Appendix V: The impact of CSAs on competition, a qualitative analysis

Introduction

V.1 This appendix provides details on our analysis of the proportion of customer demand covered by the commitment and the length of CSDs. Despite not featuring directly in our quantitative analysis, these are also relevant factors which might exacerbate the impact of CSDs on competition.

Proportion of customer demand covered by the commitment

Cloud providers' views

V.2 Microsoft said that:

(a) from its own interactions with customers, it does not recognise Ofcom's concern regarding larger cloud providers using commercial pressure to influence their customers to increase their commitments over subsequent contract negotiations. [✂];[1] and

(b) committed spend agreements cover only part of a customer's overall cloud demand. It submitted that [✂] – and that customers have substantial excess demand and flexibility to contract with other cloud providers.[2]

Our assessment

V.3 First, we looked at the ratio of total eligible spend (ie spend that counts towards the CSD commitment) to total CSD commitment for all completed AWS and Microsoft CSDs in the 2017-2023 period.[3]

(a) CSDs with a ratio smaller than one are those whereby the customer has not met its commitment(s) on AWS and/or Microsoft within the relevant period. CSDs for which this ratio is greater than one are those whereby the customer has exceeded its commitment(s). For CSDs with a ratio greater than or equal to one, the closer this ratio is to one, the greater the proportion of that

[1] Microsoft's submission to the CMA [✂].
[2] Microsoft's Response to the competitive landscape, committed spend agreements and egress fees working papers, paragraph 54.
[3] AWS' response to the CMA's information request [✂]; Microsoft's response to the CMA's information request [✂].

customer's total demand on AWS and/or Microsoft that is covered by its commitment(s).

(b) This analysis accounts for customers potentially having CSDs with both of AWS and Microsoft.[4] Because of data limitations, we did not account for CSDs from other cloud providers. Nevertheless, given AWS' and Microsoft's position in the market as compared to the other cloud providers, we consider the impact on the results of this omission not to be significant.

(c) The distribution of the spend/commitment ratios is similar across AWS and Microsoft CSDs in our data set.

   (i) The [✂] of AWS' CSD customers exceeded their commitment, [✂]. Within this group, [✂] customers exceeded their commitment by a large amount. [✂], there is a [✂] proportion of customers for which the commitment covered a large portion of the customer demand, ie [✂]. There is also a [✂] portion of CSD customers for which the commitment exceeded customer demand on AWS, [✂].

   (ii) The [✂] of Microsoft's CSD customers exceeded their commitment, [✂]. Within this group, [✂] customers exceeded their commitment by a large amount. [✂], there is a [✂] proportion of customers for which the commitment covered a large portion of the customer demand, ie [✂]. There is also a [✂] portion of CSD customers for which the commitment exceeded customer demand on Microsoft, [✂].

(d) However, we note the following limitations to the Microsoft data. Microsoft's data set contained a large number of missing values for total commitment, for eligible spend, for agreed length of commitment and, to a minor extent, discount rate.[5] Consequently, it was only possible to compute a spend/commitment ratio for approximately half of CSD contracts completed by September 2023. This may affect the shape of the distribution of the spend/commitment ratios, and we cannot estimate the exact impact of the missing data. The analysis for Microsoft should therefore be considered in that light.

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[4] For example, an AWS customer with a commitment with AWS of £1 million and total eligible spend on AWS of £1 million would have a ratio of commitment to eligible spend on AWS equal to 1. In this case, this customer's commitment equals its demand from AWS. However, if the same customer also had a commitment with Microsoft of £1 million and total eligible spend on Microsoft of £1.5 million, that customer's total demand across Microsoft and AWS would be £2.5 million against a total commitment across AWS and Microsoft of £2 million. This means that the customer would have a ratio of commitment to eligible spend across AWS and Microsoft of 1.25 (2.5/2).

[5] Total commitment figures were missing on [✂] out of [✂] total observations in the original data set. Additionally, as noted in Microsoft's response to the CMA's information request [✂], eligible spend is not systematically recorded in Microsoft's data systems, therefore such information in many cases had to be retrieved through manual checks. Agreed discount rate and length of CSD contract were also missing on several observations.

V.4 Second, the Jigsaw report suggests that some customers are negatively affected by having a commitment which is too high relative to their demand, ie customers who have a low spend/commitment ratio. In particular, some customers described how their companies use certain cloud services, not because there is a business or an IT need, but for the sole purpose of meeting committed spend targets. Other customers reported migrating more workloads than they might otherwise need to, simply in order to meet committed spend targets.[6]

V.5 Third, we reviewed internal documents produced by AWS and Microsoft in relation to negotiations of CSDs with 30 customers (15 per cloud provider).

V.6 Based on the AWS documents we have reviewed, we have seen evidence that:

(a) [✂].[7] [✂].

(b) AWS appears to have estimates of the total cloud spend of some customers.[8] [✂].[9]

(c) We also found one example where AWS has referred to some incentives only remaining in place if the customer [✂] on AWS.[10]

V.7 Based on the Microsoft documents we have reviewed, we have seen evidence that Microsoft expects [✂]. However, there does not seem to be a default growth rate requirement.[11]

Length of CSDs

V.8 The longer the contract length, the longer the period when customers might be less inclined to consider rivals for allocating new demand to. We note that even if CSD contract lengths are relatively short, they can still have a similar impact to longer ones – for example if those CSDs tend to be renewed such that customers have consecutive CSDs covering a similar length of time.

V.9 We looked at the distribution of contract lengths for AWS and Microsoft CSDs over time.[12] Specifically we have considered the average, median, minimum and maximum contract lengths for AWS CSDs over the period 2017-2023 by year of contract commencement date; and for Microsoft the average, median, minimum

[6] Cloud Services Market Investigation Qualitative Customer Research conducted by Jigsaw (2024), paragraphs 6.2.8-6.2.9.
[7] AWS' response to the CMA's information request [✂].
[8] AWS' response to the CMA's information request [✂].
[9] Transcript of hearing with AWS [✂].
[10] AWS' response to the CMA's information request [✂].
[11] Microsoft's response to the CMA's information request [✂].
[12] AWS' response to the CMA's information request [✂]; Microsoft's response to the CMA's information request [✂].

and maximum contract lengths for Microsoft CSDs over the period 2018-2023 by year of contract commencement date.

V.10 Our analysis shows that:

(a) AWS CSD contracts vary significantly in length. They range from [0-2] to [6-8] years; and

(b) Microsoft CSD contracts also vary significantly in length. They range from [0-2] to [8-10] years.