interest of those who favour lower and those who favour higher prices.

Mastercard's views

6.87 Mastercard said that eftpos was not an appropriate comparator because it was focused on domestic, debit cards and in-store transactions, whereas Mastercard also offered CNP,[396] credit cards and international transactions.[397,]

6.88 Mastercard argued that we had not evidenced why a diverse set of ownership would lead to a risk-reflective margin (and that eftpos did not have a diverse ownership as it was co-owned by 19 members which were predominantly banks[398]). Further, eftpos market power may manifest itself in inefficiencies and poor quality of service rather than in high profits.[399,400]

392 RBA, Expert Industry Opinion in Relation to the Application to The Australian Competition and Consumer Commission for Authorisation of the proposed amalgamation of BPAY GROUP PTY LTD, EFTPOS PAYMENTS AUSTRALIA LIMITED and NPP AUSTRALIA LIMITED, page 54.

393 RBA, Payments System Board Annual Report 2020, Graph 15, page 34.

394 Review of Retail Payments Regulation – Conclusions Paper, Section 3.1: Issues for the Review, page 14, (October 2021).

395 'However, if ePAL [eftpos Australia Payments Limited (ePAL)] is the company that runs the eftpos network] cannot compete for the volume of large merchants, its ability to compete for smaller merchants would also be weakened. In the extreme, as the lowest-cost network, its potential exit from the market would result in a significant lessening of competitive pressure in the debit market and would likely result in an increase in both interchange rates and scheme fees, impacting all merchants.' RBA, Review of Retail Payments Regulation – Conclusions Paper, page 16, October 2021.

396 Card not present transactions.

397 Mastercard response to PSR working paper dated 18 December 2023 [✂].

398 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), page 5 and Annex 3, page 12.

399 Mastercard response to PSR working paper dated 18 December 2023 [✂].

400 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3. pages 10 to 15.

6.89 Mastercard also said that:

a. eftpos had a lower risk profile than Mastercard as it was user owned, and because it focused on domestic transactions only and did not offer credit cards or online transactions and so had lower fraud risk exposure.[401] As such, eftpos could be expected to have lower margins than Mastercard.[402]

b. eftpos was not as efficient, service-oriented or innovative as Mastercard.[403] Mastercard said that user ownership could reduce incentives to innovate.[404] Mastercard also said that we had considered the impact of being user-owned on innovation in the 2016 market review into the ownership and competitiveness of infrastructure provision.[405]

c. User-owned entities may set lower profitability targets than companies that are not user owned.[406]

<u>Visa's views</u>

6.90 Visa said that eftpos states that it is a mutual-style corporation that is not motivated by profit. Visa said as such eftpos would not be expected to achieve the same level of margin as a for-profit company. It offers a smaller set of value-added services and provides only lower risk domestic transactions and no higher risk international transactions.[407,408] Visa also said that we had not evidenced our assumption that a diverse set of ownership is likely to lead to a risk-reflective margin[409] and that the low margins of domestic only schemes, such as eftpos, resulted in very low levels of investment in innovation compared to Visa.[410]

<u>Our response</u>

6.91 We have set out in paragraph 6.17 that we do not think that we will be able to identify an ideal comparator set. We have therefore aimed to identify sufficiently similar comparators. This recognises that any comparators we do identify will have differences to Mastercard's and Visa's relevant UK operations. We consider that the comparators we have identified are the best available comparators, i.e., they have the closest similarities with Mastercard's and Visa's relevant UK operations. It therefore follows that a comparator should not be deemed inappropriate just because it does not offer the same services as Mastercard or Visa.

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401 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, page 5 and Annex 3, page 11–12.

402 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3 pages 13.

403 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, page 5 and Annex 3 page 11–12.

404 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, page 5 and Annex 3 page 12.

405 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3 page 11, quoting: Payment Systems Regulator (July 2016), *'Market review into the ownership and competitiveness of infrastructure provision. Final report'*(MR15/2.3).

406 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, page 5 and Annex 3 page 12.

407 Visa response to PSR working paper dated 18 December 2023 [✂].

408 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraph 2.26.

409 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraph 2.26, FN102.

410 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraph 2.26.

6.92 We have set out in paragraph 6.86, why we consider that a diverse ownership can be consistent with profit margins at a risk-reflective level.

6.93 We note Mastercard's points regarding possible inefficiencies and incentives to innovate related to eftpos's ownership structure and Visa's submission states that eftpos's low margins result in very low levels of investment in innovation. We set out in paragraph 6.142 that there is not necessarily a link between margin levels and innovation/efficiency.[411] Similarly, we consider that service levels do not appear to necessarily correlate directly with margin levels, for similar reasons as for innovation.[412]

6.94 We note Visa's comments regarding lack of evidence on the impact of the ownership structure of eftpos on its margins[413] and Mastercard's submission regarding the ownership of eftpos not being diverse. We set out in paragraph 6.86 the reasons why we consider it a plausible assumption that eftpos margins are set at a risk-reflective level. However, we note that in a response to the Treasury Department's Payments System Review: Issues Paper dated November 2020 (Review), dated 22 January 2021, eftpos included the following information about itself:[414]

a. That eftpos is a mutual-style corporation that is not motivated by profit and promotes choice and competition in the Australian market.

b. That it had made significant self-funded investments in the company's and its members' core centralised infrastructure and digital capabilities in recent years.

6.95 We consider that the statements above illustrate that membership ownership, and associated with this not being motivated by profit, is not the only factor that will impact on its margins. Specifically, we note that eftpos' references to significant self-funded investments could plausibly be expected to require it to set margins at levels that allow eftpos to make such investments and which may therefore require it to set higher margins than a company that has ready access to shareholder funds. We therefore do not consider that the fact that eftpos is owned by members (even if they are predominantly banks) means that its margins are not risk-reflective.

6.96 In terms of the points raised by Mastercard and Visa in respect of factors that point to a lower risk profile for eftpos, we consider that:

a. It may be plausible that operating in international markets is riskier than in domestic markets. This is, for example, because economic shocks may impact more on international travel than general domestic expenditure. However, such a difference may not have a substantial impact on the operating margins in competitive markets. For example, even if the risk in international markets was 30% higher leading to an increase in the competitive margins by 30%, this would increase margins of eftpos from 12% to around 16%. This would be well within the margin range we have identified. This means the impact on required returns form the risk differential would need to be substantial to have a significant impact on our margin benchmarking

411 We do not consider that the PSR's market review into the ownership and competitiveness of infrastructure provision asserts such a link (Payment Systems Regulator (July 2016), *'Market review into the ownership and competitiveness of infrastructure provision. Final report'*(MR15/2.3)).

412 See paragraph 6.142 b.

413 Noting that Visa has not submitted any evidence to suggest that user ownership does not result in risk-reflective margins (although we also note that we have not specifically requested such data from Visa).

414 eftpos Payments Australia Limited, ABN 37 136 180 366, page 4.

analysis. Further, we note that we have also included OFX and PayPal as comparators, both of which operate internationally. As such, the margin range we identified in our margin benchmarking analysis does capture exposure to international transactions. See also paragraph 7.17.

b. We do not think that there is a prima facie reason that exposure to online transactions and credit cards would be expected to lead to a difference in systematic risk exposure and note that Mastercard has not provided any evidence for such an effect.

c. We also do not consider that exposure to fraud is necessarily a systematic risk that would result in higher cost of capital and therefore margins. Furthermore, even if there was such a link, we would still need to assess the significance of this risk to our margin benchmark analysis. We note that Mastercard has not provided any evidence as to the size of its losses related to fraud risk.[415] In addition, and similar to the impact of the level of innovation expenditure on margins, it is possible that (all else being equal) higher fraud costs would lower the reported margins as fraud costs could be expected to be recovered through revenues in a competitive market.[416]

<u>Overall assessment</u>

6.97 Taking all these factors into account, we consider that eftpos has sufficiently similar operations to Mastercard and Visa's relevant UK operations to be used as a comparator for the purpose of our market review, recognising that there are no like-for-like comparators. This is because, whilst we recognise that there are differences between its services and the relevant UK operations of Mastercard and Visa, we consider that there is a sufficiently large overlap between eftpos' and Mastercard's and Visa's relevant UK operations. This is also because any differentials in business risk between eftpos and Mastercard's and Visa's relevant UK operations would need to be very significant in order for it to result in a substantially different benchmark margin estimate derived from eftpos' financial information.

6.98 Whilst we also acknowledge that, unlike Mastercard and Visa, eftpos is membership owned, this does not mean that its margins are not risk-reflective.

6.99 We therefore consider that eftpos is a sufficiently similar comparator to Mastercard and Visa's relevant UK operations for the purpose of our market review.

OFX

6.100 We have considered whether OFX is sufficiently similar to Mastercard's and Visa's relevant UK operations to be used as a comparator for the purpose of our market review.

<u>Overlap of business model</u>

6.101 OFX is a global provider of foreign exchange services headquartered in Australia. It provides online international payment services across over 170 countries.[417] We consider that OFX shares a number of key features with Mastercard and Visa's relevant UK

415 We understand that Mastercard and Visa [✁].

416 This is because, everything else being equal, higher fraud costs would increase costs and revenues, leaving EBIT levels unchanged. This would mathematically reduce margin levels.

417 See: About us | OFX (UK).

operations. For example, OFX acts as a payment intermediary and provides settlement services for some of the transactions it processes.

6.102 While OFX has staff costs to provide advice to clients (which is likely more limited for Mastercard's and Visa's relevant UK operations), it does not, similarly to Mastercard's and Visa's relevant UK operations, operate through physical branches. Further, it is likely that OFX has a level of capital intensity that is not too dissimilar from Mastercard and Visa's relevant UK operations, as OFX, like Mastercard and Visa, is investing in IT infrastructure, software and risk management.[418]

6.103 We note that OFX does not offer domestic payment services and as such its risk exposure may most closely mirror Mastercard's and Visa's international payment services and less so Mastercard's and Visa's domestic payment services offered in the relevant UK operations.

Competitiveness of the market

6.104 There are a large number of providers of international payment services, and OFX's relatively limited scale (with revenues of around USD 150m) indicates that it is unlikely that OFX benefits from a lack of effective competitive constraints.

Mastercard's views

6.105 Mastercard said that OFX offered different and a smaller set of services compared to Mastercard. It said that OFX only offered international money transfer, which was a simple transfer of funds, combined with both cross-border activity and currency conversion. The types of transactions also differed, being higher value, less frequent and mainly business-to-business.[419,420]

6.106 Mastercard said that OFX was simply providing a cross-border credit transfer service. In contrast, Mastercard enabled riskier transactions between two parties that had either no, or a very limited, contractual relationship. As such Mastercard viewed that it fulfilled a greater role processing transactions (it established many rules and developed many services that are essential to delivering a seamless transaction at the point of exchange) and provided protection for the cardholders.[421] Mastercard said that there were many other international money transfer providers with similar offerings and business models, including Wise.[422]

6.107 Mastercard also said that OFX had a lower risk profile than Mastercard.[423]

418 OFX FY23 Financial Results: PowerPoint Presentation (ofx.com), page 14.

419 Mastercard response to PSR working paper dated 18 December 2023 [✂].

420 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3 pages 10 to 15.

421 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3 page 14, 15.

422 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3, page 14.

423 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), page 5.

Visa's views

6.108 Visa told us that OFX offers different and a smaller set of services compared to Visa and- has a different way of generating revenues.[424,425] Visa also said that OFX offered fewer consumer and merchant benefits than Visa, e.g. it did not offer extensive consumer protection.[426]

Our response

6.109 We state in paragraph 6.17 that an ideal comparator to Mastercard or Visa does not exist. Therefore, a comparator should not be deemed inappropriate simply because it does not offer the same services as Mastercard. We set out in paragraph 6.24 that we have not identified any more suitable comparators. We note that Mastercard has not suggested any specific international money transfer providers that we should have included in the comparator group or provided any reasons why these would be more suitable than the comparators we have identified (including for Wise).[427]

6.110 We note the differences around consumer and merchant benefits between Visa and OFX highlighted in Visa's response. We also note Mastercard's reference to its greater role in the processing of transactions. We consider that these additional differences are not sufficiently significant to change our view in respect of the suitability of OFX as a sufficiently similar comparator that we previously set out in paragraph 6.101 to 6.103. Further, we consider that similar considerations apply as for the points raised in relation to innovation (see paragraph 6.142.b.), in that, for example, the provisions of additional consumer protection do not necessarily mean that margins would be higher for those businesses that provide those compared to those that do not.

6.111 Mastercard has not provided any quantitative evidence to support its view that its risk profile is higher than OFX's, or quantified the impact this could have on margins. We also note that Mastercard said that eftpos' risk profile was lower than Mastercard's as it only operated domestic transactions, rather than higher risk cross-border ones (see paragraph 6.89). This would imply, everything else being equal, that OFX could potentially have a higher risk profile than Mastercard as Mastercard provides a mix of domestic and international transactions, whereas OFX provides primarily international transactions.

Overall assessment

6.112 We consider that OFX has sufficiently similar operations to Mastercard's and Visa's relevant UK operations to be used as a comparator for the purpose of our market review, recognising that there are no like-for-like comparators. This is because, whilst we recognise that there are differences between its services and the relevant UK operations of Mastercard and Visa, we consider that there is a sufficiently large similarity between OFX's, Mastercard's and Visa's relevant UK operations. This is also because, if anything, OFX's risk exposure is likely higher (rather than lower) than that for Mastercard's and

424 Visa response to PSR working paper dated 18 December 2023 [✁].

425 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response paragraph 2.26.

426 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraph 2.26.

427 We understood that Mastercard did not suggest that Wise is a sufficiently similar comparator in its submissions.

Visa's relevant UK operations and as such a benchmark margin derived from OFX's financial information could potentially be considered to be a conservative estimate.

6.113 We therefore consider that OFX is a sufficiently similar comparator to Mastercard's and Visa's relevant UK operations for the purpose of our market review.

Sufficiently similar comparators in combination

6.114 We consider that whilst no comparator is the ideal comparator, we have been able to identify three sufficiently similar comparators that can serve as benchmark comparators: PayPal, eftpos and OFX. The three selected comparators each have a business model that overlaps with at least some important aspects of Mastercard's and Visa's relevant UK operations. As such it can be expected that they also have a broadly similar risk exposure and capital intensity as Mastercard's and Visa's relevant UK operations.

6.115 The three selected comparators are all somewhat different to each other in the way they overlap with the relevant UK operations of Mastercard and Visa. This means that between them they overlap significantly with the services offered by Mastercard and Visa in the relevant UK operations.

6.116 Consequently, we consider that looking at the profitability of the three sufficiently similar comparators is informative for the margins that Mastercard and Visa could likely achieve in a competitive market for the relevant UK operations.

Other proposed comparators

Mastercard's views

6.117 Mastercard said that it found various companies[428] that had characteristics that were similar to those of Mastercard and could be added to the sample of selected comparators, specifically:[429]

a. transaction and payment processing services companies focused on payment methods, operating in two-sided markets, specifically Corpay (formerly Fleetcor), WEX (in particular its 'Fleet Solutions' division), Sodexo (in particular its 'Benefits and Rewards' segment, now known as Pluxee) and Edenred – with average margins ranging from 25% to 48% over the period 2018 to 2022[430, 431, 432, 433]

428 Mastercard selected these companies from the FTSE 100, NASDAQ100, S&P500, STOXX Europe 600 and STOXX Global 1800.

429 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response and Annex 3, pages 31 to 33.

430 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response and Annex 3, pages 34 to 35.

431 Mastercard response to PSR working paper dated 18 December 2023 [✂].

432 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3, pages 33 to 35.

433 In its response to the PSR working paper dated 18 December 2023 Mastercard included Paychex, but in its response to the PSR's interim report dated 21 May 2024 Mastercard did not include Paychex. We have therefore not assessed this any further.

b. information technology companies: two groups of companies of 49 and 12 companies, respectively, with an overall range of operating margins between -25% to +43% in the period 2018 to 2022[434]
c. franchises, including, in particular hotels and restaurants, with an overall range of operating margins between 13% to 62% in the period 2018 to 2022.[435] Mastercard said it operated a franchise model that licensed issuers and acquirers

6.118 Mastercard said that this list of companies was non-exhaustive but enlarged and strengthened the sample of comparators.[436] Mastercard said that this analysis clearly demonstrated that the interim report had significantly underestimated the margins of comparators.[437]

Visa's views

6.119 Visa said that it acknowledges that the selection of comparators to its business is difficult, given the global nature of Visa's operations, its size, and the breadth of different services that it provides. Consequently, rather than settling on a narrow selection of comparators, the use of a wider range of potential comparators was more appropriate.[438]

6.120 Visa said its margins were not high when assessed against a wider and more robust range of comparators. Suitable comparators could include companies that operated in a different market or sector where they nevertheless had sufficiently similar business operations and risk profile. Visa said it had significant similarities with players in other competitive markets that operate a global two-sided network which involved significant and continuous investments in technology and innovation. [✂].[439]

6.121 Visa said there are a number of other potential comparators, which we had failed to consider. Visa provided a number of alternative comparators to illustrate that there are other companies that have similar risk profiles to Visa's business and that have margins similar to Visa's UK margins.[440] This list included [✂] (an acquirer), [✂] (a payment services provider primarily for logistics companies), [✂] (internet domain service provider) and [✂] (a stock exchange).[441,442,443]

434 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, Annex 3, page 35.
435 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, Annex 3, pages 35 to 36.
436 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, Annex 3, page 31.
437 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, Annex 3, page 37.
438 Visa response to PSR working paper dated 18 December 2023 [✂].
439 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response paragraphs 2.29 and 2.30.
440 Visa response to PSR working paper dated 18 December 2023 [✂].
441 Visa response to PSR working paper dated 18 December 2023 [✂].
442 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraphs 2.29 and 2.30.
443 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response paragraphs 2.29 and 2.30.

Third parties' views

6.122 None of the third-party respondents to our February 2023 working paper and the interim report provided us with specific suggestions for suitable comparators.[444]

6.123 One respondent to the interim report said that additional comparators could enhance our analysis. It proposed that the following could act as additional comparators:[445]

a. **Developed markets with similar regulatory frameworks:** This would be Mastercard's and Visa's profitability in specific regions or countries with similar market conditions. Similar market conditions would be defined as regions with comparable regulatory environments and market infrastructures.

b. **Regional subsidiaries:** This would be other regional subsidiaries that operated under similar business models and market conditions.

Our response

6.124 We have set out our approach to selecting the sufficiently similar comparators in paragraph 6.18 to 6.21. We acknowledged that there is no ideal comparator, but that companies whose operations are sufficiently similar, in sufficiently competitive markets, can be sufficiently similar comparators. In identifying sufficiently similar comparators, we considered whether companies' operations overlap with Mastercard's and Visa's relevant UK operations.

6.125 We have used a number of considerations to identify three similar comparators to Mastercard's and Visa's relevant UK operations.[446] We have undertaken, both prior to publishing our interim report and following receipt of interim report responses from the schemes and others, a careful review of submissions we received in respect of the selection of the comparators. We have not identified comparators that have more similar operations to Mastercard's and Visa's relevant UK operations and that operate in competitive markets other than the three comparators included in our analysis. We do not consider it appropriate to expand our comparator set or make any other modification for the following five reasons.

a. First, expanding the comparator set will not necessarily improve the information value of the comparator set for the purpose of establishing a competitive benchmark margin. For example, if an additional comparator is less similar to Mastercard's and Visa's relevant UK operations, then there is a risk that including that comparator makes the overall margin range less representative of the competitive margin levels. Indeed, Mastercard states in its response to the interim report that 'for comparisons to be meaningful, comparators should face similar business and financial risk characteristics to the firm being studied'.[447]

b. Second, franchise operations in the hotel and restaurant sector are not sufficiently similar comparators. This is primarily because their operations are not payment related. There is

444 MR22/1.7 *Stakeholder input (and non-confidential responses) to the competitive constraints call for evidence and profitability working paper* (September 2023), paragraphs 3.11 to 3.16.

445 Third party response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9. [✁].

446 See also paragraph 6.19 to 6.21.

447 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, page 75, para 4 and Annex 3, page 1.

therefore a real risk that the risk profile and capital intensity of franchise operations in these sectors is significantly different to that of payment system operators.

c. Third, Mastercard has not provided us with the company names it considers to be sufficiently similar comparators in the information technology sector. We have therefore not been able to assess whether any of these companies could serve as sufficiently similar comparators. We have set out in paragraph 2.60 that IT companies are not necessarily sufficiently similar comparators and note that IT companies do not generally operate as payment systems operators (which was one of the factors we considered when selecting sufficiently similar comparators – see paragraph 6.19 for more details).

d. Fourth, we do not consider that the additional comparators proposed by Mastercard that offer transaction and payment processing services in two-sided markets are equally or more comparable to Mastercard and Visa than the comparators we have selected. This is because these companies all primarily serve a specific subset of the payment market (for example, logistics). We consider that this suggests that they are therefore likely less reflective of the broader payments market than the comparators we have identified, which all serve multiple industries. We further consider that:

    1. We would also need to assess whether the comparators suggested by Mastercard operate in competitive markets. We note in this context that the French competition authority issued an opinion in 2023 (in response to a proposal by the French government to price cap meal vouchers to address market failures) which notes market power held by Edenred and three other issuers (including Sodexo) in that market.[448,449] This indicates that it is possible that Edenred and Sodexo may not operate in sufficiently competitive markets. It would therefore likely be prudent to exclude Edenred and Sodexo from the set of comparators even if their operations were sufficiently similar to Mastercard's and Visa's.

    2. Corpay and WEX both have an economic exposure to fuel purchases and to some extent the volatility of fuel prices.[450] We consider that both factors indicate that Corpay and WEX have a higher exposure to systematic risk than Visa and Mastercard. For example, the exposure to the fuel price is likely to result in a larger volatility of revenues that are linked to purchase volumes than exposure to the broader payment market. Further, Mastercard told us that comparators that offer retail payment methods are relevant comparators.[451] However, Corpay and WEX appear to be mainly operating business-to-business payment methods.[452] Margins between WEX and Corpay (at the corporate level – see Table 49) differ significantly despite operating in broadly the same sector. If we were to consider companies in the fuel payment sector, we would need to assess what an appropriate estimate for the overall industry margin is for this sector in the UK. We do not consider that a subset of comparators within the

448 www.autoritedelaconcurrence.fr/en/press-release/meal-vouchers-autorite-de-la-concurrence-issues-opinion-government.

449 The Autorité noted the existence of market failures, including the existence of barriers to entry, expansion and innovation, and above all the market power of the incumbent issuers.

450 Corpay and WEX annual report.

451 [✂].

452 We also note that when looking at our chosen comparators, Corpay and WEX seem to be most similar to PayPal. However, PayPal appears to be more comparable to Mastercard and Visa than Corpay and WEX, mainly because PayPal's payment services are offered to a very wide range of sectors (rather than being focused on the supply of fuel).

industry that have the highest margins would form an appropriate datapoint for a comparator benchmark margin. See also paragraph 6.141.

Table 49: WEX and CorPay ('formerly FleetCor') EBIT margins (%)

	2018	2019	2020	2021	2022	2023	Average (2018–23)
WEX	26	22	-6	18	20	25	18
CorPay	45	46	41	44	42	44	44

EBIT margins shown are for the business as a whole.
Source: WEX annual report and Fleetcor 10K Form (on 25 March 2024, Fleetcor changed its corporate name to Corpay), i.e. annual reports up to the year end of 2023 are for Fleetcor).

e. Fifth, we disagree that a minimum number of comparators is required. We recognise that the selection of the appropriate comparators is ultimately a question of regulatory judgement. We consider we have chosen the most relevant comparators and consider that adding additional, less similar, comparators may weaken the informative value of the margin benchmark.

6.126 We note that Visa has provided the comparators for illustrative purposes.[453] We have undertaken an initial high-level review of them. Based on this initial review we do not consider that the illustrative comparators would be better than the comparators we have identified. For example:

a. For [✁] this is because [✁] operates as an acquirer. Whist we do consider that acquirers are likely to face similar business risk as Mastercard and Visa as they also operate in the overall payments market, we did not consider they match Mastercard and Visa as closely as the comparators we identified, which all offer payment system operation services (at least to some extent).

b. For [✁] this is because we consider that it mainly serves a specific subset of the payment markets (logistics operators). [✁] is therefore less reflective of the broader payments market than the comparators we have identified. See also paragraph 6.125(d)(2).

c. For [✁] and [✁] this is because they do not offer payment services.

6.127 We further note that Visa has suggested one company from each of the different market sectors it had identified. If we were to consider whether to include comparators from these market sectors, we would also need to assess which of the companies in these market sectors are most comparable to Mastercard and Visa. Specifically, we do not consider that the comparator benchmark margin should simply be derived based on the highest (or lowest) margin of a company in a comparable market sector. We particularly note that Visa suggested that [✁], an acquirer, is a sufficiently similar comparator with a margin of [✁]%.[454] We had set out in paragraph 6.58.b a submission from Mastercard in response to the CWP, which estimated median acquiring margins to be approximately 10% on average over the period of 2018–2022. We note that this is broadly in line with the lower end of the range we have identified in our benchmark comparator margin analysis.

453 Visa response to PSR working paper dated 18 December 2023 [✁].

454 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraph 2.29.

6.128 We note that the third party [✂]455 has not provided any specific examples of additional comparators. We did not have data available to compare the profitability of Mastercard's and Visa's relevant UK operations to their margins in other countries or regions, other than at the overall European and global level. However, even if such information was available we would still need to consider whether Mastercard and Visa could be considered to be operating in competitive markets in these countries or regions.

Stakeholder's views of our comparator selection method and approach

Mastercard's views on our comparator selection method and approach

6.129 Mastercard said that we had not provided any evidence of other comparators being considered and then being rejected. In particular, we had not explained what other domestic card schemes were considered, why these were excluded from the analysis, and why, out of all the domestic card schemes, eftpos was deemed the relevant comparator.[456] Mastercard noted that 'since the PSR has not included any other money transfer providers and concluded that it "did not identify any other comparators that have greater similarities with Mastercard and Visa's relevant UK operations and that can be considered to be operating in a competitive market"', this might imply that the PSR has excluded other money transfer companies from its analysis due to these having market power without sufficient evidence to support such an assessment.[457]

6.130 Mastercard said that we had not explained why we have not used the comparators from the February 2023 working paper (other than PayPal).[458]

6.131 Mastercard said that when selecting the margin benchmark the mean or median results for each market or sector would be an inappropriate benchmark as this would imply that at least half the firms in these clusters were earning excessive returns.[459]

6.132 Mastercard said that good practice is to consider a broad sample of comparators covering companies in similar industries, as well as companies in different industries that nonetheless shared similar characteristics and/or business models, and that additional comparators would therefore improve its robustness.[460] Mastercard cited a 2003 report prepared by Oxera to support its view.[461]

Visa's views on our comparator selection method and approach

6.133 Visa said we had not explained the methodology used to identify the comparators. We had provided only at a very high level some of the criteria used to derive the shortlist of comparators. Further detail was required on how we applied the criteria when selecting comparators and whether we looked at other potential comparators and if so, on what basis they were excluded (and if not, why we had not looked at other comparators).[462]

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455 Third party response to PSR Interim Report dated 21 May 2024. [✂].

456 Mastercard response to PSR working paper dated 18 December 2023 [✂].

457 Mastercard response to PSR working paper dated 18 December 2023 [✂].

458 Mastercard response to PSR working paper dated 18 December 2023 [✂].

459 Mastercard response to PSR working paper dated 18 December 2023 [✂].

460 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, page 75 and Annex 3, paragraph 4.

461 OFT (2003), '*Assessing profitability in competition policy analysis*', prepared by Oxera.

462 Visa response to PSR working paper dated 18 December 2023 [✂].

6.134 Visa said we had not investigated whether other factors should be taken into account when selecting comparators, such as: efficiency levels, innovation and stage of the firm's life cycle. These criteria demonstrated that eftpos and OFX were not suitable comparators.[463]

Third parties' views on our comparator selection method and approach

6.135 A number of respondents commented on the criteria we should apply when selecting comparators, including:[464]

a. comparators should be similar to the two card schemes

b. IT companies are the most appropriate benchmark comparators

6.136 One respondent also said we should consider a wide range of metrics including operating margins, market-specific factors that could influence profitability (for example, consumer behaviour and technological adoption rates), operational efficiencies (for example, economies of scale and local partnerships) as well as wider additional factors, such as regulatory impact, market maturity and innovation/investment.[465]

Our response

6.137 We set out in paragraphs 2.54 to 2.56 and 6.18 to 6.21 our approach to identifying the benchmark comparators. One of the key elements of this approach was to identify companies that have operations that are as similar as possible to Mastercard's and Visa's relevant UK operations. We considered these were payment system operators or payment service providers. We therefore focused our analysis on identifying comparators that derive a significant proportion of their revenues from these services. We identified a sufficient number of comparators that met this criterion.

6.138 Consequently, we did not find it necessary to also explore comparators offering other services, which we considered were likely to have less similarities with Mastercard's and Visa's relevant UK operations. Including additional comparators would therefore risk introducing comparators that are less similar to Mastercard's and Visa's relevant UK operations and consequently may provide less meaningful information about the profit margins that Mastercard and Visa could be expected to earn in the relevant UK operations under competitive market conditions. For example, we consider that companies operating as payment system operators or payment service providers would likely be more comparable to Mastercard's and Visa's relevant UK operations than IT companies more generally. This is because it is likely that the capital intensity and risk exposure of IT companies more generally could differ significantly from those of Mastercard and Visa. We note that we have also undertaken a cross check for the margin range derived from the benchmark comparators we identified, based on a large subset of the FTSE 100 constituents (see paragraphs 6.163 to 6.186). The cross check shows margins that are broadly consistent with the range of the EBIT margins derived from the benchmark comparators.

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463 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraph 2.26.

464 MR22/1.7 *Stakeholder input (and non-confidential responses) to the competitive constraints call for evidence and profitability working paper* (September 2023) paragraphs 3.11 to 3.16.

465 Third party response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9. [✁].

6.139 We consider that it may be possible to identify additional companies operating as payment system operators or payment service providers. We have assessed possible additional comparators in paragraphs 6.125 and 6.126. We note that when selecting comparators we identified five possible comparators, but selected only three. As such, we have set out other comparators we have considered, but not selected. We do not think it would be necessary for us to identify all possible comparators and then to set out why they were not chosen in order to explain our findings. We note that one of the key elements of our approach was to identify companies that have operations that are as similar as possible to Mastercard's and Visa's relevant UK operations, which we considered were payment system operators and payment service providers (see paragraphs 6.19 to 6.21). As such, companies that do not provide these services would not be selected as comparators. This is the main reason why we did not include most of the companies from the February 2023 working paper. Other considerations when choosing comparators are set out in paragraphs 6.18 and 6.23. Further, we note that our cross check includes a large number of additional comparators as a proxy for the broader UK market.

6.140 In respect of other domestic schemes, we note that there are other possible comparators, but these are either smaller in size or do not have financial information in a publicly available format.

6.141 We understood Mastercard's comments regarding the range of margins to imply that the competitive benchmark margin should be set by reference to the highest and lowest margin in an industry. We do not agree with this approach. For example, the CMA guidelines state that 'In practice, a competitive market would be expected to generate significant variations in profit levels between firms and over time as supply and demand conditions change, but with an **overall** tendency towards levels commensurate with the cost of capital of the firms involved' (emphasis added).[466] This clearly indicates that basing a competitive benchmark margin on the highest and lowest margins in an industry are unlikely to be an appropriate approach.

6.142 We have set out our approach to selecting the sufficiently similar comparators in paragraph 6.19 and 6.20. This includes consideration of 'similar maturity'.[467] As such we consider that we have had regard to the stage of life cycle in our analysis. We have not identified efficiency levels and innovation as specific separate considerations. Our view is that:

a. Efficiency levels can, in principle, have an impact on margins. In a competitive market, highly efficient companies will have higher margins than inefficient companies. However, we would also expect that the competitive process will either lead to low efficiency companies exiting the market (as they would not be able to earn their cost of capital) or to catch up in efficiency levels with highly efficient companies. Given that we have selected comparators with a similar maturity to Mastercard and Visa, have looked at margins over a longer time period and have assessed whether the comparators are likely to operate in competitive markets, we consider it plausible to assume, in absence of evidence to the contrary, that efficiency levels broadly reflect a competitive level of efficiencies in our comparator group.[468]

466 CC3 – paragraph 117.

467 See paragraph 6.19d.

468 We note in this context that an assessment of efficiency levels would not only require us to review the efficiency levels of our comparators, but also those of Mastercard and Visa. It is not implausible that, should Mastercard and/or Visa exercise their respective market power to raise prices above the competitive level, their respective cost base were also higher than expected in competitive markets. In such a scenario our comparator analysis may not necessarily be unduly impacted if some of the comparators that we have chosen were not operating at a fully efficient level.

b. The relationship between innovation and margins is not necessarily straightforward and could potentially be complex. It is therefore not a given that there is a direct relationship between them. As such we would not necessarily expect that more innovative companies would have higher margins than companies that are less innovative. This is because:

   1. Expenditure on innovation may not necessarily lead to the creation of intangible assets – for example, in a situation where innovation is relatively short lived. Further, even where innovation leads to the creation of intangible assets, these may not necessarily be so significant as to lead to substantial increases in the levels of the capital employed (for example, where the expenditure on innovation is small in relation to the overall level of capital employed) and therefore the impact on EBIT margins may be limited.[469]

   2. We do not consider that being innovative would necessarily increase systematic risk of an investment (and would therefore not necessarily increase the cost of capital). This is because the chance of success for being innovative is likely a diversifiable risk, that is, it is a risk that is less likely to correlate to market risk (on which the cost of capital is based).[470]

6.143 We do not consider that there is an objective measure that would quantify the number of comparators that should be used in a comparator benchmark analysis.[471]

6.144 Further, the report cited by Mastercard does not appear to support Mastercard's view that 'a broad sample of comparators covering **both** companies in similar industries **and** companies in industries that are different but have similar market characteristics and/or business models' should be included as comparators (emphasis added). Rather the report states (emphasis added):[472]

'When selecting comparators, it is common to use **either**:

a. other companies in the same industry in the same region, or
b. other industries with similar characteristics operating in the same region, or
c. the same industry in other regions, or
d. the activities of the same company in other regions'

469 We also note that even if there was a significant and direct link between innovation and benchmark margin levels, we would still need to assess whether the difference in the levels of innovation differ significantly between the benchmark comparators and Mastercard and Visa's relevant UK operations.

470 It is important to note, in this context, that when selecting a comparator group, it would not be reflective of the outcome of competitive markets to only select comparators that have been highly successful in launching innovative products, but we should also include companies that have had less success.

471 We note that the OFT report cited by Mastercard did not suggest a specific minimum number of comparators.

472 OFT (2003), *'Assessing Profitability in Competition Policy Analysis'*, prepared by Oxera, paragraph 7.34.

Profitability of the selected comparators

6.145 We have estimated profitability for the benchmark comparators identified in the previous section by reference to EBIT margins, which is how we have estimated profitability for Mastercard and Visa's relevant UK operations. This is because the EBIT margin accounts for operational costs, but excludes financing costs and as such best represents the economic benefits that a firm receives from its business activities.

6.146 We have used reported revenues and EBIT for each comparator in our calculations of the EBIT margins. This is because we have not identified clear reasons for adjustments to either reported revenues or reported operating income (EBIT) for our chosen comparators. Such adjustments could, for example, be to adjust for large non-operating items like goodwill write-offs, litigation costs or the removal of gains or losses on the disposal of assets.

Benchmark margins

6.147 Table 50 below shows the six-year average EBIT margins for the period 2018 to 2023 for the benchmark comparators.[473] It also shows the highest and lowest EBIT margin in that period for each selected comparator.

6.148 Table 50 also shows the average, highest and lowest estimate for Mastercard's and Visa's margins in the relevant UK operations that form the basis for their respective margin ranges we have identified in the sections above.

Table 50: Comparator benchmark margins (2018–2023)[474]

	EBIT margin (min)	EBIT margin (simple average)	EBIT margin (max)
eftpos (2018 to 2021)	5%	12%	21%
OFX	13%	18%	21%
PayPal	14%	16%	18%
Mastercard fully loaded UK P&L accounts (2019 to 2023)	[✂]%	[✂]%	[✂]%
Mastercard global	49%	54%	57%
Visa fully loaded UK P&L accounts	[✂]%	[✂]%	[✂]%
Visa global	63%	64%	66%

Notes:
1. eftpos margins are based on data from 2018 to 2021 as data for 2022 and 2023 is not available.
2. OFX margins are based on a financial year end in March (for example, 2022 data is based on March 2023 accounts).

Source: eftpos, OFX and PayPal financial statements, and Mastercard global and Visa global financial statements.

473 Except for eftpos, where only four years' data was available in that period.

474 All data has been sourced from companies' published annual reports. Where a financial year end was not in December, we have used the nearest year when calculating the margin in each year. See Annex A for more details.

6.149 Table 50 shows that the selected comparators have average EBIT margins of between 12% and 18% when using six-year averages.

a. It shows that the average EBIT margins of all of the benchmark comparators is substantially below the upper end of the EBIT margin range for Mastercard's and Visa's relevant UK operations.

   1. For Mastercard the upper end of the range is around three times as high as the average margin of the highest benchmark comparator.
   2. For Visa the upper end of the range is more than three times as high as the average margin of the highest benchmark comparator.

b. The low end of the range for Mastercard's margins for the relevant UK operations [✂] of the margin range for the comparators.[475]

c. The low end of the range for Visa's margins for the relevant UK operations [✂] the highest average margin of the benchmark comparators.

Mastercard's views

6.150 Mastercard said it would be more appropriate to use Mastercard's fully-loaded P&L margin on a Belgian GAAP basis in the comparator margin analysis. This would remove the need to make any adjustments to the margins of eftpos and OFX (as part of the sensitivity analysis that we had undertaken for them). This was because:[476]

a. eftpos and OFX follow Australian accounting standards, where incentives are treated in the same way as under Belgian accounting standards.

b. The level of incentive payments for OFX and eftpos are likely to be much smaller than for Mastercard.

Visa's views

6.151 Visa said that accounting-based profit margins were not representative of an economic measure of profitability. Further, accounting approaches could differ between companies, which limited the comparability of profit margins based on published financial statements. This limited the robustness of our profitability comparator assessment and was further exacerbated by our reliance on only three potential comparators.[477]

Our response

6.152 We consider we have been mindful of the impact of accounting conventions on the profitability benchmark margin analysis. For example, this is reflected in our sensitised margin analysis for our three comparators as set out in paragraphs 6.63 to 6.65 for PayPal and in paragraphs 3.76 to 3.80 for eftpos and OFX, which takes into account the potential impact of differing accounting conventions on the comparator margins.

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475 We note that this gap could be larger if 2018's margins for Mastercard's relevant UK operations were included in the average margins based on the fully loaded UK P&L accounts.

476 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 2, pages 27 to 29, Section 3.3.

477 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraph 2.32.

6.153 We note Mastercard's preference to undertake the benchmark margin analysis using an approach for the accounting for incentive payments based on Belgian GAAP (which Mastercard used for the fully loaded UK P&L accounts). We do not consider that this approach is more appropriate compared to the approach we have taken (which is based on the US GAAP approach where all incentive payments are netted off gross revenues). This is because Mastercard's preferred approach would not allow a like-for-like comparison of Mastercard's UK margins in the fully loaded UK P&L accounts with its global margins, nor with Visa's global margins or PayPal's margins, which are all based on US GAAP. We note that Mastercard acknowledges that relevant incentive payments for OFX and eftpos are likely to be small and consider that consequently an approach to treating incentives based on Australian GAAP would have limited impact on the benchmark margins calculated for OFX and eftpos.

Visa's full-chain margin analysis

6.154 In its response to our interim report, Visa raised the suggestion that its margins should be compared on a like-for-like basis with comparators by undertaking a 'full chain margin analysis' to account for differences between four-party and non-four-party payment models.[478,479] Visa said that a full chain margin would entail an adjustment to Visa's reported global margins to make them comparable with the reported margins of all non-four-party payment schemes (PayPal, Amex and Discover).

6.155 Visa estimated its full chain margins by combining the revenues and costs of an issuer and an acquirer with its own revenues and margins, to create a hypothetical non-four party Visa payment scheme.[480] This included using the financials of 'monoline' issuers and acquirers (i.e., firms whose primary focus is on stand-alone issuing or acquiring). Specifically:

- Global Payments UK as the monoline acquirer, as this was the only monoline acquirer whose financial reporting provided a breakdown of interchange scheme and processing fees
- Capital One as the monoline issuer as it was the largest monoline issuer, and so it was the most relevant candidate to assess issuing costs (Visa also noted that Vanquis Bank could act as a UK monoline issuer and performed a sensitivity analysis using this provider)

6.156 Visa stated that the results of its full chain analysis show 'full chain' margins of a hypothetical non-four-party Visa scheme would be [✁]% in 2021 and [✁]% in 2022, compared to Visa's global four-party scheme margins of 65.6% and 64.2% respectively. Visa stated that these hypothetical margins were, as well as being [✁].

6.157 Visa also said that the approach taken in our interim report to the margin benchmarking analysis had the effect of not being technologically neutral, as it artificially promoted non-four-party business models over four-party models.[481]

478 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response, paragraph 2.24.

479 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Assessment of Visa's "full chain" margins, [✁], paragraph 10.

480 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Assessment of Visa's "full chain" margins, [✁].

481 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Assessment of Visa's 'full chain' margins, [✁].

Our response

6.158 We do not consider the full chain margin analysis proposed by Visa to be a sound framework for analysing Visa's profitability for the following three reasons.

6.159 First, if we adopted Visa's proposed approach, we would not be assessing Visa's relevant UK operations, but instead would be assessing a hypothetical operator that offered substantial additional services over and above those offered by Visa in the relevant UK operations (i.e., substantial credit services and acquiring services). The calculations provided by Visa show that the effect of this would be to dilute scheme and processing costs to [✂]% of the total costs in the full chain margin analysis.[482] To illustrate this, the figures provided by Visa in its submission to us show that the hypothetical operator would have costs of ca. $930 million of which only ca $70 million are Visa's costs, suggesting that the scheme and processing services are a very small proportion of the overall hypothetical operator. This suggests it would be very difficult to assess the presence of excess profits within the scheme and processing operations as any such profits would be diluted by the margins of the much larger non-scheme and processing services within the hypothetical operator. Again, to illustrate this, the results of Visa's full chain analysis show margins of the hypothetical operator of 27.5% in 2021 and 20.6% in 2022, compared to Visa's global margins of 65.6% and 64.2% respectively. The relative size of the credit and acquiring services compared to scheme and processing services suggest that the margins in the hypothetical operator primarily represent the margins of a credit and acquiring business, rather than the margins of Visa's scheme and processing services (which are the subject of this market review).

6.160 Second, when considering whether to make an adjustment to Visa's margins as suggested in the full chain margin approach, an assessment is also required whether it would be more appropriate, if adjustments are necessary, to adjust the margins of the comparator companies, rather than to adjust Visa's margins. A key consideration when looking at the need to make adjustments to either Visa or the comparators will be the risk of inadvertent distortions in the adjustment process. Therefore, adjustments should be chosen that, for example, minimise the number and complexity of the adjustments and the need to rely on assumptions. We note that that we have undertaken sensitivity analysis of our three comparators in paragraphs 6.64 and 3.78, together with, in particular, our assessment of the sensitised margins of PayPal in paragraph 6.67. The related adjustments were much simpler than those that would be required in a full chain margin analysis. Thus we consider that the full chain margin analysis is less appropriate to assess Visa's margins than basing the assessment on adjustments, should they be necessary, to our chosen comparators.

6.161 Third, in addition, we have identified a number of areas in Visa's full chain margin analysis that would require further assessment before such a hypothetical operator could be relied upon as part of the margin benchmarking analysis. Such areas include, but are not limited to, for example:

a. the challenges of estimating a meaningful EBIT margin for businesses with significant credit exposure (which the hypothetical operator would have)

b. the large number of assumptions required and the potential sensitivity of the margins in the hypothetical operator to the assumptions made. For example, Visa stated that changing the inputs for the issuer side could impact margins by [✂][483]

482 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Assessment of Visa's 'full chain' margins, [✂].

483 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Assessment of Visa's 'full chain' margins, [✂].

6.162 We have set out our approach to selecting the sufficiently similar comparators in paragraphs 6.19 and 6.20. We do not consider that it is necessary to add technological neutrality as an additional factor to identify comparators. This is because we have already included a number of factors that help us to identify comparators that are as similar as possible to Mastercard's and Visa's relevant UK operations.

Cross-check

6.163 In addition to the benchmark margin analysis, we have undertaken a cross-check, using a wide range of companies with operations in the UK. This was to cross-check the results of our benchmark margin analysis against margins in the UK more generally.

6.164 Our cross-check is based on FTSE 100 companies (excluding banks, asset managers and insurers), differentiating comparators by capital employed intensity.[484]

6.165 We set out below why we considered it appropriate to differentiate comparators in our cross-check on the basis of capital employed intensity.

Market-wide profitability analysis

6.166 Economic theory establishes that investors require a return for investing capital to compensate them for the non-diversifiable risk that they bear for making their investment. The rate of return that the investors require from a particular firm is measured by the firm's Weighted Average Cost of Capital (WACC). Economic theory also establishes that in a competitive market, firms will on average earn returns on capital, as measured by Return on Capital Employed (ROCE), that equals the WACC. This is because broadly the firms temporarily earning a higher ROCE will have those returns competed away (e.g., by new entrants into the market), whereas those earning a lower ROCE than the WACC will not be able to attract capital from their investors and therefore either improve their efficiency or fail.

6.167 Further, and all else equal, firms that employ relatively more capital will need to generate margins that are higher than the firms that employ relatively less capital, in order to attract capital from their investors.

6.168 There is therefore a relationship between the level of capital employed and the margins a business needs to earn in order to attract capital from their investors. For the purpose of this cross-check, we have used capital employed intensity, which we have defined as net assets[485] divided by revenues. This ratio tells us how much assets are required to generate a unit of revenues.

484 We refer to capital employed intensity when considering the ratio between capital employed (total assets less current liabilities) and revenues.

485 That is, total assets less current liabilities.

6.169 The relationship between capital employed intensity and EBIT margins can be illustrated by the following equations:[486]

$$WACC \times Capital\ Employed\ Intensity = Required\ EBIT\ Margin$$

$$ROCE \times Capital\ Employed\ Intensity = actual\ EBIT\ Margin$$

$$\frac{EBIT}{Capital\ Employed} \times \frac{Capital\ Employed}{Revenue} = \frac{EBIT}{Revenue}$$

6.170 The first relationship indicates that the required EBIT margin is a function of a company's required rate of return and its capital employed intensity. The second and third functions (with the third being a disaggregation of the second), show that the actual EBIT margin is a function of returns and capital employed intensity.

6.171 Assuming the relationship between the level of capital employed and the margins businesses need to generate to attract capital holds in practice (for example, that markets are competitive and that actual EBIT margins are equal to required EBIT margins), we should be able to identify (on average) a relationship between the level of capital employed intensity and the EBIT margins companies generate.

6.172 We are interested estimating the competitive margins of Mastercard's and Visa's relevant UK operations – that is, we are interested primarily in the competitive margin levels in the UK. We have therefore aimed to identify companies with significant UK operations for our cross-check.

6.173 In our cross-check we have therefore looked at the relationship between operating (EBIT) margins and capital employed intensity of FTSE 100 firms over the period of 2018 to 2023. In order to make this analysis more relevant to Mastercard's and Visa's relevant UK operations we have excluded from the FTSE 100 companies that were either banks, insurance companies or asset managers as calculating an EBIT margin for these sectors may not result in a meaningful margin benchmark. We note, for example, that profitability for banks is usually assessed on a return on equity (ROE) basis rather than using EBIT margins.

6.174 We chose the FTSE 100 in preference to international indices as the latter would likely result in a smaller, rather than a larger proportion of companies in the index that have a significant UK exposure.

6.175 We would expect that the more assets a company uses to generate a unit of revenue (expressed as the capital employed intensity), the higher the EBIT margin a company would need to generate to attract investors.

6.176 We consider that this analysis can serve as a useful cross-check in our market review. Whilst such an analysis cannot be expected to result in a precise EBIT benchmark margin for Mastercard's and Visa's relevant UK operations it can provide useful directional information on what margins businesses with a similar capital intensity are able to achieve on average in the wider economy. Information on margins sourced from across the wider economy are also less likely to be significantly impacted by individual companies' ability to earn supernormal profits or, for example, the phase of the lifecycle a company is in.

486 Please note the use of the term 'capital employed intensity' to distinguish it from capital intensity, with the latter equalling total assets divided by revenue.

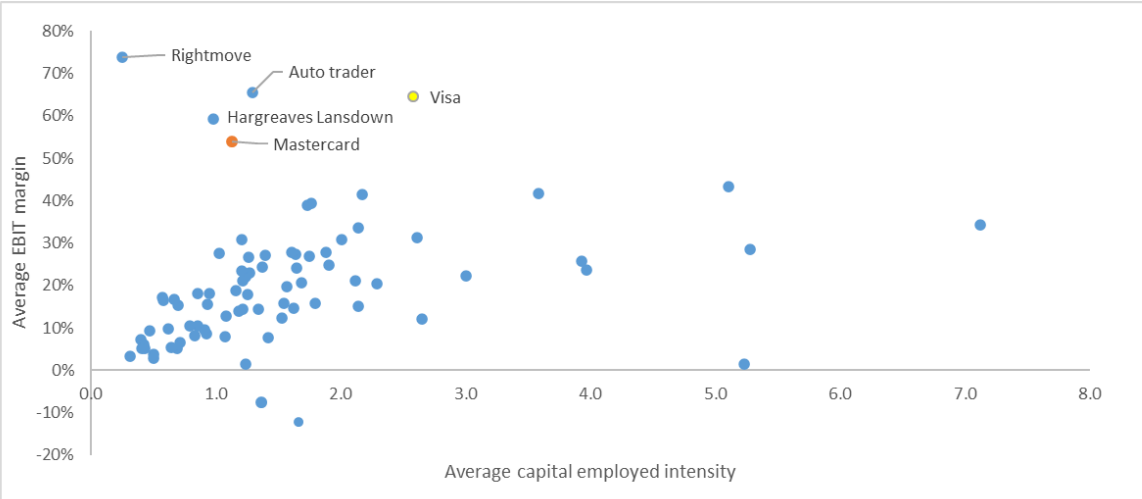
6.177 We note in this context that in particular the data used for our cross-check is taken from published accounts.[487] Published accounts are drawn up based on accounting principles, rather than with a view to derive an appropriate economic estimate of, in particular, the capital employed. The resulting capital employed intensity may therefore deviate from an economic capital employed intensity. For example, we note that, in particular Visa has very significant levels of intangible assets in the global accounts. In order to derive an appropriate economic estimate of the capital employed, the value of the assets and liabilities (for example, intangible assets) would need to be reviewed (and potentially adjusted).

6.178 Figure 12 below shows, for each FTSE 100 company (excluding banks, insurance companies and asset managers):[488]

- the average EBIT margin over the period of 2018–2023
- the capital employed intensity

6.179 FTSE 100 companies are shown in blue on this chart. Mastercard is shown in red. Visa is shown in yellow.

Figure 12: Average EBIT margins and average capital employed intensity for the FTSE 100 (2018 to 2023)



Note: Capital employed intensity is total assets minus current liabilities, divided by net revenue
Source: FTSE 100 data, Bloomberg, Mastercard/Visa data, company financial statements.[489]

6.180 We note that Figure 12 above includes a small number of outliers that have a capital employed intensity of around 1 with relatively high margins. There could be a number of reasons for this. This includes the possibility that these firms do not operate in competitive markets.[490] However, for the purpose of performing a cross-check we have not considered it necessary to conclude on the precise reasons for the presence of these outliers.

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487 This includes the data for Mastercard and Visa, which we have taken from the global accounts. Capital employed intensity is (on average in the period 2018 to 2023) 1.13 for Mastercard (based on Mastercard's global accounts) and 2.58 for Visa (based on Visa's global accounts).

488 See Annex B for details, which includes a list of the FTSE 100 companies that this cross-check is based on.

489 For Mastercard/Visa, there are slight discrepancies between the EBIT margin and capital employed intensity calculated using Bloomberg data and company financial statement data.

490 For example, two of the outliers are advertising platforms with market shares of above 70%.

6.181 Figure 12 shows that, except for the small number of outliers, margins for businesses with a low capital employed intensity (that is, businesses with a capital employed intensity of around 1 or less) are no higher than around 20%.

6.182 The average EBIT margin for this group is around 14% including, and around 10% excluding the outliers.

6.183 Figure 12 shows that the capital employed intensity for Mastercard for 2018 to 2023 is 1.13 (based on Mastercard global accounts).[491] As explained above, the reported capital intensity may not reflect the economic capital intensity. Nevertheless, even assuming an uncertainty range around the reported figures, this indicates that Mastercard's global margins are higher than what would be expected in competitive markets. For example, average EBIT margins are around 17% at a capital employed intensity of around 1.[492]

6.184 Figure 12 shows that Visa has a capital employed intensity of around 2.5 based on its global accounts. This is likely, to a large extent, due to significant levels of acquisition-related intangible assets that are included in Visa's global accounts.[493,494] As explained above, the reported capital intensity may not reflect the economic capital intensity. Nevertheless, even assuming an uncertainty range around the reported figures, this indicates that Visa's global margins are higher than what would be expected in the wider market, and by implication, competitive markets. For example, average EBIT margins are around 26% at a capital employed intensity of between 2 and 3.

6.185 This suggests that companies with a reported capital employed intensity that is similar to the reported capital employed intensity of Mastercard and Visa (based on their global accounts) have EBIT margins of around 17% and 26% on average.[495] This is broadly consistent with the range of EBIT margins of the benchmark comparators of 12% to 18%, particularly when considering that this analysis is intended to serve as a cross-check and that it is based on reported capital employed intensity.

6.186 We further note that the vast majority of companies with a capital employed intensity of 1 and below have EBIT margins of around 20% or less. This is again broadly consistent with the range of EBIT margins of the benchmark comparators.

Mastercard's views

6.187 Mastercard said that our cross-check was too narrow as it only considered companies in the FTSE 100, and contained too few technology stocks. Mastercard said that our rationale for using the FTSE 100 to ensure companies had greater UK exposure was not a valid consideration as FTSE 100 companies had global exposure.[496]

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491 We do not show Mastercard's European accounts here as these accounts are not consolidated and may therefore not include all relevant assets and liabilities.

492 The average EBIT margin shown here is based on companies with a capital employed intensity of between 0.5 and 1.5.

493 See, for example, Visa Annual Report 2022 (q4cdn.com), pages 56 and 82.

494 We note that there is a possibility, where companies benefit from a lack of effective competitive constraints, that acquisition-related intangibles can be valued above levels derived from a cost based method (e.g. the modern equivalent asset value). This could result in a higher value for the capital intensity.

495 We note that the upper end of the range is based on the relatively high capital intensity in Visa's global accounts, which is likely, to a large extent, due to acquisition related intangible assets.

496 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3, pages 24, 26, 29.

6.188 Mastercard said that focusing on additional indices showed that a wide range of margins up to 40% was common, including for businesses with a low capital employed intensity, but where other indicators suggested there may be strong intangible assets.[497,498,499]

6.189 Mastercard said that we did not consider the importance of off-balance sheet intangibles when interpreting the results of the cross-check analysis.[500] Mastercard said that its capital employed intensity is likely higher than 1[501], citing a Bank of England paper that found that intangible assets are often understated in published accounts.[502] Mastercard also told us that we had previously indicated in the February 2023 working paper on profitability that Mastercard has substantial intangible assets, where the reported accounting value may not reflect the true economic value.

6.190 Mastercard said this implied that comparing Mastercard's margins to companies with a reported capital intensity similar to the reported capital employed intensity of Mastercard (which had margins of approximately 16% and 24%)[503] was not meaningful.[504]

6.191 Mastercard indicated that it was not appropriate to identify outliers in the cross-check based on their high margins.[505]

6.192 Mastercard said that it was incorrect to base our cross-check on mean or median EBIT margins. Rather we should have used the upper quartile or higher. Otherwise, 50% of companies would be earning excessive returns.[506] Mastercard also said that averaging the companies in the cross-check could result in overlooking firms that take more risks and/or are very successful in innovating and enhancing their service proposition'.[507]

6.193 Mastercard said that 'extra care' was required when using operating margins rather than a ROCE or IRR approach.[508]

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497 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3, pages 25, 29.

498 Mastercard response to PSR working paper dated 18 December 2023 [✂].

499 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3, pages 24 to 29.

500 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3, pages 27-28.

501 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3, pages 27-28.

502 Mastercard response to PSR working paper dated 18 December 2023 [✂].

503 Our interim report included a margin range from the cross-check of 16-24%, which was based on data covering the period of 2018-2022. We have updated our analysis with 2023 data, which results in an equivalent margin range from 17 to 26% on average over the period of 2018-2023.

504 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3, pages 27-28.

505 Mastercard response to PSR working paper dated 18 December 2023 [✂].

506 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3, page 24, 28.

507 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3, page 28.

508 Mastercard response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Annex 3, page 75 and Annex 3, page 1.

Visa's views

6.194 Visa said that it was unclear why we had chosen FTSE 100 as the only appropriate benchmarking index.[509]

6.195 Visa said that different accounting policies, the age and nature of the assets employed, or differences in how the costs of intangible assets or research and development are accounted for will affect this analysis and the same conclusions might not be drawn if data was properly adjusted to reflect an economic measure of capital intensity.[510] In particular:[511]

a. accounting data may provide an inconsistent picture of a company's capital intensity as accounting rules required some assets to be capitalised (e.g. fixed assets) and others not (e.g. internally generated intangibles)

b. we had underestimated Visa's capital intensity because Visa had a large intangible asset base that was uncapitalised

6.196 Visa stated that it was not reasonable to discount 'outliers' from the cross-check, because of an assumption that they may not represent competitive margins.[512]

Our response

6.197 We set out in paragraphs 6.172 to 6.175 that one of the aims of the cross-check is to provide information on the average margins earned by listed firms in the UK, for different levels of capital intensity.[513] We looked at the FTSE 100 in preference to broader indices as the FTSE 100 would likely provide a closer approximation of margins in the UK than international indices. Looking at broader international indices increases the potential for the risk exposure and business environment of the index constituents to differ from those in the UK. We therefore do not consider that international benchmarks are more appropriate for the cross-check than the FTSE 100. As the FTSE 100 index has a number of large international companies which may not have a large proportion of their revenues in the UK, we have also undertaken the same analysis with the equivalent FTSE 250 constituents. This analysis indicates that the average margins in our cross-check would likely have been lower had we used the FTSE 250 constituents. We therefore consider that the results from a cross-check based on the FTSE 100 can be reflective of a UK-focused index, albeit potentially being a somewhat conservative estimate.[514]

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509 Visa response to PSR working paper dated 18 December 2023 [✂].

510 Visa response to PSR working paper dated 18 December 2023 [✂].

511 Visa response to PSR *'Market review of scheme and processing fees Interim Report'* MR22/1.9 (30 July 2024), Main response paragraph 2.35.

512 Visa response to PSR working paper dated 18 December 2023 [✂].

513 We would ideally have compared the schemes' UK margins to those of other UK businesses of a similar type. We set out in paragraph 6.17 this was not possible in this market review. We have therefore selected comparators that are international businesses of a similar type, recognising that these are not ideal comparators as they are not UK-based. Our cross-check, which is based on the FTSE 100 therefore complements our comparator analysis as it is UK-focused. The cross-check assesses whether there are likely significant differences in the benchmark margins derived from our selected comparators' margins identified in the cross-check. It is therefore important that our cross-check has a UK focus.

514 We have undertaken the FTSE 250 analysis using data for 2018-2022. We have not updated the data with 2023 information as we did not consider it necessary to do so, taking into account our view that adding one further year of data is not likely to significantly change results from the FTSE 250 analysis, and that it was therefore not the most appropriate use of our resources.

6.198 We note Mastercard's and Visa's view that [✂]. However, Mastercard and Visa have not provided any evidence to substantiate that [✂].[515,516] Moreover, both Mastercard's and Visa's published global balance sheet that we have used in the cross-check includes substantial levels of goodwill, which is often excluded when assessing capital employed on an economic basis. It is therefore possible that Mastercard's and Visa's capital employed intensity may not be higher if assessed on an economic basis.

6.199 We note that Mastercard has only suggested that it is likely that its capital intensity is greater than 1 and has only provided evidence of a general nature, which is likely to apply to a significant number of companies in the sample. It is not clear from Mastercard's submission that the results of the cross-check would be different if the adjustments made in the Bank of England paper were applied to all companies in the sample as the Bank of England report (as cited by Mastercard) indicates that it is likely that intangible asset values in other index constituents may also be understated.

6.200 We consider that a full economic assessment of capital intensity for each comparator included in the cross-check (and for Mastercard and Visa) would be disproportionate when considering that the purpose of the cross-check is a sense-check on the margins derived from our selected comparators and when considering the likely substantial amount of work required to derive an economic estimate of asset values for each comparator. We further note that a full economic assessment may also result in adjustments to FTSE index constituents.[517]

6.201 Whilst we have identified possible outliers as part of our cross-check analysis, we have not placed significant weight on the cross-check analysis where outliers are excluded. In other words, the substantive part of our cross-check analysis is based on the full dataset including outliers.

6.202 We note Mastercard's suggestions to further differentiate the cross-check by industry (for example, technology stocks) and/or by specific attributes of the companies in the index (for example, levels of innovation). The aim of our cross-check was to assess the link between capital intensity and average margins more broadly in the UK. There will necessarily be a trade-off between being more specific in the design of the cross-check and the associated reduction in the breadth and number of companies included in the cross-check that result from introducing additional selection criteria. For example, using a single industry in the cross-check may result in a much more limited range for the capital employed intensity, which would make it more difficult to identify average EBIT margins at different levels of capital employed intensity as part of the cross-check. Whilst it may have been possible to design the cross-check in a different way, we consider that our approach is proportionate, considering its purpose was to cross-check the results of our comparator benchmark margin analysis.

6.203 We have set out in paragraph 6.141 that an approach that bases a comparator benchmark margin analysis on the highest and lowest margins in an industry would unlikely be consistent with CMA guidance on market investigations. We note that had we used the upper quartile as the benchmark, this would have only moderately increased the margin range of our cross-check to 21% to 32% compared to 17% to 26% and, at the upper end of the range, would be broadly similar to PayPal's sensitised margins (see also table 48).[518]

515 We note that we have not specifically requested such data from Mastercard.

516 We note that we have not specifically requested such data from Visa.

517 That is because the difference between accounting and economic valuations may also be present in FTSE 100 constituents.

518 We note that the upper end of this range in our cross-check is based on a range for the capital employed intensity of 2-3. We also note this corresponds with the capital employed intensity of Visa's global accounts, which contains significant levels of goodwill. We have set out in paragraph 6.198 that goodwill is often excluded when assessing capital employed on an economic basis.

6.204 We set out in paragraph 7.24 to 7.26 how we have taken into account the challenges of basing our profitability analysis on a margin benchmarking analysis in this market review.

Our view on the comparators

6.205 Given that Mastercard and Visa account for a very large proportion of the combined total of UK debit and credit card payments both by volume and value, we do not expect there to be an ideal comparator, i.e. a comparator that is directly comparable to Mastercard's and Visa's relevant UK operations.[519]

6.206 We have reviewed a number of possible comparators that share as many features with Mastercard's and Visa's relevant UK operations as possible, recognising that there will not be an exact mirroring of operations. These were:

a. Amex and Discover
b. Eftpos
c. OFX
d. PayPal

6.207 We have not identified any other suitable comparators that have more similar operations to Mastercard's and Visa's relevant UK operations and that operate in competitive markets.

6.208 We consider that Discover and Amex (global card-based payment system operators), are not sufficiently similar comparators to Mastercard and/or Visa's relevant UK operations. Reasons for this include that their business model incorporates a significant element of financial services (in particular, lending) alongside payment services and as such are unlikely to have similar risk exposure. As a result, the revenue and cost structure of their operations are also likely to differ significantly from Mastercard / Visa relevant UK operations. The high levels of interest income and expense in their cost structures also means that it would be challenging to calculate a meaningful estimate for the EBIT margin for Amex and Discover. Further, we cannot exclude the possibility that Amex and Discover may be benefiting from a lack of effective competitive constraints, at least in some regions or use cases and may be able to indirectly benefit should prices set by Mastercard and/or Visa be higher than what would be available in competitive markets, at least to some degree.[520]

6.209 We are of the view that the other possible comparators (eftpos, OFX, PayPal) have businesses that mirror at least some of Mastercard's and Visa's relevant UK operations. Further, they do not have significant other operations that are likely to result in sufficiently substantial differences to Mastercard's and Visa's relevant UK operations in terms of risk exposure, capital structure or revenue and cost structure to exclude them as comparators. We also consider that they operate in sufficiently competitive markets.

6.210 We therefore consider that the margins of these benchmark comparators are informative for the margins that Mastercard and Visa could likely achieve in a competitive market for the relevant UK operations.

519 Such a comparator would, for example, provide services that are the same as (or very similar to) Mastercard's and Visa's relevant UK operations and provide services in the same geographic region.

520 We have set out in paragraph 6.32 and 6.38 why we do not consider Discover's payment services division to be a sufficiently similar comparator.

Our conclusions on the comparator benchmark margins

6.211 Our comparator benchmark analysis did not identify an ideal comparator. This is not surprising given Mastercard's and Visa's very high combined market share in the UK.

6.212 We therefore sought to identify sufficiently similar comparators. The selection of the comparators ultimately requires some element of judgement, given there is potentially a relatively wide range of possible alternative comparators, and it is necessary to take certain decisions in order to decide which comparators are sufficiently similar.

6.213 We consider that our choice of comparators is therefore necessarily subject to a proportionate exercise of regulatory discretion. We note that other approaches may provide a different set of comparators. However, we consider that our approach is reasonable and appropriate and is not invalidated by the possibility of other approaches being available. We consider that we have been prudent and careful in exercising our regulatory discretion, especially considering that we have also undertaken a cross-check, which is broadly consistent with the results of the benchmark margin analysis.

6.214 Our benchmark margin analysis identified three comparators that we consider are sufficiently close comparators to Mastercard's and Visa's relevant UK operations. We have not identified other suitable comparators that have more similar operations to Mastercard's and Visa's relevant UK operations.

6.215 Table 51 below shows that the average EBIT margins of these benchmark comparators is between 12 to 18% over the period of 2018–2023.

Table 51: Comparator benchmark margins 2018–2023

	EBIT margin (min)	EBIT margin (simple average)	EBIT margin (max)
eftpos (2018–2021)	5%	12%	21%
OFX	13%	18%	21%
PayPal	14%	16%	18%

Notes:
eftpos margins are based on data from 2018–2021 as data thereafter is not publicly available.[521] OFX margins are based on a financial year end in March (e.g. 2022 data is based on March 2023 accounts).
Source: eftpos, OFX, PayPal financial statements.

521 In September 2021 the ACCC (Australian Competition & Consumer Commission) granted authorisation for AP+ (Australian Payment Plus Ltd) to acquire eftpos, Source: ACCC, Authorisation number: MA1000020.

6.216 We have carefully considered Mastercard's and Visa's representations as regards the suitability of eftpos as a sufficiently similar comparator, in particular its ownership structure and whether its risk profile is lower than that of Mastercard and Visa. We consider that, in the round, it is appropriate to include eftpos as a comparator. This is because it is not necessarily the case that user ownership would lead to margins that are not risk-reflective and because any adjustment for the risk differential could be relatively small. We also note that eftpos forms the low end of the range of our margin benchmark analysis.[522]

6.217 We have cross-checked the results of the comparator benchmark margin analysis using average margins derived from FTSE 100 companies (excluding banks, asset managers and insurers), which suggests that average EBIT margins of companies with a reported capital employed intensity that is similar to the reported capital employed intensity of Mastercard and Visa have EBIT margins of around 17% and 26% on average.[523, 524]

6.218 Thus the cross-check using FTSE 100 companies is broadly consistent with the range of the EBIT margins of 12% to 18% of the benchmark comparators.

6.219 We therefore conclude that the competitive benchmark margin for Mastercard's and Visa's relevant UK operations is likely to be between 12% and 18% in the period of 2018–2023.[525]

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522 We also note that we only had four years of financial data available to us from eftpos and that eftpos is now part of a larger organisation. Whilst this is a limitation in our dataset for eftpos, we do not consider that this makes the margins calculated for eftpos unsuitable for inclusion into our comparator dataset. This is in particular considering the caution with which we have used the comparator benchmark information in this market review.

523 We note that the implied margin range based on the cross-check is based on accounting data and significant assumptions. The results may differ should we undertake a more robust economic analysis of the capital employed for Mastercard and Visa (and the FTSE 100 constituents).

524 We note that the upper end of the range is based on the relatively high capital intensity in Visa's global accounts, which is likely, to a large extent, due to acquisition-related intangible assets.

525 However, we note that this range should be interpreted with a degree of caution, given the inherent uncertainty with identifying a suitable comparator, in this case.

7 Summary and our conclusions from our profitability analysis

7.1 In this section we set out our conclusions from our profitability analysis. We set out our current estimate of the margins of Mastercard's and Visa's relevant UK operations and the margins of benchmark comparators that operate in competitive markets. This enables us to assess whether Mastercard's and/or Visa's fees and/or fee increases may have resulted in profits (and consequently prices) that are higher than would be expected in competitive markets.

Summary and introduction

7.2 We found in Chapter 4 of our final report that, on the acquiring side, Mastercard and Visa do not face effective competitive constraints in the provision of core scheme and processing services. Mastercard and Visa are subject to varying degrees of constraint across their optional services, with stronger indications that lack of effective alternatives results in the schemes not facing effective competitive constraints in the supply of some of these services.

7.3 These findings, combined with other evidence, including indications of profits that are or may be higher than those available in competitive markets, may indicate that Mastercard and/or Visa are able to benefit from a lack of effective competitive constraints.

7.4 We applied a two-stage approach to first estimating Mastercard's and Visa's margins for the relevant UK operations and second to identifying the most appropriate comparators (and their profit margins) for the purpose of our market review. This is summarised below.

7.5 For estimating Mastercard's and Visa's margins for the relevant UK operations:

- **Step 1:** Choosing the measure of profit margins.

  We have estimated profit margins of Mastercard's and Visa's relevant UK operations using EBIT margins.

- **Step 2:** Selecting the estimation method for the chosen measure of profit margins.

  EBIT margins are the ratio between EBIT (operating profit) and revenues.

- **Step 3:** Selecting and evaluating the most relevant input data.

  We have assessed margin estimates based on the fully loaded UK P&L accounts, European accounts and global accounts.

- **Step 4:** Estimate Mastercard's and Visa's margins for the relevant UK operations.

  The documents we reviewed show a range for the average margins for the relevant UK operations of [✂]% to 54% for Mastercard and [✂]% to 64% for Visa in the period of 2018–2023.

7.6 For identifying the most appropriate comparators and their margins.

- **Step 1:** In the absence of in ideal comparator, identify sufficiently similar comparators to Mastercard's and Visa's relevant UK operations that operate in competitive markets

  We have identified PayPal, eftpos and OFX as sufficiently similar comparators.

- **Step 2:** Identify the benchmark EBIT margin from the benchmark comparators.

  The benchmark comparators have average EBIT margins of between 12 to 18%.

- **Step 3:** Cross-checking the results.

  We performed a cross-check using the FTSE 100 constituents – the results from the cross-check are broadly consistent with the range of average margins for the benchmark comparators.

7.7 We set out below our key conclusions.

Mastercard's and Visa's margins in the relevant UK operations

7.8 We have identified in our analysis of Mastercard's and Visa's margins for the relevant UK operations that:

a. The documents we have reviewed show EBIT margins for Mastercard in a range from [✂]% (the fully loaded UK P&L accounts) to 54% (Mastercard's global accounts) on average over the period of 2018–2023.[526,527]

b. The documents we have reviewed show EBIT margins for Visa in a range from [✂]% (the fully loaded UK P&L accounts) to 64% (based on Visa's global accounts) on average over the period of 2018–2023.

7.9 We found that the fully loaded UK P&L accounts are likely to understate the economic benefits Mastercard and Visa derive from the relevant UK operations and that consequently margins are likely higher than indicated by the lower end of the range:

a. For Mastercard this is because the fully loaded UK P&L account does not include all relevant revenues (e.g., FX conversion income). Further, different cost allocation choices can result in significantly different margins for the fully loaded UK P&L accounts. We are currently not persuaded that the cost allocation choices by Mastercard best reflect the economic benefits that Mastercard receives from its UK operations.

b. For Visa this is primarily because the fully loaded UK P&L accounts include [✂] and because different cost allocation choices can result in significantly different margins for the fully loaded UK P&L accounts. We are currently not persuaded that the cost

526 We note that Mastercard's fully loaded UK P&L accounts do not include a figure for 2018 and the average therefore represents a five-year average compared to the European and global accounts, which are based on 6-year averages.

527 However, we interpret the upper end of the range with a degree of caution, given that European and global accounts can only serve as a proxy for UK profitability.

allocation choices by Visa best reflect the economic benefits that Visa receives from its UK operations.[528]

7.10 We recognise that global and European margins represent an imperfect proxy for UK margins. Ideally, we would have derived our own estimates of the margins for the relevant UK operations (possibly derived by making adjustments to the fully loaded UK P&L accounts).

7.11 However, we have not found it necessary to conclude on the extent to which Mastercard's and Visa's fully loaded UK P&L accounts underestimate the margins of the relevant UK operations. This is considering:

a. The likely substantial additional analytical work that would be required to derive a robust estimate of the margins for the relevant UK operations based on a fully allocated revenue and cost model for the relevant UK operations, e.g. by making relevant adjustments to the fully loaded UK P&L accounts provided to us by Mastercard and Visa.

b. The purpose of the profitability analysis and the weight we are placing on it in this market review. We consider it sufficient to demonstrate that there is a possibility that Mastercard's and Visa's margins for the relevant UK operations may be higher than what would be expected in competitive markets, which we have set out in this annex.

c. That we also had European and global accounting data from Mastercard and Visa available to us, which allowed us to derive a range for Mastercard's and Visa's profitability in the relevant UK operations.

The comparator benchmark margin analysis

7.12 We have not been able to identify companies that have operations that are very similar to the relevant UK operations of Mastercard and Visa (ideal comparators). This is not necessarily unexpected, given the high market share of Mastercard and Visa in the UK.

7.13 Consequently, we base our comparator analysis on companies:

a. whose operations share key features with Mastercard's and Visa's relevant UK operations, but may also differ in certain aspects (sufficiently similar comparators)

b. who operate in competitive markets, i.e. a market where there is limited market concentration, and where there is an absence of other features indicating a lack of effective competitive constraints

7.14 We identified the following benchmark comparators:

a. domestic and international non-card-based payments: PayPal

b. domestic only card-based payments: eftpos

c. international non-card-based payments: OFX

7.15 We have not identified any other suitable comparators that have more similar operations to Mastercard's and Visa's relevant UK operations and that operate in competitive markets.

528 Another factor is that Visa's fully loaded UK P&L accounts initially did not include [✂]. However, Visa has now provided fully loaded UK P&L accounts including this information. We note that the figure for the lower end of the range in the previous paragraph does not include [✂].

7.16 We consider that each comparator is sufficiently similar to Mastercard's and Visa's relevant UK operations to serve as benchmark comparators and to help us identify a range for the comparator benchmark EBIT margin that Mastercard and Visa could expect to earn for the relevant UK operations in a competitive market.

7.17 The benchmark comparators are all somewhat different to each other in the way they overlap with the relevant UK operations of Mastercard and Visa. Between them they overlap significantly with the services offered by Mastercard and Visa in the relevant UK operations. Consequently, we consider that looking at the benchmark comparators is informative for the margins that Mastercard and Visa could likely achieve in a competitive market for the relevant UK operations.

7.18 The benchmark comparators have on average EBIT margins in a range from 12% to 18% in the period of 2018–2023.

7.19 We also performed a cross-check which is broadly consistent with these findings with:

a. margins of FTSE 100 companies, with a similar capital employed intensity as Mastercard/Visa having EBIT margins in a range from ca 17% to 26% on average[529]

b. EBIT margins of companies with a low capital employed intensity generally being less than around 20%

7.20 We note, however, that the cross check is based on published accounting data and as such is based on accounting valuations rather than economic valuations of, in particular, the asset values used when calculating capital employed intensity. As such the results should be considered directional and may differ when undertaking a full economic assessment.

Comparing Mastercard's and Visa's margins to the benchmark

7.21 Table 52 below shows our estimate of the range for Mastercard's and Visa's EBIT margins in the relevant UK operations and the EBIT margins of the benchmark comparators.

a. It shows that the average EBIT margins of all of the benchmark comparators is substantially below the upper end of the EBIT margin range for Mastercard's and Visa's relevant UK operations.

b. For Mastercard the upper end of the range is around three times as high as the average margin of the highest benchmark comparator.

c. For Visa the upper end of the range is more than three times as high as the average margin of the highest benchmark comparator.

d. The low end of the range for Mastercard's margins for the relevant UK operations [✂] of the margin range for the comparators.[530]

e. The low end of the range for Visa's relevant UK operations, [✂] the highest average margin of the benchmark comparators.

529 We note that the upper end of the range is based on the relatively high capital intensity in Visa's global accounts, which is likely, to a large extent, due to acquisition related intangible assets.

530 We note that this gap could be larger if 2018 margins for Mastercard's relevant UK operations were included in the average margins based on the fully loaded UK P&L accounts.

Table 52: Comparator benchmark margins 2018–2023

Company	EBIT margin (min)	EBIT margin (simple average)	EBIT margin (max)
eftpos	5%	12%	21%
OFX	13%	18%	21%
PayPal	14%	16%	18%
Mastercard fully loaded UK P&L accounts (2019–2023)	[✂]%	[✂]%	[✂]%
Mastercard global	49%	54%	57%
Visa fully loaded UK P&L accounts	[✂]%	[✂]%	[✂]%
Visa global	63%	64%	66%

Notes: eftpos margins are based on data from 2018 – 2021 as data for 2022 and 2023 is not available. OFX margins are based on a financial year end in March (e.g. 2022 data is based on March 2023 accounts).
Source: eftpos, OFX, PayPal financial statements, Mastercard and Visa global financial statements, Mastercard and Visa fully loaded UK P&Ls.

Our interpretation of the results

7.22 For the periods considered, there is a sizeable gap between the EBIT margins for the benchmark comparators of 12–18% and the upper end of the range for the margins of Mastercard's relevant UK operations of 54%. [✂]. This would indicate that Mastercard could be earning margins that are higher than would be expected in competitive markets.

7.23 There is also 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 [✂]%[531] to 64%. [✂]. This would indicate that Visa's margins are higher than would be expected in competitive markets.

7.24 We recognise that in our approach to identifying the range of the margins of Mastercard and Visa we have used proxies (i.e., the global and European accounts).

7.25 Further, there is no ideal comparator for Mastercard and Visa' relevant UK operations. The selection of the chosen comparators is therefore based on our regulatory judgement and the exercise of our regulatory discretion. We consider that we have been prudent and careful in exercising our regulatory discretion, especially considering that we have also undertaken a cross-check of the results of the benchmark margin analysis.

7.26 We have taken this into account when considering the amount of weight we place on the results from the benchmark margin analysis in the conclusions set out in this annex and our final report, including whether to undertake a ROCE based analysis within this market review. The decision not to undertake a ROCE based analysis as part of this market review considered carefully the potential benefits of obtaining a more robust estimate of Mastercard's and Visa's UK profitability within this market review when set against the potential detriment of any possible delay of subsequent stages to this market review.

7.27 We further note that because Mastercard and Visa do not report financial performance for their respective UK businesses, and because there are large discrepancies in the schemes' financial performances across the datasets we have looked at, we are currently not in a position to effectively monitor the schemes' financial performance in the UK.

531 Or [✂]% when using the fully loaded UK P&L accounts [✂] in the period of 2021–2023.

Annex A – Benchmark comparator margins

Table 53: Comparator benchmark margins by year

EBIT Margins	2018	2019	2020	2021	2022	2023	Average[532] (2018–23)
eftpos[533,534]	5%	11%	21%	10%	N/A	N/A	12%
eftpos (netting P&I[535] against revenue)	8%	15%	28%	13%	N/A	N/A	16%
OFX[536]	17%	19%	13%	21%	19%	19%	18%
OFX (netting promotional expenses against revenue)	20%	21%	15%	24%	21%	21%	20%
PayPal	14%	15%	15%	17%	14%	18%	16%
PayPal (excluding transaction costs)	22%	25%	24%	28%	25%	33%	26%

532 The averages are simple averages of the individual annual margins, where data was available.

533 eftpos is now part of Australian Payments Plus Ltd, following a merger approved in September 2021: eftpos Australia (auspayplus.com.au). Consequently eftpos margins are based on data from 2018–2021 as data for 2022 and 2023 is not available.

534 eftpos financial year end is June. The figures shown for each calendar year in Table 53 are the financial results to June in each calendar year.

535 Product and implementation expenses.

536 OFX financial year end is in March – given that the majority of the financial year is in the previous calendar year we have calculated margins for OFX using the annual report for 2023 to inform figures for calendar year 2022 (and adopted the same approach for prior years).

Annex B – FTSE 100 companies included in the cross-check

Table 54: FTSE 100 Companies included in cross-check (unless stated otherwise, figures are averages over the period of 2018 to 2023)

Count	Company	Average capital employed intensity[537]	Average EBIT Margin
1	Rightmove PLC	0.3	74%
2	Auto Trader Group PLC	1.3	65%
3	Hargreaves Lansdown PLC	1.0	59%
4	British American Tobacco PLC	5.1	43%
5	London Stock Exchange Group PLC	3.6	42%
6	Imperial Brands PLC	2.2	41%
7	Rio Tinto PLC	1.8	39%
8	InterContinental Hotels Group PLC	1.7	39%
9	United Utilities Group PLC	7.1	34%
10	Schroders PLC	2.1	34%
12	RELX PLC	1.2	31%
13	Diageo PLC	2.0	31%
14	Severn Trent PLC	5.3	28%
15	AstraZeneca PLC	1.9	28%
16	Anglo American PLC	1.6	28%
17	GSK PLC	1.4	27%
18	Experian PLC	1.3	27%
19	Airtel Africa PLC	1.6	27%
20	Persimmon PLC	1.0	27%
21	Ashtead Group PLC [Data missing for 2021]	1.8	27%
22	Informa PLC	3.9	26%
23	Reckitt Benckiser Group PLC	1.9	25%
24	National Grid PLC	4.0	24%
25	Berkeley Group Holdings PLC	1.6	24%

537 Capital employed intensity is calculated by dividing net assets (i.e. total assets minus current liabilities) the net revenues.

Count	Company	Average capital employed intensity[537]	Average EBIT Margin
26	Croda International PLC	1.4	24%
27	Spirax-Sarco Engineering PLC	1.2	23%
28	Haleon PLC [Data missing for 2018, 2019 and 2020]	3.0	22%
29	Hikma Pharmaceuticals PLC	1.3	23%
30	Sage Group PLC/The	1.2	22%
31	SSE PLC [Data missing for 2018 and 2019]	2.3	21%
32	Fresnillo PLC	2.1	21%
33	ConvaTec Group PLC	1.7	21%
34	Halma PLC	1.2	21%
35	Smith & Nephew PLC	1.6	20%
36	Taylor Wimpey PLC	1.2	19%
37	Barratt Redrow PLC	1.3	18%
38	Diploma PLC	1.0	18%
39	Unilever PLC	0.9	18%
40	Intertek Group PLC	0.7	17%
41	Next PLC	0.6	17%
42	BT Group PLC	1.8	16%
43	Smiths Group PLC	1.5	16%
44	Howden Joinery Group PLC	0.6	16%
45	Mondi PLC	0.9	15%
46	IMI PLC	0.7	15%
47	Entain PLC	1.6	15%
48	Endeavour Mining PLC	2.1	15%
49	Vistry Group PLC [Data missing for 2022]	1.3	14%
50	Weir Group PLC	1.2	14%
51	Rentokil Initial PLC	1.2	14%
52	WPP PLC	1.1	13%
53	Pearson PLC	1.5	12%
54	Vodafone Group PLC	2.7	12%
55	Coca-Cola HBC AG	0.8	10%
56	BAE Systems PLC	0.9	10%
57	B&M European Value Retail SA	0.6	10%
58	DS Smith PLC	0.9	10%
59	JD Sports Fashion PLC	0.5	9%
60	Associated British Foods PLC	0.8	8%
61	Melrose Industries PLC	1.4	8%

Count	Company	Average capital employed intensity[537]	Average EBIT Margin
62	Bunzl PLC	0.4	7%
63	Kingfisher PLC	0.7	7%
64	BP PLC	0.9	9%
65	Shell PLC	1.1	8%
66	Compass Group PLC	0.4	6%
67	Marks & Spencer Group PLC	0.6	5%
68	Frasers Group PLC	0.7	5%
69	Centrica PLC	0.4	5%
70	Glencore PLC	0.4	5%
71	Tesco PLC	0.5	4%
72	DCC PLC	0.3	3%
73	J Sainsbury PLC	0.5	3%
74	Rolls-Royce Holdings PLC	1.2	2%
74	Whitbread PLC	5.2	1%
75	International Consolidated Airlines Group SA	1.4	-8%
76	easyJet PLC	1.7	-12%

PUB REF: MR22/1.10 Annex 10

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