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Glossary

Appendix A: Terms of reference and conduct of the inquiry

Terms of reference

1. On 19 May 2017, the CMA referred the anticipated acquisition by Just Eat plc of Hungryhouse Holdings Limited for an in-depth phase 2 inquiry.

    1. In exercise of its duty under section 33(1) of the Enterprise Act 2002 (the **Act**) the Competition and Markets Authority (**CMA**) believes that it is or may be the case that:

        (a) arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation, in that:

            (i) enterprises carried on by, or under the control of, Just Eat plc will cease to be distinct from enterprises carried on by, or under the control of, Hungryhouse Holdings Limited**;** and

            (ii) the condition specified in section 23(2)(b) of the Act is satisfied; and

        (b) the creation of that situation may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom for goods or services, including in the supply of online takeaway ordering aggregation platforms.

    2. Therefore, in exercise of its duty under section 33(1) of the Act, the CMA hereby makes a reference to its chair for the constitution of a group under Schedule 4 to the Enterprise and Regulatory Reform Act 2013 in order that the group may investigate and report, within a period ending on 2 November 2017, on the following questions in accordance with section 36(1) of the Act:

        (a) whether arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and

        (b) if so, whether the creation of that situation may be expected to result in a substantial lessening of competition within any market or markets in the United Kingdom for goods or services.

Kate Collyer
Deputy Chief Economic Adviser
Competition and Markets Authority
19 May 2017

Conduct of the inquiry

2. We published biographies of the members of the inquiry group conducting the phase 2 inquiry on 22 May 2017 and the administrative timetable for the inquiry was published on the inquiry case page on 9 June 2017.

3. On 31 May 2017, we sent a notice under s.109 of the Enterprise Act 2002 to Just Eat and Hungryhouse (the "Original Notice") requesting relevant documents and information. We received a large number of documents from the Parties in response to the Original Notice on 12 June 2017 and 19 June 2017.

4. On 9 June 2017, we published an issues statement on the inquiry case page setting out the areas of concern on which the inquiry would focus.

5. On 9 June 2017, members of the inquiry group, accompanied by staff, attended a presentation by Just Eat at the offices of Just Eat. Members of the inquiry group, accompanied by staff, also attended a presentation by Hungryhouse at the CMA's office at Victoria House on the same day.

6. We invited various third parties to comment on the merger. These included competitors and customers. Evidence was also obtained from third parties through hearings, telephone contact and written information requests. A summary of evidence from interviews and hearings with third parties is published on the inquiry case page.

7. We received written evidence from the Parties and non-confidential versions of their main submissions (ie their merger notice, response to the phase 1 decision and response to the issues statement) are on the inquiry case page. We also held separate hearings with Hungryhouse and Just Eat on 31 July 2017 and 1 August 2017 respectively.

8. Prior to the main party hearing, we sent Just Eat and Hungryhouse some working papers setting out some of the evidence and analysis we were considering. We also sent them an annotated issues statement, indicating our emerging thinking and inviting them to comment.

9. We issued further s.109 notices on 24 July 2017 (the "Second Notice") and on 11 August 2017 (the "Third Notice") to Hungryhouse to request additional documents and information. Hungryhouse provided 216 documents on 4 August 2017 in response to the Second Notice and 172 documents on 21 August 2017 in response to the Third Notice.

10. On 6 September 2017 and 8 September 2017, s.109 notices (the "Fourth Notice") were issued to Just Eat and Hungryhouse. We received 1,497

documents from Hungryhouse and 2,683 documents from Just Eat in response to the Fourth Notice on 11 September 2017.

11. A non-confidential version of the provisional findings report has been placed on the inquiry case page.

12. We would like to thank all those who have assisted us in our inquiry so far.

Appendix B: Delivery Hero and Hungryhouse group structure and financial performance

Introduction

1. This appendix sets out:

   (a) the structure of the companies comprising the acquired business;

   (b) the historical financial performance of Hungryhouse since its acquisition as set out in its statutory and management accounts;

   (c) financial forecasts; and

   (d) Delivery Hero's shareholdings and financial performance in 2015 and 2016.

The Hungryhouse group of companies

Structure of Hungryhouse

2. Under the SPA, Just Eat will acquire three related companies: Hungryhouse Holdings Limited, Hungryhouse.com Ltd and Hungryhouse GmbH. Hungryhouse.com Ltd and Hungryhouse GmbH are wholly owned subsidiaries of Hungryhouse Holdings Limited which is itself a wholly owned subsidiary of Delivery Hero GmbH (now Delivery Hero AG)[1]. The companies and their respective activities are set out in below Table 1.

Table 1: Hungryhouse companies

Company	*Activity*	*Description*
Hungryhouse Holdings Limited	UK holding company	Intermediary holding company (Delivery Hero group)
Hungryhouse.com Ltd	UK trading company	Holds all restaurant contracts. External revenue booked, marketing spend incurred. [✂]
Hungryhouse GmbH	Service entity	Based in Berlin [✂]

Source: Hungryhouse.

[1] Delivery Hero AG was listed on the Frankfurt Stock Exchange on 30 June 2017.

3. Figure 1 shows the structure of the Hungryhouse group of companies and the services received and provided both within these companies and to companies within the wider Delivery Hero group. [✂]

Figure 1: Services provided by Hungryhouse companies

[✂]

Source: Hungryhouse.

Financial performance of companies within Hungryhouse

Public accounting information

4. The following section sets out the publicly available accounting information for the Hungryhouse companies covering the four-year period ended 31 December 2016.[2] Hungryhouse does not produce consolidated accounts. Hungryhouse GmbH accounts are unaudited.

Hungryhouse Holdings Limited

5. Table 2 sets out the financial results for Hungryhouse Holdings Limited. The only significant financial entry in the four-year period is the impairment charge of £1.8 million in 2016. This relates to the write off of an intercompany debt from Hungryhouse.com Ltd.

Table 2: Hungryhouse Holdings Limited summary P&L

	£'000			
	Year ended 31 December			
	2013	*2014*	*2015*	*2016*
Summary P&L				
Administrative expenses	–15	–8	–17	–3
Operating loss	–15	–8	–17	–3
Interest	10	2	–7	
Impairment charges			–21	–1,800
Loss for the financial year	–5	–6	–45	–1,803
Shareholder funds	1,855	1,848	1,803	1

Source: statutory accounts.

[2] Delivery Hero acquired Hungryhouse in January 2013.

Hungryhouse.com Ltd

6. Table 3 sets out the financial results for Hungryhouse.com Ltd, the UK trading entity. Figure 2 shows a graphical representation of the key elements of this financial performance. This shows that:

   (a) Revenue and gross margin have increased year on year

   (b) Hungryhouse.com Ltd has been loss making throughout the period with the largest loss incurred in 2015.

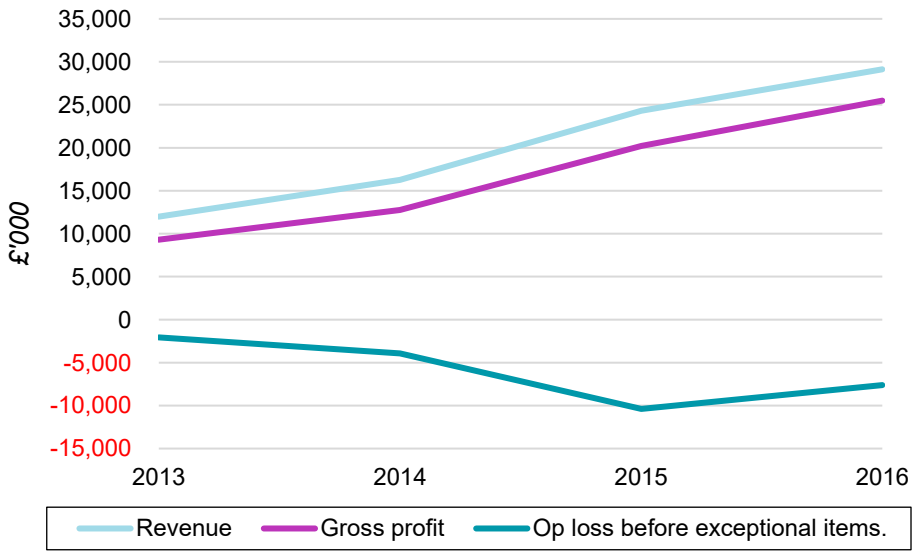
7. The detail underlying the financial performance is assessed under the review of management accounts (paragraphs 13 to 22) below.

Table 3: Hungryhouse.com Ltd summary P&L

£'000	*Year ended 31 December*			
Summary P&L	*2013*	*2014*	*2015*	*2016*
Revenue	11,990	16,267	24,291	29,129
Cost of sales	-2,684	-3,489	-4,066	-3,644
Gross profit	9,306	12,778	20,225	25,485
	77.6%	*78.6%*	*83.3%*	*87.5%*
Admin expenses	-11,555	-16,966	-31,298	-33,257
Other op. income	184	270	688	156
Op loss before exceptional items	-2,065	-3,918	-10,385	-7,616
Exceptional items*			-2,486	
Operating loss	-2,065	-3,918	-12,871	-7,616
Loss for financial year	-2,094	-3,952	-13,003	-8,018

Source: Statutory accounts.
* Write off of a balance owed by Valk Fleet (UK) Limited following company entering into liquidation.

Figure 2: Hungryhouse.com Ltd financial performance 2013 to 2016



Source: CMA.

8. Table 4 sets out key figures from the balance sheet for the four-year period. It shows first, that losses are being funded through intercompany debt and

second, that the company as a result of the losses has a significant and growing shareholder deficit. The result of this is that the auditor in each of the four years included a statement on going concern within its report.

Table 4 Hungryhouse.com Ltd balance sheet extracts

£'000	*Year ended 31 December*			
Balance sheet extract	*2013*	*2014*	*2015*	*2016*
Cash at bank	1,770	1,794	1,947	3,627
Intercompany (net)	-5,730	-7,575	-18,786	-28,182
Shareholder deficit	-2,094	-9,367	-22,371	-30,389

Source: Statutory accounts.

9. In each of the four years since its acquisition by Delivery Hero, Hungryhouse.com Ltd has had a statement on its status as a going concern in its Auditor's report. In each report the auditor has stated that Hungryhouse.com Ltd's ability to continue as a going concern is reliant on the continued financial support of its ultimate parent company, Delivery Hero.

10. For the year ended 31 December 2016 the statutory accounts also included in note 1.9 to the statutory accounts that:

> if the proposed sale to Just Eat does not complete, the company will remain dependent for its working capital on funds provided to it by Delivery Hero GmbH… Delivery Hero GmbH has indicated that, so long as it remains the ultimate parent company, for at least 12 months from the date of approval of these financial statements [23 May 2017], it will continue to make available such funds as are needed by the company.

It also states that whilst there is no certainty that parent company support will continue the directors "have no reason to believe that it will not do so."

11. In addition, note 1.9 states:

> the continuation as a going concern of the Parent Company, the subsidiaries and, therefore, the Group is dependent on the implementation of further measures by the parent company's shareholders and other potential investors to secure capital and liquidity.

Hungryhouse GmbH

12. Table 5 sets out the financial performance for Hungryhouse GmbH for the four years ended 31 December 2016. The company acts as a service entity for Hungryhouse.com Ltd. [✂].

Table 5: Hungryhouse GmbH P&L

Profit & loss	*Year ended 31 December*			
€'000	*2013*	*2014*	*2015*	*2016*
Turnover	[✂]	[✂]	[✂]	[✂]
Other Income	[✂]	[✂]	[✂]	[✂]
Employment costs	[✂]	[✂]	[✂]	[✂]
Depreciation	[✂]	[✂]	[✂]	[✂]
Other expenses	[✂]	[✂]	[✂]	[✂]
Interest	[✂]	[✂]	[✂]	[✂]
Net profit before taxes	[✂]	[✂]	[✂]	[✂]
Taxes	[✂]	[✂]	[✂]	[✂]
Profit	[✂]	[✂]	[✂]	[✂]

Source: Hungryhouse GmbH full year accounts.

Hungryhouse.com Ltd management account review

13. The following section looks in detail at the financial performance of Hungryhouse.com Ltd (the UK trading entity) through a review of its management accounts for the four years ended 31 December 2016. This review covers both [✂].

14. Before looking at management accounts in detail Table 6 shows the reconciliation between management accounts and the statutory account disclosed loss for the financial year in each of the four periods.

Table 6: Reconciliation of statutory accounts to management accounts

£'000	*Year ended 31 December*			
	2013	*2014*	*2015*	*2016*
Revenue	[✂]	[✂]	[✂]	[✂]
cost of sales	[✂]	[✂]	[✂]	[✂]
gross profit	[✂]	[✂]	[✂]	[✂]
Costs				
administrative expenses	[✂]	[✂]	[✂]	[✂]
shared services	[✂]	[✂]	[✂]	[✂]
depreciation & amortisation	[✂]	[✂]	[✂]	[✂]
net finance cost	[✂]	[✂]	[✂]	[✂]
currency translation	[✂]	[✂]	[✂]	[✂]
	[✂]	[✂]	[✂]	[✂]
Loss per management accounts	[✂]	[✂]	[✂]	[✂]
loss per statutory accounts	[✂]	[✂]	[✂]	[✂]

Source: management and statutory accounts.
* Valk Fleet write off

Revenue

15. Table 7 shows the split of revenue over each of the four years. Overall revenue has [✂] between 2013 and 2016 [✂]. Commission revenue has [✂].

16. The change in the percentage of the total revenue each component makes up is shown in Table 8. The figures show [✂]. This is to be expected as [✂].

Table 7: Hungryhouse.com Ltd revenue split

	Year ended 31 December					
Revenue £'000	*2013*	*2014*	*2015*	*2016*	*Change 2013 -16 %*	*CAGR %*
Card Fee User	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Commission	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other*	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Premium Fee	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Start Package	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Subscription Fee	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Revenue Statutory accounts	[✂]	[✂]	[✂]	[✂]		

Source: management accounts.
*includes other fees and provision releases

Table 8: Percentage revenue split 2013 compared with 2016

Revenue % of total	*2013*	*2016*
Card Fee User	[✂]	[✂]
Commission	[✂]	[✂]
Other Fees	[✂]	[✂]
Premium Fee	[✂]	[✂]
Start Package	[✂]	[✂]
Subscription Fee	[✂]	[✂]

Source: CMA from management accounts

Cost of sales and gross margin

17. Table 9 shows the cost elements that make up cost of sales and gross margin. Cost of sales largely comprises [✂]. The gross margin is [✂]% in all years. The 2015 margin is [✂]. This is in line with the 2014 and 2016 results.

Table 9: Hungryhouse.com Ltd cost of sales and gross margin

	Year ended 31 December			
£'000				
Cost of sales	*2013*	*2014*	*2015*	*2016*
Call Centre	[✂]	[✂]	[✂]	[✂]
Other Admin	[✂]	[✂]	[✂]	[✂]
Other Cost of Sales	[✂]	[✂]	[✂]	[✂]
Payment fee	[✂]	[✂]	[✂]	[✂]
Sales - non-personnel	[✂]	[✂]	[✂]	[✂]
Server	[✂]	[✂]	[✂]	[✂]
Total boxes	[✂]	[✂]	[✂]	[✂]
Transaction costs	[✂]	[✂]	[✂]	[✂]
	[✂]	[✂]	[✂]	[✂]
Gross profit	[✂]	[✂]	[✂]	[✂]
Gross margin	[✂]	[✂]	[✂]	[✂]

Source: management accounts.

- *Administrative expenses*

18. Table 10 sets out the administrative expenses for Hungryhouse.com Ltd for each of the four years. The changes in the cost categories over the period are shown graphically in Figure 3.

19. [✂].

Table 10: Hungryhouse.com Ltd administrative expenses

£'000

	2013	*2014*	*2015*	*2016*
Customer acquisition costs	[✂]	[✂]	[✂]	[✂]
Restaurant acquisition & support	[✂]	[✂]	[✂]	[✂]
General & admin	[✂]	[✂]	[✂]	[✂]
IT & Product	[✂]	[✂]	[✂]	[✂]
Marketing	[✂]	[✂]	[✂]	[✂]
	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
	[✂]	[✂]	[✂]	[✂]
Administrative expenses per statutory accounts	[✂]	[✂]	[✂]	[✂]

Source: management accounts.

Figure 3: Hungryhouse.com Ltd key administrative expenses (Graph)

[✂]

Source: management accounts.

- *Customer acquisition costs*

20. Customer acquisition costs make up between [✂]% and [✂]% of total administrative costs in the period (see Table 11)

Table 11: Hungryhouse.com Ltd customer acquisition costs as a percentage of total administrative costs

£'000	*Year ended 31 December*			
	2013	*2014*	*2015*	*2016*
Customer acquisition costs	[✂]	[✂]	[✂]	[✂]
Other administrative costs	[✂]	[✂]	[✂]	[✂]
	[✂]	[✂]	[✂]	[✂]
Customer acquisition cost %	[✂]	[✂]	[✂]	[✂]

Source: management accounts.

21. Table 12 sets out the sub-cost categories within customer acquisition. [✂].

Table 12: Hungryhouse.com Ltd customer acquisition costs

£'000

	2013	*2014*	*2015*	*2016*
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
	[✂]	[✂]	[✂]	[✂]

Source: management accounts.

Figure 4: Hungryhouse.com Ltd customer acquisition costs

[✂]

Source: management accounts.

- *Other administrative costs*

22. [✂].

Forecast financial performance

23. Hungryhouse's business plan for 2017-19 shows [✂] (see Table 13 and

24. Figure 5).

Table 13: Hungryhouse summary 2017-19 business plan

	Year ended 31 December			
	*Actual***	*Forecast*		
£'000	*2016*	*2017*	*2018*	*2019*
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]

Source: Hungryhouse.
[✂]

Figure 5: Hungryhouse budget/forecast EBITDA September 2016 - December 2019

[✂]

Source: Hungryhouse.

25. Hungryhouse submitted that the business plan should be read in light of the context in which it was prepared. The business plan is:

(a) [✂]

(b) [✂]

(c) [✂]

26. Given this context, Hungryhouse submitted that [✂].

27. [✂]

Hungryhouse financial forecasts 2017-2019

28. [✂].

29. [✂]

Delivery Hero

Shareholdings

30. Table 14 shows shareholdings by ultimate shareholder as disclosed in the IPO prospectus. It includes the shareholding acquired by Naspers Limited on 12 June 2017. Naspers acquired 42,967 newly issued shares for €301 million and €86 million acquiring 12,600 existing shares[3] at a valuation of around €3.55 billion.[4]

Table 14: Shareholdings in IPO prospectus (Ultimate Shareholder, Indirect ownership), pre IPO

	Percentage
Zerena GmbH Global Online Takeaway Group (100% owned by Rocket Internet)	35.7
*Naspers Limited**	*10.9*
Christian Leone Luxor Capital Partners Funds	10.0
Jeff Horing DHH Main Insight and others	8.4
Lukasz Gadowski Luktev GmbH, Team Europe & others	7.1
Gavril Yushvaev**	6.0
	72.1
Other**	21.9
	100.00

Source: Delivery Hero IPO prospectus pages S-6 & S-7.
* Invested 12 May 2017.
** includes Gavril Yushvaev – not separately disclosed in main IPO table – included as footnote.

[3] Naspers acquired from [✂].
[4] On 28th September 2017 Rocket Internet agreed to sell an additional 22.4 million shares in Delivery Hero to Naspers Limited reducing its overall shareholding in Delivery Hero to around 13%. Naspers Limited shareholding in Delivery Hero will increase to 23.9%. This transaction is subject to regulatory approval with the parties expecting that it will close in the first quarter of 2018.

Financial performance

31. Delivery Hero's consolidated profit and loss is shown in Table 15 below. It shows large losses (relative to turnover) in both 2016 and 2015. These losses increased Delivery Hero's accumulated loss which at the end of 2016 was reported as minus €588 million.[5] Delivery Hero's group annual report make references to the need to obtain additional capital and equity to continue as a going concern.

Table 15: Delivery Hero consolidated profit and loss 2016 and 2015

	Year ended 31 December		
€'m	*2016**	*2015***	*2015****
Revenue (continuing operations)	297.0	166.2	199.5
Cost of sales	(84.3)	(29.3)	(29.6)
Gross profit	212.7	136.8	169.9
Administrative expenses			
Operating result	(159.8)	(198.8)	(217.9)
Interest			
Loss before tax	(202.3)	(246.6)	(254.8)
Tax	11.0	2.2	1.8
Loss after tax (continuing operations)	(191.3)	(244.5)	
Loss from discontinued operations	(3.6)	(8.5)	
Loss	(194.9)	(252.9)	(252.9)

Source: IPO prospectus page S-9.
*Does not include Emerging Markets Online Food Delivery Holding Sarl.
acquired 10 December 2016.
** Hungryhouse reclassified in 2015 as a discontinued operation as a result of the sale agreed in December 2016.
*** 2015 restated with Hungryhouse included in continued operations results.

[5] Annual report page 49, Retained earnings and other reserves.

Appendix C: Documentary evidence relating to the counterfactual

1. This appendix sets out the evidence provided by Hungryhouse in respect of its counterfactual submissions, and our review of the relevant evidence available to us.

2. First, we set out the submissions from Hungryhouse relating to the potential to restructure the business in response to the financial difficulties it was experiencing in the run up to the sale. We then set out Hungryhouse's submissions in relation to Delivery Hero's sale approval process and the rationale for the sale and the decision-making process. Finally, we set out our evaluation of Hungryhouse's counterfactual submissions and other evidence provided to us during the course of our inquiry and what this means in terms of the most likely counterfactual for our assessment of the effect of the merger on competition.

Restructuring

Cost sanitisation programme

3. Hungryhouse submitted that in late 2015/ early 2016 Delivery Hero initiated a cost reduction programme across the Delivery Hero Group. The UK part of this programme started in January 2016. It targeted [✂] savings [✂].

4. An internal presentation on the cost reduction programme noted that a number of initiatives had reduced costs. There were however challenges with the programme, [✂].

5. The cost reduction programme produced a cost saving of [✂]%, compared with the target of [✂]% (see Table 1). [✂]

Table 1: Cost reduction programme effect

			€'000	*%*
	November 2015 Actuals	*August 2016 Actuals*	*Variance*	*Variance*
P&L line				
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
Total	[✂]	[✂]	[✂]	[✂]

Source: Hungryhouse.

6. We note that whilst a reduction of Hungryhouse's cost base would theoretically make it more efficient and reduce its losses, a reduction of the costs chosen would not change it from a loss making to a profitable business. [✂]

Differentiation strategies

Restaurants

7. Hungryhouse's 2016 strategy to differentiate itself from other providers of online takeaway services, from the perspective of restaurant customers, aimed to improve its offering by:

   (a) [✂]

8. Hungryhouse submitted that, overall, these strategies (that were designed to inject new life into a struggling, loss-making business) did not have the desired impact, as evidenced by Hungryhouse's financial performance.[31]

Consumers

9. Hungryhouse's management set out a plan to increase its differentiation on the consumer side. This involved:

   (a) [✂]

10. [✂]

11. The details, implementation of and our assessment of the effect on the competitive environment of the restaurant and consumer differentiation strategies set out in paragraphs 7 and 9 above are looked at in Appendix D.

Wider corporate context

Delivery Hero sale approval process

12. Hungryhouse told us that a number of strategic matters require approval from the Advisory board, which consists of [✂]. These matters include (amongst other things) [✂].

13. [✂]

Rationale for sale and the decision-making process

Hungryhouse submission

Rationale for the sale

14. Delivery Hero recorded the rationale for the sale in its Board papers as:

(a) Challenge competitive environment in the UK.

(b) Intensifying as a result of well-funded competitors using aggressive tactics to gain market share.

(c) UK continues to be unprofitable, with ongoing war of attrition requiring significant cash to compete.

15. In its submissions, Hungryhouse stated that the business' performance against key performance indicators was declining and this was the rationale for the sale (or closure, in the event of no sale). [✂]

16. Hungryhouse highlighted internal documents which, it submitted, supported the view that Hungryhouse's performance was declining. [✂].

The role and influence of Rocket Internet

17. [✂] Hungryhouse submitted that strategic decision making (such as an exit from a business) was made by the major shareholders. [✂].

18. Hungryhouse further submitted that the significant capital investments in Delivery Hero as well as the strong personnel links[1] with Rocket Internet meant that the views of Rocket Internet carried significant weight ([✂]) in determining Delivery Hero's strategy, including the decision to sell Hungryhouse. [✂].

19. The link between the two businesses has also been referenced in several media reports suggesting that Rocket Internet's success was closely linked with the performance of Delivery Hero.[2]

20. [✂].

21. [✂].

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[1] [✂]
[2] Hungryhouse's response to the CMA's Phase 1 Decision.

22. [✂].

23. Hungryhouse submitted that [✂]:

(a) Delivery Hero had concluded that it was not viable to continue supporting the business, meaning that it must either sell Hungryhouse or exit the UK market;

(b) [✂]; and

(c) It was clear that, absent the sale, Delivery Hero would have pursued the only remaining option available to it based on its group-wide and consistently implemented strategy: to shut down the business as it had done with similarly underperforming subsidiaries in other jurisdictions.

Actions in other jurisdictions

24. In relation to other jurisdictions, Hungryhouse submitted that Delivery Hero's withdrawal of financial support from it would be entirely consistent with the action Delivery Hero had taken in several other jurisdictions [✂].

25. [✂]

CMA evaluation of the evidence

26. In this section, we evaluate the evidence submitted by the Parties in relation to the rationale for the sale and its decision-making processes. In doing so we note the Guidelines state[3] 'the Authorities will be particularly interested in evidence that has not been prepared in contemplation of the merger'.

27. Therefore, we place greater weight on evidence that was generated in advance of the merger and less weight on evidence that has been prepared post the transaction being agreed.

Rationale for the sale

28. Hungryhouse submitted that the rationale for the sale was its poor financial performance.

29. Hungryhouse was a loss-making company (see Appendix B). However, [✂].

30. [✂].

[3] Merger Assessment Guidelines, paragraph 4.3.9.

31. [✂]. In this regard, we note the timeline of the proposed merger and the knock on effect this had on the expected timing of any receipt of funds. It was first discussed in early 2016 with an initial offer made on [✂]. The Heads of Terms though were only signed on [✂] - [✂] months after the initial offer - with the final agreement signed on 15 December 2016.

Was there a Board decision to close Hungryhouse in the event of no sale?

32. We do not accept the interpretation of the email exchange that took place in August 2016 (paragraph [✂] that there was an agreed course of action to close Hungryhouse if the sale to Just Eat had not occurred. Our view from reviewing the relevant email and the available evidence in the round, is that the comment regarding closure made by [✂].

33. [✂]

The role and influence of Rocket Internet

34. Hungryhouse submitted the views of Rocket Internet carried significant weight ([✂]) in determining Delivery Hero's strategy, including the decision to sell Hungryhouse. [✂]

35. [✂]:

(a) Rocket Internet was the largest single shareholder in Delivery hero. It did not though have a majority shareholding. The other major shareholders [✂] each had shareholdings of around 10% and in total their combined shareholdings were greater than the shareholding of Rocket Internet.

(b) [✂]

Was closure the only rational decision?

36. We do not agree that the evidence supports the view that closure was the only rational decision. As set out below, documentary evidence shows that:

(a) There was greater monetary value in holding Hungryhouse than closing the business.

(b) Hungryhouse was of strategic importance to Delivery Hero’s wider corporate plans.

(c) The UK was viewed as an inherently attractive market.

Valuation of Hungryhouse

37. Delivery Hero's September 2016 Board meeting pack includes a valuation range for Hungryhouse along with a risk/challenges/opportunity assessment for the business (see Table 2 below).

Table 2: Delivery Hero's Valuation calculation for Hungryhouse

Valuation approach	*Range €'m*	*Comments*
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]

Source: Delivery Hero (September Board deck).

38. [✂] These valuations contrast sharply with the reported operating loss of Hungryhouse.com Limited of £7.6 million in the year ended 31 December 2016 and the forecast of [✂].

39. [✂]

UK as a strategic asset

40. [✂]

41. Hungryhouse was described as [✂] in an email exchange that took place in May 2016. [✂]

42. [✂]

43. We also note that, on 2 August 2016, Just Eat announced that it had sold its Benelux businesses to Takeaway.com,[4] and around the same time Takeaway.com withdrew from the UK. Rocket Internet had also sold its Italian and Spanish businesses to Just Eat. The decision to sell Hungryhouse was made late August 2016. By then, Hungryhouse had lost some of its value as [✂].

44. [✂]

[4] https://techcrunch.com/2016/08/02/just-eat-offloads-netherlands-and-belgium-business-to-takeaway-com-for-e22-5m/

UK attractive sector

45. From our review of both publicly available information, including stockbroker reports and internal documents, it seems clear that the UK is a particularly attractive geography for providers of online food platforms.[5]

Alternative acquirers

46. Hungryhouse submitted that there was only one potential buyer for Hungryhouse: Just Eat. [✂].

47. Hungryhouse submitted that, for tactical reasons, Delivery Hero did not undertake a formal sale process for Hungryhouse, [✂].

48. However, we have set out above the strategic nature of the UK to Delivery Hero in its wider growth strategy, the general view of the attractiveness of the market and the valuation placed on the business by Delivery Hero. This would suggest that Hungryhouse may have been attractive to other potential purchasers.

49. Delivery Hero did not market Hungryhouse. We note that of the other UK operators: [✂]. [✂]; and Takeaway.com, who were not approached, told us that, had it been approached, it could have been interested in buying Hungryhouse.[6]

50. We also note that in previous transactions for similar businesses to Hungryhouse a range of non-industry buyers were also interested. [✂]. While a non-industry buyer is at least a theoretical possibility, we have no concrete evidence in this case that such a buyer would have been interested in purchasing Hungryhouse.

51. Within Delivery Hero itself, there is some evidence from email exchanges that its shareholders believed that there were companies other than Just Eat that could be interested in buying Hungryhouse. [✂] However Hungryhouse has submitted that [✂] was both too small and not present in the UK, ruling it out as a credible bidder.

52. We also note that a more formal and open marketing process could have been explored. [✂].

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[5] [✂]
[6] Although we note that at the time Delivery Hero was actively pursuing the possibility of buying Takeaway.com.

Strategic exit

53. The Guidelines also acknowledge that a firm can exit a market for strategic reasons, in addition to financial failure.[7] We have considered in this case whether Hungryhouse would have exited for strategic reasons, such as a change in the strategy of Delivery Hero. As set out in detail above, there is no evidence to support the view that absent the sale of Hungryhouse, Delivery Hero would have closed Hungryhouse and exited the UK market. Therefore, we conclude that strategic exit is not a likely counterfactual scenario.

[7] Merger Assessment Guidelines, paragraph 4.3.9.

Appendix D: The dimensions of competition

The dimensions of competition

Services offered

1. Online food platforms[1] offer a range of intermediary services to restaurants/restaurant chains and consumers to attract these two types of customer to their online platforms.

Restaurants and restaurant chains

2. Online food platforms comprise two groups, depending on the main business model adopted: food ordering marketplaces; and ordering and logistics specialists.

Food ordering marketplaces

3. The primary service that food ordering marketplaces provide to their restaurant customers is an ordering platform – a hardware terminal and software package that communicates orders placed by consumers on the website or app of the online platform.

4. In addition to this primary service, Just Eat and Hungryhouse both offer restaurants a range of ancillary services. These include the following services which are available to all restaurants:

   (a) access to an online store (through which restaurants can purchase products such as boxes or delivery bags);

   (b) premium/top placement (ie paid listings to appear at the top of the search engine results page or at the top of customer search results);

   (c) microsites and white-label websites;

   (d) co-branded menu printing services; and

   (e) restaurant online self-service portals (through which restaurants can access information on their performance and track orders, etc).

[1] In this appendix, 'online food platforms' refer to the main operators of food ordering market places and ordering and logistics specialists in the UK. That is Just Eat, Hungryhouse, Deliveroo, Uber (through its UberEATS service) and Amazon (through its Amazon Restaurants service).

5. In addition to this core offering common to both Parties, Just Eat provides all its restaurants with two additional services:

   (a) driver management solutions (eg software to help manage the restaurant's own driver network and order tracking); and

   (b) preferential deals and other cost-saving opportunities for the benefit of restaurants on its platform (eg delivery vehicle insurance, broadband and TV packages, food hygiene training, food standards audits, etc).

6. Just Eat indicated that these additional services were part of its 'value added product'; restaurants benefited from more than just incremental consumer order revenue when partnering with the platform. An example of a 'value added' service is the partnership Just Eat has with Booker (a food services wholesaler), whereby restaurants on its platform are offered discounts and rebates on orders placed through Booker's website. Just Eat believed that this broader proposition provided greater value to current and potential customers than the services offered by its competitors.

7. The Parties also told us that they offered microsites/white-label[2] websites to all restaurants that were listed on its website.[3]

   (a) Hungryhouse explained that these white-label websites existed outside of its platform but were connected to the Hungryhouse transaction infrastructure; orders placed by consumers through these sites were subject to Hungryhouse's commission rate. [✂].

   (b) Just Eat offered a microsite service to restaurants listed on its website, although this was as a redirect to its own platform and not an independent website. [✂].

8. While the ancillary services listed above are available to all restaurants listed on their websites, both Parties offer large restaurant chains (ie key accounts[4]) additional specialist services. For instance:

   (a) Just Eat provides customer call-centre solutions to all restaurants listed on its websites. [✂].

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[2] White label refers to products or services produced and supplied by one company and then rebranded by another company (the user) to make the product/service appear to be the user's own (eg a white label website will be presented under the brand of a restaurant or restaurant chain, rather than the provider of the service). Providers of white label services include online food platforms and third-party "white label" app-building suppliers, such as Preoday Limited and Orderlord UK. Merger Notice, paragraph 14.2.1.
[3] See also Merger Notice, paragraph 14.2.4.
[4] A 'Key Account' in the supply of online food platforms is a restaurant chain that generates a high number of orders and consumer visits to the platform's website or app.

(b) Hungryhouse provides co-marketing activities as part of its offering to restaurant chains.

Ordering and logistics specialists

9. The primary services provided by ordering and logistics specialists are:

(a) an online/ordering platform;

(b) delivery services; and

(c) co-marketing campaigns.

10. The ordering and logistics specialists therefore differ from food ordering marketplaces on one key point, which is that their ordering platforms facilitate the delivery of consumer orders on behalf of restaurants.

(a) Deliveroo explained that its business model was different from the marketplace-only model, as it also provided delivery services to restaurants/consumers, and enabled consumers to track their orders.

(b) Uber also provided restaurants with access to food delivery services as an important part of its offering, with restaurants able to request independent delivery partners willing to fulfil the delivery of a consumer order on behalf of the restaurant.

(c) Amazon told us that its online takeaway ordering business was linked to the Amazon Prime Now service, which offered a 2-hour delivery service on various household items and exclusively for Amazon Prime members.[5]

11. In addition to this core common offering, ordering and logistics specialists provide additional services to restaurants, as follows:

(a) Deliveroo provides its restaurants with access to an online store.[6]

(b) [✂].

(c) [✂] consumer support to its consumers, which includes a telephone service and in-app support for users.

(d) [✂] various preferential deals and cost-saving opportunities on an exceptional basis.

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[5] [✂] https://primenow.amazon.co.uk/onboard?sourceUrl=%2F.
[6] Merger Notice, paragraph 14.2.2.

(e) [✂] access to restaurant online self-service portals (through which restaurants could access information on their performance and track orders, etc).

12. Table 1 below provides a summary of the key services offered to restaurants by Just Eat, Hungryhouse, Deliveroo, Uber and Amazon.

Table 1: Overview of key services provided to restaurants

Answer	*Just Eat*	*Hungryhouse*	*Deliveroo*	*Uber*	*Amazon*
Ordering platform	Yes	Yes	Yes	Yes	Yes
Co-marketing campaigns	Yes**	Yes	[✂]	[✂]	[✂]
Delivery services	*	*	Yes	Yes†	Yes
Portals‡	Yes	Yes	[✂]	[✂]	[✂]
Restaurant services§	Yes	No	[✂]	[✂]	[✂]
Online store/shop¶	Yes	Yes	[✂]	[✂]	[✂]
Menu printing services	Yes	Yes	[✂]	[✂]	[✂]
Premium/top placement#	Yes	Yes	[✂]	[✂]	[✂]
Driver management solutions~	Yes	No	[✂]	[✂]	[✂]
Microsites/white-label websites/ services★	Yes	Yes	[✂]	[✂]	[✂]

Source: Just Eat, Hungryhouse, Deliveroo, Uber and Amazon [✂].
* Just Eat and Hungryhouse started offering delivery to selected restaurants (see paragraphs 103-108).
** Just Eat occasionally undertakes co-branding campaigns with certain restaurants where it displays its logo alongside the restaurant's signage.
† Uber told us that it "does not provide delivery services directly. Uber provides the app, which provides restaurants seeking to purchase delivery services with access to a network of delivery partners willing to sell their delivery services to the restaurant."
‡ Through which restaurants can access information on their performance and track orders, etc.
§ For example, special offers and discounts on products and services such as food, drinks, insurance, training, etc.
¶ Online store through which restaurants can purchase products such as boxes or delivery bags.
# Paid listings to appear at the top of the search engine results page.
~ Software to help manage the partner restaurant's own driver network.
★ White-label ordering websites or managed call centre.

Consumers

13. The primary service that online food platforms offer to consumers is the ability to order takeaway meals from nearby restaurants online (ie using a website or app).

14. Online food platforms told us that they offered a range of additional services to consumers to attract them to their platforms and/or differentiate themselves from other online food platforms. These services include: price-match guarantees, payment options, delivery, and restaurant choice.

Price-match guarantees

15. Both Parties ensure that consumers buying takeaway meals from their platforms are offered the same menu prices as those buying directly from the restaurants:

(a) Just Eat operates a 'Price Promise', whereby any consumer who is charged more by a restaurant on its platform than if he/she had ordered

directly from the restaurant is entitled to a credit voucher for double the price difference.[7]

(b) Hungryhouse customers who are charged more for their order than direct ordering customers are also able to claim a credit voucher [✂].

16. On the other hand, [✂] noted that prices and offers on its website or app might differ from prices and offers in the restaurants.[8]

Payment options

17. Online food platforms offer a range of payment options, including: cash, debit/credit cards, and digital wallets (eg Android and Apple Pay), for instance:

(a) Just Eat consumers can pay using Apple Pay.[9]

(b) Hungryhouse consumers can pay with Paypal, whereas Just Eat consumers are not offered this option.

(c) Hungryhouse consumers can pay by cash to the driver,[10] whereas Deliveroo does not accept cash.[11]

Delivery

18. Online food platforms have different offerings in relation to delivery, particularly in relation to the cost of delivery, speed of delivery and delivery tracking. For instance:

(a) Deliveroo and restaurants on UberEATS[12] currently charge a standard delivery fee of £2.50 on each order, whereas Amazon does not charge a delivery fee.

(b) Amazon told us that consumers who ordered food from its online food platform were given a guideline delivery time of [✂] minutes, although its average delivery time was less than [✂] minutes. Uber segments

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[7] [✂]. See Just Eat website.
[8] https://about.ubereats.com/en_gb/london/faq/.
[9] Just Eat website.
[10] Hungryhouse website.
[11] Deliveroo website.
[12] UberEATS told us that this fee is varied for promotional purposes following discussions with restaurant partners

restaurants on its app such that it is possible to identify restaurants which would be expected to deliver within [✂] minutes.

(c) Consumers ordering via UberEATS can track their order's progress through the UberEATS app.[13]

(d) Customers ordering via Just Eat's online food platform receive an SMS notification to let them know the order is on its way.[14]

Restaurant choice

19. The services offered by food ordering marketplaces and ordering and logistics specialists are largely differentiated by the choice of restaurants available to consumers on these platforms, with the ability to acquire higher quality dine-in restaurants being a key driver in the growth of the ordering and logistics specialists.

(a) Just Eat noted the importance of the restaurant choice offered by a platform for consumers, with the success of Deliveroo and UberEATS providing evidence of the potential growth of differentiated platforms in the online food marketplace. Additionally, Just Eat's told us that its internal data suggested that repeat ordering consumers prefer to order from a variety of restaurants.

(b) Hungryhouse told us that online food platforms that differentiated themselves [✂] which is evidenced by the rapid entry and expansion of Deliveroo and Uber.

(c) Deliveroo told us that its business model was based on a curated model under which a consumer ordering food through Deliveroo is offered the best selection of good-quality dine-in restaurants, with many previously not listed on online food platform suppliers. Curation was about making sure Deliveroo offered the best selection of good-quality restaurants and high-quality food to consumers in each area of operation.

(d) Amazon told us that its primary focus was on dine-in restaurants (even though it also had some takeaway restaurants on its platform) and it focused on a subset of handpicked high quality restaurants.

[13] UberEATS website.
[14] Just Eat website.

Pricing

20. Online food platforms earn revenue by charging fees to customers for the services provided. In this section, we consider the fees charged to restaurants and consumers, which include:

    (a) sign-up fees charged to restaurants;

    (b) monthly fees charged to restaurants;

    (c) commission charged to restaurants on each customer order; and

    (d) delivery fees charged to restaurants or paid by consumers.

Sign-up fees

21. Restaurants that join the Just Eat online food platform for the first time pay a standard sign-up fee of £699; in return, Just Eat installs and connects the hardware terminals and software that link the restaurant(s) to its platform. This standard sign-up fee has not changed since [✂]. However, Just Eat occasionally offers a discount on this standard sign-up fee for [✂], and/or restaurants which have had more than one store joining the platform.

    (a) [✂].

    (b) Just Eat also offers discounts on the standard sign-up fee based on the number of individual stores added to the platform by a restaurant or restaurant chain. [✂] The sign-up fees charged to restaurant chains with more than [✂] locations are determined by the Just Eat management team [✂].

22. For restaurants joining the Hungryhouse online food platform, the sign-up fee [✂].

23. Following [✂].

24. Uber [✂].

25. Deliveroo [✂]. Amazon [✂].

Monthly fees

26. Most online food platforms [✂] do not charge monthly fees to restaurants.

27. Restaurants [✂] are however charged a monthly administration fee of £[✂].[✂].

Commission rates

28. Just Eat told us that it had [✂].

29. As of May 2017, [✂]% of orders placed on the Just Eat online food platform were subject to these standard commission rates.[15] The [✂]% of Just Eat orders that were charged non-standard commission rates were those that were placed through restaurants chains [✂].

30. Restaurant chains [✂] were charged non-standard commission rates as they attracted new customers, drove additional traffic to the online food platform, as well as broadened the choice of restaurants available on Just Eat.

31. The discounts and pricing structures offered by Just Eat to larger brands and restaurant chains are designed on a case-by-case basis [✂].

32. Hungryhouse told us that it charged a standard commission rate of [✂]% for orders made on its online food platform. It told us that approximately [✂]% of restaurants on the Hungryhouse platform paid this standard commission rate.

33. The approximately [✂]% of restaurants which are charged non-standard commission rates are 'large or strategically important' restaurant chains that Hungryhouse believes would improve the quality and choice of restaurants available on its platform or restaurants which are targeted under a specific marketing or restaurant acquisition initiative. Examples of 'large or strategically important' restaurant chains with non-standard commission rates include: [✂]

34. These discounted commission rates are offered by Hungryhouse on an individual basis [✂].

35. Other online food platforms generally charge higher commission rates than the Parties as they manage the delivery of consumer orders on behalf of restaurants.

    (a) Restaurants on the Deliveroo platform pay commission rates of around [✂]%, although the actual rates paid by restaurants listed on the online food platform range from [✂]% to [✂]%. [✂]

    (b) Uber charges restaurants commission rates which range from [✂]% to [✂]%. The choice of commission rates paid by restaurants is dependent on [✂].

[15] [✂]% of orders charged at the [✂]% rate and [✂]% of orders charged at the [✂]% rate.

(c) Amazon charges a standard commission rate of [✂]%, which is paid by [✂]% of restaurants. The lowest commission rate paid by its restaurants is [✂]% and this applies to [✂] restaurants which are considered by Amazon to bring significant value or benefit to the consumer. The types of restaurants that Amazon offers non-standard commission rates to are those that Amazon think would add value to the platform, are highly rated and potentially have several locations enabling Amazon to garner a wider selection for its consumers.

Delivery fees

36. Industry research and discussions with online food platforms indicate that restaurants and online platforms may charge delivery fees to cover the costs of delivering the food from the restaurant (where the food is prepared) to the consumer's location.[16]

37. Delivery fees on each consumer order are charged, or are being trialled, by ordering and logistics specialists.

(a) Deliveroo charges consumers a £2.50 delivery fee on each order, although discounts may be offered on this for new consumers and credits towards future orders are awarded to existing customers who refer Deliveroo to friends / relatives who go on to place orders with Deliveroo.[17]

(b) Restaurants on UberEATS charge a standard £2.50 delivery fee to consumers across the UK, although this fee is varied for promotional purposes following discussions with restaurants.

(c) Amazon told us that it trialled a delivery fee to consumers of £[✂] in February 2017 [✂].

38. Additionally, restaurants listed on the Parties' platforms could apply a delivery fee to consumers on orders at their discretion. Just Eat told us that consumers may pay a delivery charge to the restaurant for the delivery and that around [✂]% of restaurants charged consumers for delivery.

Marketing and customer acquisition

39. To be successful, online food platforms must be able to acquire and retain customers on both sides of their platform and, as such, continuous marketing and acquisition activities are required to attract both consumers and

[16] Macquarie Research (July 2016), Takeaway marketplaces; University of Westminster (February 2017), An analysis of online shopping and home delivery in the UK.
[17] Deliveroo website.

restaurants. This section sets out and compares the marketing activities of online food platforms in terms of their:

(a) marketing expenditure;

(b) marketing strategies;

(c) use of consumer vouchers and discounts;

(d) pay-per-click (PPC) advertising; and

(e) key metrics for analysing the effectiveness of their marketing activities.

Marketing expenditure

40. The marketing channels available to online platforms for advertising to customers include:

(a) TV and radio (using advertisements or programme sponsorships);

(b) newspapers/magazines (using adverts and sponsored content in publications);

(c) outside of home (OOH) (ie adverts on billboards, transit branding, and the use of flyers/mailers);

(d) online adverts, including website banners or in-page adverts, social media content, search engine optimisation and pay-per-click advertising; and

(e) other forms of advertising (eg vouchers/discounts[18] and branded restaurant merchandise).

41. Table 2 shows the share of marketing expenditure allocated to each of the channels by Just Eat, Hungryhouse, Deliveroo and Uber (in relation to its UberEATS service) for the period from January 2014 to March 2017. As can be seen from this table:

(a) Just Eat focused a larger proportion of its marketing expenditure on [✂] forms of advertising;

[18] Consumer vouchers and discounts can be funded by the online food platform supplier or restaurant listing on these platforms as part of their own consumer acquisition activities. Unless described as being offered by restaurants, we refer to consumer vouchers and discounts that are funded by the online food platform supplier in this section.

(b) Hungryhouse spent relatively more (as a proportion of its total marketing expenditure) on [✂] advertising; and

(c) Uber's [✂].

Table 2: Marketing expenditure by channel*

%

Platform	*TV & radio*	*Newspapers & magazines*	*Outside of home*	*Online*	*Other*
Just Eat	[✂]	[✂]	[✂]	[✂]	[✂]
Hungryhouse	[✂]	[✂]	[✂]	[✂]	[✂]
Deliveroo	[✂]	[✂]	[✂]	[✂]	[✂]
Uber	[✂]	[✂]	[✂]	[✂]	[✂]

Source: The Parties [✂], Deliveroo and Uber [✂].
* UberEATS categorised its marketing channels as [✂]. These categories have been matched to the CMA's definitions of marketing channels.

42. Figure 1 compares the monthly marketing expenditure of Just Eat, Hungryhouse, Deliveroo and Uber (in relation to its UberEATS service) between June 2014 and March 2017. It can be seen that:

(a) Just Eat had the largest amount of expenditure on marketing. It spent the most on marketing in each month (except for [✂]).

(b) Hungryhouse's expenditure on marketing [✂].

(c) [✂] Hungryhouse marketing spend in 2017, [✂].[19]

(d) Deliveroo increased its marketing expenditure from [✂] in early [✂] to £[✂] per month in mid [✂] and [✂].

(e) [✂].

Figure 1: Monthly marketing spend*

[✂]

Source: The Parties [✂], Deliveroo and Uber. [✂]
* Data for UberEATS has been converted from US Dollars to British Pounds using a conversion rate of 0.78.

Marketing and customer acquisition strategies

43. As noted above, online food platform suppliers spend considerable amounts on marketing and customer acquisition activities to attract both consumers and restaurants. This marketing and customer acquisition spend is principally focused on attracting consumers to their platforms, with restaurant marketing

[19] [✂] The SPA is outlined in paragraphs 3.1–3.6 of the provisional findings.

and acquisition costs constituting a much smaller proportion of their overall spend.

44. In this section, we outline the strategies of online food platform suppliers in this area, including: advertising channels for consumers; branded restaurant merchandise (that is seen by consumers on restaurant menus, delivery boxes and other merchandise); sales efforts to acquire new restaurants to their platform; and targeted initiatives that combine all of these marketing and customer acquisition activities

Just Eat

45. Just Eat told us that it divided its marketing strategy into three main categories:

(a) Brand marketing [✂];

(b) Digital marketing [✂]; and

(c) Partner marketing [✂].

46. The brand marketing and digital marketing activities were primarily focused on consumers and accounted for [✂]% of marketing expenditure in 2017, whereas the partner marketing was focused on restaurants [✂].

47. Just Eat's expenditure on brand marketing increased significantly between [✂] and [✂], both in absolute terms and as a share of its overall marketing expenditure, and was around [✂] times the size of its digital marketing expenditure in [✂]. [✂]

48. Although Just Eat's marketing activity has typically been conducted at a national level, it has recently added [✂]

49. In order to improve [✂], Just Eat targeted restaurants that [✂]. These targeted customer acquisition activities were coupled with Just Eat's use of [✂].

(a) [✂].

(b) [✂] This project to [✂] used to acquire these restaurant customers to the Just Eat platform. [✂]

50. [✂].

Hungryhouse

51. [✂].

52. Hungryhouse told us that it [✂] targeted consumers through [✂]. In addition to these activities, Hungryhouse invested significantly in [✂] advertising.

53. Hungryhouse told us that it also carried out targeted advertising as part of its key account co-marketing activities. This involved undertaking co-marketing campaigns with restaurants on its platform [✂] for certain key accounts. [✂].

54. While Hungryhouse determines its marketing strategy at a national level, it also undertakes specific marketing activities in certain local areas. In 2016, Hungryhouse introduced the [✂] initiative which aimed to target resources in local areas [✂].

55. Based on an analysis of restaurant numbers and order volumes, Hungryhouse classified local areas into four categories: [✂]. Hungryhouse identified those restaurants that would be likely to generate more significant sales and set out acquisition and marketing activities to be performed in each local area in three stages:

    (a) [✂] of existing restaurants.

    (b) Increasing the local availability of restaurants [✂].

    (c) Targeted local marketing [✂].

56. Two different types of financial incentives were trialled to encourage restaurants to sign up to Hungryhouse:

    (a) [✂] in underperforming major cities [✂], whereas in smaller regional areas restaurants were offered [✂].

    (b) Top rated 'AAA' restaurants were given a £[✂] discount [✂], with the whole offer package available to existing restaurants in the area. [✂].

57. To receive the financial benefits of the package, restaurants were required to use Hungryhouse's visual branding [✂]

58. In August 2016, Hungryhouse explored the potential for using 'Media for Equity' deals with large media companies in the UK to change their marketing strategy. [✂]

59. Once the agreement between Delivery Hero and Just Eat for the purchase of Hungryhouse had been finalised in December 2016, we observed that the marketing strategy of Hungryhouse changed significantly in response to the

'earn-out' provision of the SPA – [✂]. This change in marketing strategy (which included provision of an additional £[✂] million for marketing and customer acquisition activities) in response to the SPA has led to [✂].

Deliveroo

60. Deliveroo told us that it had used various forms of advertising, including national advertising, online social media and local advertising. [✂].

61. [✂]. The Parties also told us that they understood that Deliveroo offered free branded merchandise to restaurants.[20]

62. [✂].

Uber

63. Uber told us it typically marketed its UberEATS service on channels that were [✂].

Amazon

64. Amazon told us that it only marketed its Amazon Restaurants service to Prime members, [✂]. Amazon did not carry out any national brand awareness advertising [✂] for its Amazon Restaurants service.

Vouchers and discounts

65. All the online food platforms told us they had used vouchers and discounts to attract consumers, although the context in which these had been used varied.

66. Just Eat told us that it had historically not relied upon providing consumers with vouchers or discounts as part of its marketing strategy. [✂].

67. In addition to 'traditional' consumer vouchers and discounts, Just Eat [✂].

68. Hungryhouse told us that it had [✂] growth in order volumes [✂]. The promotions initiated by Hungryhouse have used consumer vouchers and discounts, offered discounts for specific restaurants promoted through user newsletters, and other marketing campaigns.

69. Deliveroo may offer discounts to new customers and provides credit to existing customers who refer Deliveroo to friends and relatives who go on to

[20] Merger Notice, paragraph 14.2.2.

place orders with Deliveroo. The amount of discount and credit will vary according to the relevant promotional materials.[21]

70. Uber has typically offered special promotions and discounts to first-time and existing consumers, as well as consumers referred by friends. [✂].

71. Amazon offers [✂] vouchers as part of its initial offer to consumers. Amazon uses these discounts across a variety of media including: consumer emails, promotions on various parts of the Amazon.co.uk website and direct mailers to Amazon Restaurants Prime consumers.

72. Despite the use of vouchers and discounts by the Parties and other food ordering platforms, the effectiveness of this form of customer acquisition (as measured by cohort re-order rates) has been questioned [✂].

    (a) [✂].

PPC advertising

73. While the costs of most consumer marketing channels are fixed in nature (ie the cost of an OOH marketing campaign does not vary directly with consumer order volumes) the spend on pay-per-click (PPC) advertising varies with the number of visits to a firm's website by consumers clicking through their advert.

74. PPC advertising allows firms to target their adverts on search engines, at consumers who enter keywords or phrases that could indicate their interest in the firm's product, with firms able to place bids on these terms through the search engine's paid-search auction process. The adverts of firms successful in the auction process are placed at the top of the search results page following the consumer's search, although the firm does not pay for this placement if customers do not click on its ad. Firms' bids relate to the position of their ad in the paid search results list, with higher bids (relative to those placed by other firms) leading to higher ad positions in the paid search area.

75. This marketing channel is relatively more important for the Parties than for the other online food platforms [✂].

76. The monthly spend of Just Eat and Hungryhouse on PPC advertising for the past 18 months is shown in Figure 2, which also includes the overall marketing spend of the Parties for the same period to show its relative importance for the two firms. This figure shows that:

[21] Deliveroo website.

(a) Just Eat's PPC spend is on average £[✂] per month, corresponding to [✂]% of its total marketing spend over the past 18 months; and

(b) Hungryhouse's PPC spend averages £[✂] per month over the past 18 months, corresponding to [✂]% of its total marketing spend during this period.

Figure 2: PPC spend of the Parties in the past 18 months

[✂]

[✂]

Source: Just Eat [✂] and Hungryhouse [✂].

77. [✂].

78. The relative importance of this consumer acquisition channel for the Parties provides an insight into their overall marketing strategies.

(a) Just Eat allocates more than [✂]% of its marketing spend on 'brand-building' activities, [✂].

(b) Hungryhouse [✂] targets new consumers [✂], which have accounted for [✂] of its overall marketing spend since January 2014. [✂].

Metrics for measuring marketing effectiveness

79. The evidence we received showed that each online food platform measured its marketing performance against several different metrics. As such, the marketing performances of the key players are not directly comparable as definitions used by each supplier for the same metric are sometimes different. We have therefore identified four metrics which would allow us to assess and compare the effectiveness of each platforms' marketing activities. These are: cohort re-order rates, customer conversion rates, PPC effectiveness, and marketing expenditure as a share of the supplier's revenues.

Cohort re-order rates

80. Hungryhouse told us that the cohort re-order rate was a very important metric for assessing the effectiveness of marketing activities. For any given cohort of new customers acquired in month 0, the proportion of that cohort that returned and made an order in subsequent months was the re-order rate for that month. Cohorts could be aggregated to give an overall re-order rate for a given period (for example, the re-order rate after 12 months for all 2015 cohorts).

81. Hungryhouse submitted evidence emphasising that the re-order rate was a crucial metric for evaluating the profitability of its business, as it was a crucial determinant of the long-term value of a consumer. [✂].

Figure 3: The Parties' re-order rates

[✂]
Source: Hungryhouse [✂].

82. [✂]. Just Eat instead used the number of orders that each cohort group placed in a given month as its key metric of consumer retention.

83. Deliveroo told us that it monitored the performance of its [✂].

84. Uber uses [✂]. This measures [✂]. This rate has fallen from [✂]% in its second month of operation in July 2016 to [✂]% in May 2017.

85. Amazon monitors the repeat order rate of consumers from their first purchase, [✂].

Consumer conversion rates

86. A performance metric monitored by both the Parties and the main online food platforms is the conversion rate, obtained by dividing the number of orders by the number of visits to the platform's website or number of sessions on the platform's app.

(a) Just Eat's overall conversion rate is approximately [✂]%, being [✂] on its app (approximately [✂]%) and [✂] on its website (approximately [✂]%).

(b) Hungryhouse told us that its conversion rate in 2017 was [✂]%.

(c) Deliveroo's conversion rate in April 2017 was around [✂]%.

(d) UberEATS' app conversion rate was [✂]% in June 2017 – [✂] from [✂]% in its first month of operation in June 2016.

PPC effectiveness

87. A common measure of the effectiveness of PPC advertising, which is used by both Parties, is the cost-per-click of their paid-search adverts.

88. The PPC spend and number of consumer clicks on the adverts of Just Eat and Hungryhouse in search results over the past 18 months is shown in Figure 4. Over the past 18 months:

(a) Just Eat averaged [✂] clicks per month, with an average monthly spend of [✂]. This equates to a cost-per-click of [✂].

(b) Hungryhouse averaged [✂] clicks per month, with an average monthly spend of [✂]. This equates to a cost-per-click of [✂].

89. The cost-per-click metric used by Just Eat and Hungryhouse can also be used to assess the cost-effectiveness of the Parties' PPC advertising activities, expressing the number of consumer clicks generated by the Parties for a given amount of PPC spend. Over the past 18 months, for every £1 spent on PPC advertising;

(a) Just Eat generated [✂] consumer clicks; and

(b) Hungryhouse generated [✂] consumer clicks.

90. On these two measures of the effectiveness of the PPC advertising activities of the Parties, [✂]. As the number of consumer clicks from paid-search adverts is correlated with the volume of orders placed through its website, this greater efficiency of PPC spend indicates that [✂].

Figure 4: PPC spend and clicks of the Parties in the past 18 months

[✂]

[✂]

Source: Just Eat [✂] and Hungryhouse [✂].

91. While the above analysis is true for the entire period considered, Hungryhouse's changed marketing strategy following the SPA between Just Eat and Delivery Hero [✂] was expected to be a more effective customer acquisition channel. The effect of this change in marketing strategy is outlined [✂].

92. [✂].

93. [✂].

Marketing expenditure as a proportion of revenue

94. We observed that the main online food platforms used different measures for measuring the cost of consumer acquisition: [✂] used the cost per acquisition while [✂] measured the cost per order.

95. An indication of marketing efforts can be gained by looking at the ratio of marketing costs as a share of overall revenues. This is provided for Just Eat, Hungryhouse, Deliveroo and Uber in Table 3. As can be seen:

(a) [✂] marketing expenditure as a share of revenues [✂].

(b) [✂] has made a significant investment in marketing and consumer acquisition, largely spent on offering vouchers and discounts on orders.

Table 3: Marketing expenditure as a share of revenues in 2016

Just Eat	*Hungryhouse*	*Deliveroo*	*UberEATS*
[✂]%	[✂]%	[✂]%	[✂]%

Source: CMA calculations from information submitted by the Parties, Deliveroo and Uber.
* This is only for H2 2016 – UberEATS entered the market in June 2016.

Innovation in consumer services

96. To ensure that consumers view their offering as differentiated from other competitors, online food platforms must continually improve the range and quality of the services available to consumers on their platform. Evidence submitted by the online food platforms indicate that initiatives to improve their offering to consumers are continually under consideration.

97. Just Eat told us that it was improving the technical functionality of its online food platform and the means of ordering available to consumers, exploring in particular ordering via voice recognition technology.

98. Throughout 2016, Hungryhouse had given active consideration to introduce a number of projects that were intended to improve its offering to consumers in 2017.

(a) Hungryhouse had taken steps to upgrade its underlying technology platform to improve [✂] for both consumers and restaurants as part of a [✂]. However, this initiative was only partially implemented and was halted in advance of the planned merger with Just Eat as Hungryhouse focused on maximising the earn-out provision included in the SPA.

(b) Hungryhouse had researched the potential impact that a 'Click-to-call' function would have in the UK. This 'click-to-call' service is a button that enables consumers to use their phone to call restaurants to order from the menu page within the platform's app. [✂].

(c) Hungryhouse submitted evidence of a planned [✂] initiative, a discount of up to [✂]% on consumer orders (applied at the point of sale like a voucher), which is offered for a limited period. [✂].

99. Deliveroo told us that it had considered and discussed how to expand its [✂]. [✂].

100. Uber has considered and discussed whether to [✂].

101. Amazon said it had “seen some changes in this market over the last 18 months to two years where the online food platform was looking at links where they were not only providing cooked food but was providing ‘ready to eat’ meals prepared by the restaurants.”

Evolution of business models

102. We set out below the evidence we have received on the recent (and future plans for) changes to the business models of the online food platforms. These changes are reflected in the services offered to restaurants and consumers, increasing the choices of both sets of customers in three areas:

(a) provision of delivery services by online food marketplaces;

(b) partnerships with restaurant chains; and

(c) expansion into new segments of the food ordering sector.

Delivery services

103. Online food platforms told us that the immediate future for online platforms was in delivery services:

(a) Just Eat told us that it began providing delivery services on a small scale in [✂]. Just Eat told us that it [✂].

(b) Hungryhouse noted that one of the shortcomings of a food ordering marketplace business model was the inability to control the reliability and speed of delivery, as well as the inability to list restaurants without their own delivery services on its platform.

(c) [✂].

(d) [✂].

104. [✂].

105. Just Eat began exploring providing delivery services [✂].

106. Just Eat offers a delivery management solution to restaurants which allows them to allocate orders to specific delivery drivers, as well as providing consumers with real-time delivery updates for their orders. [✂].

107. Hungryhouse began operating in partnership with Valk Fleet[22] in early 2015 to provide restaurants with delivery services in selected cities. Hungryhouse observed that several restaurants were unable to meet consumer order demand at peak times. The provision of delivery services by Hungryhouse, to complement the restaurants' own delivery services, could therefore increase the order capacity of such popular restaurants. Hungryhouse's relationship with Valk Fleet was successful in the UK, [✂].

108. However, as Valk Fleet went into liquidation in March 2016 following the withdrawal of its funding by Delivery Hero, Hungryhouse could no longer offer delivery services to restaurants [✂]. Hungryhouse's delivery operations with Valk Fleet were not replaced until January 2017 when a formal arrangement with Quiqup was signed [✂].

109. Deliveroo told us that its proposition was to deliver high-quality food in less than 32 minutes. Deliveroo's business model is different from the Just Eat business model, with Deliveroo offering a complete service, working with couriers and thereby enabling customers to track their orders.

110. From a consumer perspective, Uber told us that it saw demand for food delivery growing over the next two to three years. It had recently observed faster growth from online food platforms providing a delivery service and would continue to monitor this. From a restaurant perspective, Uber believed [✂].

111. Amazon explained that the food delivery business was different from other parts of the Amazon business [✂].

Restaurants chains

112. Most online food platforms from which we obtained evidence indicated that they were expanding the choice of cuisine available to consumers on their platforms by aiming their restaurant acquisition efforts at large branded chains.

    (a) [✂].

    (b) [✂].

    (c) [✂].

    (d) [✂].

[22] Valk Fleet was a food delivery service owned by Delivery Hero, the parent company of Hungryhouse.

113. Just Eat and Hungryhouse launched some delivery services, [✂]

114. Evidence submitted to us also indicates the preference of restaurant chains for partnering with online food platforms that supply their own delivery services.

(a) [✂].

(b) Wagamama decided to partner with one provider exclusively [✂] as it had the relevant infrastructure and delivery capabilities, with the company and the provider working closely to develop the service.

(c) ASK Italian and Zizzi partner with [✂], with this decision being based on its desire to offer home delivery to its customers without setting up their own services. Additionally, Azzurri group (the parent company of ASK Italian and Zizzi) decided against listing with more than one online food platform as it believed it would be difficult to manage more than one, [✂].

115. Just Eat also submitted information on [✂].

116. Hungryhouse provided evidence that it offered key-account white-label solutions to acquire high-quality restaurant customers. [✂].

Expansion into other market segments

117. Deliveroo has created the 'Deliveroo Editions' concept, a new service aimed at providing delivery-only kitchens [✂].

118. Deliveroo explained that the Deliveroo Editions concept allowed it to work with an entrepreneur or a chain looking to expand into a new area. [✂].

119. Deliveroo told us that it [✂] and had six 'Deliveroo Editions' locations in London with a range of restaurant types and cuisines and that it was looking to grow to about [✂] 'Deliveroo Editions' kitchens across the UK.

120. Deliveroo provided information on the potential growth of Deliveroo Editions. [✂].

121. Deliveroo told us that the Editions sites allowed it to put additional restaurants in places where Deliveroo already had coverage, [✂].

122. [✂].

123. [✂].

124. Deliveroo [✂].

Appendix E: The economics of multi-sided platforms

Analytical framework

1. An online food platform provider needs to attract two types of customers: restaurants and consumers. The nature of such a platform may therefore be characterised by indirect network effects (INEs), as the utility (or value) that customers on one side derive from the platform may depend on the number (and/or variety) of customers on the other side. This can generate feedback loops between them, with an increase in the number of customers on one side leading to an increase in the number of customers on the other side and so on.[1]

2. We first sought to understand the behaviour of customers on each side of the platform, ie the behaviour of restaurants and of consumers. We then sought to understand the strength of indirect network effects, ie whether and, if so, to what extent the interlinked demand between the two customer groups affected competition between platforms.

3. When more than one platform is available, customers can decide either to single-home or to multi-home. Customers (restaurants or consumers) are described as 'single-homing' when they only use one platform, whereas 'multi-homing' refers to customers using more than one platform. In this context, we consider that restaurants are multi-homing when they are listed on more than one platform. On the consumer side, a consumer may have an account with more than one platform, but this may not necessarily be an example of multi-homing. A consumer may have access to more than one platform, but may use them for different purposes. Strictly speaking, multi-homing on the consumer side only occurs if a consumer uses more than one platform in making a purchasing decision, for example searching for restaurants on two platforms and then deciding which one to order through.[2]

4. Typically, a high proportion of single-homing customers on one side of the platform may mean that the platform operator faces little direct competition for customers on the other side, as the platform becomes the only way to access these customers. Platforms therefore have an incentive to try to push

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[1] See paragraph 5.2.20 of the CMA's Merger Assessment Guidelines.
[2] We note that different definitions and measures of multi-homing may be relevant in different contexts. For example, assessing the sustainability of competition between multiple, a looser definition of multi-homing - where customers are listed on, or use, more than one platform over a period - may be more relevant. Whether customers treat different platforms as substitutes or as complements is not important for the assessment of whether a sector is 'winner takes all' in that context. In assessing the competitive constraint that one platform imposes on another, however, a stricter definition of multi-homing - where more than one platform is searched in the course of making a purchasing decision – may be more relevant, as this tells us more about a customer's likelihood of switching between platforms for that type of transaction.

customers on one side towards single-homing.[3] The single- or multi-homing behaviour of customers on either side of the platform has implications for how competition takes place, as summarised in Table 1, below.

Table 1: Single- and multi-homing and the effect on platform competition

		Restaurants	
		Single-homing	**Multi-homing**
Consumers	**Single-homing**	Platforms compete on the consumer side and on the restaurant side	Platforms compete on the consumer side; platforms face little direct competition on the restaurant side, as they provide access to separate sets of consumers
	Multi-homing	Platforms compete on the restaurant side; platforms may face little direct competition on the consumer side, as they provide access to separate sets of restaurants, though this depends on the extent to which consumers consider the different sets of restaurants to be close substitutes*	Platforms compete on the consumer and restaurant side and may try to push restaurants (or consumers) towards single-homing, eg through exclusivity (restaurant side) or loyalty rewards (consumer side)

Source: CMA.

* This framework is a simplification of how competition between platforms is likely to work in practice and is most applicable to competition between undifferentiated platforms. The issue of competition on the consumer side where restaurants are single-homing is an area where a more nuanced characterisation may be needed. On a simple level, where restaurants are single-homing, then the two platforms have different offers, so they may not be in direct competition on the consumer side. But, if both platforms have the same types of restaurants or both list restaurants that consumers consider to be close substitutes for each other, then we could still see strong competition on the consumer side.

There is an asymmetry between multi-homing on the restaurant side and on the consumer side: in the former case, multi-homing happens, in a sense, simultaneously, as a restaurant is listed on both platforms at the same time and receives orders through both simultaneously; however, on the consumer side, for a given transaction decision, even where a consumer is multi-homing, only one platform can be used to complete a particular order. This allows greater scope for competition among consumers who are multi-homing as the consumer must be induced to choose one platform over the other in completing a particular order.

5. The extent of single- and multi-homing on each side of the platform is determined by a number of factors, including: the cost of multi-homing; platform differentiation; and whether there is single- or multi-homing on the opposite side of the platform.

   (a) For both restaurants and for consumers, whether they choose to single- or multi-home is, to an extent, endogenous to the offers available from the platforms in the market, eg if sign-up fees for restaurants are very high then this may reduce restaurants' willingness to multi-home, or if

[3] If customers on one side only join one platform, then customers on the other side can only access those customers by joining the same platform. Armstrong (2006) shows that this creates "competitive bottlenecks" – with single-homing customers on one side and multi-homing customers on the other, the platform competes aggressively for the single-homing customers and once they are on board it earns profits from customers on the other side who multi-home.[3] Firms compete aggressively on the side that uses a single network in order to charge monopoly prices on the other side that is trying to reach them. Armstrong, Mark. 2006. "Competition in Two-Sided Markets" *The RAND Journal of Economics,* 37(3): 668-91. As a result, competition between platforms can have large price effects on the side of the market that uses a single platform and little or no effect on the side that uses multiple platforms. Rysman, Marc. 2009. "The Economics of Two-Sided Markets" *Journal of Economic Perspectives* – Volume 23, Number 3: 125-143.

platforms offer a generous loyalty programme on the consumer side then their willingness to multi-home may be reduced.

(b) Second, where two platforms list the same types of restaurants or, as in our case, the same restaurants and do not differentiate themselves horizontally,[4] consumers are more likely to tend to single-home and a greater proportion of consumers could be expected to single-home on the platform with the larger number and range of restaurants.

(c) Where consumers tend to single-home, each platform has, in a sense, a 'monopoly' over access to these consumers when facing those restaurants that want to access these consumers. Under these circumstances, restaurants will choose to multi-home to capture a unique set of consumers from each platform, ie in order to gain access to those consumers who are not also using another platform. This implies that these restaurants do not view the platforms as strict substitutes but rather as complementary routes to market: Platforms A and B are not alternative routes to the same set of consumers, but rather two different routes to two different sets of (single-homing) consumers.

6. As set out in Table 1, above, where two platforms have a high level of multi-homing on the restaurant side and a high level of single-homing on the consumer side, there may be limited scope for direct competition between them on the restaurant side. As argued by Just Eat, there are two possible sources of constraint that one platform may exert on the other when competing on the restaurant side:

(a) Single-homing or 'switching' constraint: One platform could try to convince restaurants to switch to it alone (single-home) – for example, in return for a lower commission rate. However, where the two platforms are horizontally undifferentiated and one platform provides access to a far smaller pool of consumers, then few, if any, restaurants would find this attractive, even for a low commission rate.[5]

(b) Multi-homing constraint: One platform trying to convince restaurants to list on it in addition to the other platform would impose a competitive constraint if a sufficient proportion of the shared consumers between them

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[4] In this context, we characterise horizontal differentiation in terms of providing different types of restaurants, serving different areas, providing different services, and so on. Vertical differentiation, in this context, would be where Platform A is objectively better than Platform B, eg from a consumer perspective, this may be where it provides the same restaurants as Platform B, as well as additional restaurants which consumers may also value having access to; from a restaurant perspective, it would be the case if Platform A provides access to more consumers and generates more orders than Platform B.

[5] In this sense, the platform providing access to the smaller pool of consumers is of lower quality from a restaurant perspective.

would then switch platform when ordering from the restaurant. Consumers might do this if one platform had better functionality or user experience than the other, or if one platform had a loyalty programme. The restaurant would benefit if the second platform were charging a lower commission rate on these switched orders. However, where the overlapping consumers constitute a small share of the larger platform's orders, then this constraint is likely to be weak.

7. To the extent that this characterisation of the market holds in relation to the Parties, it would imply that there would be limited competition between Just Eat and Hungryhouse for restaurants. This would also imply that much of the competitive interaction between Just Eat and Hungryhouse would be on the consumer side.

8. The framework set out in Table 1, above, is, by necessity, a simplification of how competition between platforms can be expected to work. In particular, where we see differentiation between platforms and the sort of innovation that recent entrants like Deliveroo and UberEATS have introduced into the sector, then the assessment of how single- and multi-homing on each side of the market drives competition becomes less straightforward. In particular:

   (a) To the extent that Just Eat (and Hungryhouse) have different types of restaurants listed on them compared to delivery platforms such as Deliveroo and UberEATS, and to the extent that there is currently relatively little overlap between the restaurants on Just Eat and those on these two platforms, consumers would, in theory, be more likely to multi-home across the food ordering marketplaces and these newer ordering and logistics platforms. This is because the two types of platforms are complementary routes to different restaurants from a consumer perspective.

   (b) As such the extent to which these platforms directly constrain Just Eat and Hungryhouse on the consumer side is not clear. On the one hand, they would compete with Just Eat and Hungryhouse for a share of consumers' food orders. However, with very different restaurant offers the constraint on current Just Eat and Hungryhouse orders may not be very strong. It becomes an empirical question of whether sufficient numbers of Just Eat and Hungryhouse consumers see the restaurants and the delivery services provided by Deliveroo and UberEATS as close substitutes for their current Just Eat or Hungryhouse restaurants.

   (c) The simple framework above focusses on consumer and restaurant behaviour on each side of a set of platforms, but innovation in the sector has a more fundamental impact than simply inducing consumers or

restaurants to multi-home across a larger number of platforms. More fundamental innovation, like providing delivery services to restaurants that previously did not deliver and so were not on any platform before, expands the number and types of restaurants available to consumers. It may both attract new consumers to the market for online food platforms and generate additional orders from existing platform-using consumers. As such, it disrupts the established modes of competition between incumbent platforms and exerts new pressures over and above the basic need to offer a good range of restaurants on one side and attract a sufficient number of consumers (and their orders) on the other.

9. The degree of multi-homing versus single-homing on both sides of the market also has implications for the strength of any indirect network effects and the likelihood of demand 'tipping' towards one platform or another, ie resulting in one platform establishing and maintaining a particularly high market share.

Parties' submissions

10. Just Eat's economic advisers set out a theoretical framework – broadly consistent with our characterisation above – and pointed to a number of empirical features of the business models of Just Eat and Hungryhouse and the behaviour of customers on both sides of these platforms. In particular, they told us that:

(a) Where consumers are single-homing on the consumer side, each platform is serving a distinct set of consumers. In order to get access to those consumers, a restaurant must sign up to both platforms.

(b) Undifferentiated platforms like Just Eat and Hungryhouse are not competing on the restaurant side:

(i) They are not supplying services of comparable quality from the perspective of restaurants;

(ii) Hungryhouse provides a much smaller number of unique consumers and orders than Just Eat, and there is only a small pool of shared consumers;

(iii) Their services are more likely to be considered complements (restaurants use both)[6] rather than substitutes (they choose one over the other) by restaurants; and

[6] The Parties submit that their services are complements to restaurants because restaurants use both as complementary routes to market, not that their services are strict complements in the economic sense.

(iv) The decision to list on each platform depends on the expected profits from the extra consumers who are reached, rather than being related to the offer of the other platform.

(c) On the consumer side, there is scope for competition as each platform tries to attract enough consumers to make itself attractive to restaurants and to generate enough orders to cover its costs.

11. Just Eat's analysis of data on orders placed through the Just Eat and Hungryhouse platforms over a six-month period found that consumers tended to single-home, especially those on Just Eat, with only [✂]% of Just Eat consumers also using Hungryhouse, while [✂]% of Hungryhouse consumers also use Just Eat. A similar analysis of the restaurants listed on Just Eat and on Hungryhouse found that restaurants tended to multi-home, with almost all of Hungryhouse's restaurants ([✂]%) also listing on Just Eat. The comparable share for Just Eat restaurants also listing on Hungryhouse was [✂]%.

12. Just Eat's analysis focussed on the low level of multi-homing among Just Eat consumers, which, it argued, left very limited scope for competition on the restaurant side. As set out above, in paragraph 6, it argued that there were two possible sources of constraint and that the evidence in this market pointed towards neither of these being a possible way for Hungryhouse to constrain Just Eat on the restaurant side.

13. In relation to the single-homing or 'switching' constraint, Just Eat argued that:

(a) Hungryhouse has very few unique restaurants, so this does not appear to be an attractive option.

(b) Hungryhouse is, on average across the UK, so much smaller and provides access to far fewer consumers compared with Just Eat so that no restaurant would rationally choose to list on Hungryhouse instead of Just Eat, even at a 0% commission rate. Given the difference in expected order volumes, Just Eat argued that Hungryhouse would have to charge large negative commission rates – that is, pay restaurants a commission rather than charge them a commission – in order to make this more attractive to restaurants than Just Eat.

14. In relation to the multi-homing constraint, Just Eat argued that:

(a) Even though there are a non-trivial number of consumers who use both platforms – approximately [✂] – this represents only [✂]% of Just Eat's consumers.

(b) The Parties' transaction data showed that multi-homing consumers tended to order more through Just Eat than through Hungryhouse, with only [✂]% of orders from multi-homing consumers being made through Hungryhouse. Based on this, Just Eat's economic advisers estimated that the constraint on Just Eat would be equivalent to approximately [✂]% of its orders.

15. In addition to the Parties' points, we note that, in any case, Hungryhouse charges the same commission rate as Just Eat, so restaurants would not benefit from this form of competition in this context.

Evidence on restaurant and consumer multi-homing behaviour

16. In order to assess the extent of the possible competitive constraint from Hungryhouse on Just Eat, we first estimated the proportion of restaurants listed on the Just Eat food ordering marketplace that are also listed on Hungryhouse's marketplace and vice-versa. We also calculated the proportion of restaurants listed on Just Eat that are also listed on Deliveroo and/or UberEATS online food platforms, as our assessment focuses on the potential constraint on Just Eat, as the larger of the two merging platforms, from these platforms. We did not carry out this analysis for Amazon Restaurants as it currently operates only in London and provides its services only to Amazon Prime customers.

17. Starting with Just Eat and Hungryhouse, as set out in Table 2, below, data from the Parties and from our restaurant survey show that, as of January 2017, the vast majority of restaurants (about 90 per cent by any measure) that are listed on Hungryhouse's food ordering marketplace are also listed on Just Eat's marketplace, while Just Eat's marketplace has a large number of restaurants that are listed on it but not on Hungryhouse.

Table 2: Single- and multi-homing by restaurants across the main Parties

		Relevant restaurant group	
		Just Eat restaurants also on Hungryhouse	Hungryhouse restaurants also on Just Eat
Evidence sources	Parties' Phase 1 analysis*	[✂]%	[✂]%
	Just Eat analysis	[✂]%	[✂]%
	CMA restaurant matching†	[✂]%	[✂]%
	CMA restaurant survey	46%	92%

Source: Just Eat, CMA analysis of the Parties' data, CMA survey.
* At Phase 1, the Parties' submitted an analysis of the extent to which the Parties' restaurant customers were listed on each other's platforms.
† We obtained the names of restaurants listed on each of Just Eat, Hungryhouse, Deliveroo and UberEATS as of June 2017 and matched the names in order to calculate the numbers of restaurants single- and multi-homing.

18. In contrast, there are [✂] restaurants that are listed on both Just Eat and Deliveroo, and [✂] restaurants that are on both Just Eat and UberEATS, as set out in Table 3, below:

(a) The Parties estimated that, as of May 2017, there were around [✂] restaurants that were listed on Just Eat but not on Deliveroo, [✂] that were listed on Deliveroo but not on Just Eat and only [✂] that were shared, representing [✂]% of the restaurants listed on Just Eat.

(b) In areas where Deliveroo was present, Deliveroo and Just Eat were closer in size: there were [✂] restaurants that were listed on Just Eat but not on Deliveroo in these areas, with [✂]% of Just Eat restaurants also listing on Deliveroo.

(c) The pattern is similar for UberEATS. As of May 2017, there were circa [✂] restaurants that were listed on Just Eat but not on UberEATS, [✂] that were listed on UberEATS but not on Just Eat and [✂] that were shared, representing [✂]% of the restaurants on Just Eat.

(d) In areas where UberEATS was present, Just Eat had circa [✂] restaurants that were not listed on UberEATS and the proportion of shared restaurants in these areas was [✂]% of Just Eat's total restaurant numbers.

19. The CMA restaurant matching analysis yielded very similar results in relation to both Deliveroo and UberEATS.

Table 3: Single- and multi-homing by restaurants across Just Eat, Deliveroo and UberEATS

		Relevant restaurant group			
		Just Eat restaurants also on Deliveroo	Deliveroo restaurants also on Just Eat	Just Eat restaurants also on UberEATS	UberEATS restaurants also on Just Eat
Evidence sources		*National*			
	Just Eat analysis	[✂]%	[✂]%	[✂]%	[✂]%
	CMA restaurant matching	[✂]%	[✂]%	[✂]%	[✂]%
	CMA restaurant survey	7%	n/a	7%	n/a
		Areas where Deliveroo is present		*Areas where UberEATS is present*	
	Just Eat analysis*	[✂]%	[✂]%	[✂]%	[✂]%
	CMA matching	[✂]%	[✂]%	[✂]%	[✂]%
	CMA restaurant survey	15%	n/a	15%‡	n/a

Source: Just Eat and the CMA.
‡ This share is based on an analysis of areas where Deliveroo is present rather than where UberEATS is present. However, given the overlap in the presence of these two platforms and the fact that [✂], this is likely to be a good approximation of the true share.
Note: 'n/a' – not applicable: as our surveys were conducted on samples of Just Eat and Hungryhouse restaurants and consumers, we cannot calculate the shares of Deliveroo and UberEATS customers that are multi-homing, as we have not surveyed these populations. Our surveys can only be used to compute these shares for Just Eat and for Hungryhouse.

20. While we consider that matching lists of restaurants supplied by the relevant online food platform suppliers themselves is the most accurate way to measure the extent of multi-homing on the restaurant side, our restaurant survey also provides some information on this issue. We note the similarity between the results obtained from both approaches, as set out in Tables 2 and 3, above. In particular, our restaurant survey found that:

(a) There is a higher level of single-homing by restaurants listed on the Just Eat's food ordering marketplace than by those on Hungryhouse's marketplace: 92% of Hungryhouse restaurants are also on Just Eat, while 46% of Just Eat restaurants are also on Hungryhouse.[7]

(b) Multi-homing between the Parties is much more prevalent than between either of the Parties and Deliveroo or UberEATS.[8]

(c) The main reasons for joining Just Eat's or Hungryhouse's food ordering marketplace among restaurants who were listed on another platform at the time of joining were: to gain access to a larger number of customers; to increase business; and because the restaurant was approached by the online food platform.[9]

[7] CMA Survey report, Chart 1.
[8] CMA Survey report, Chart 1.
[9] CMA Survey report, Chart 11.

(d) 22% of those Just Eat restaurants that chose to single-home did so in order to keep costs down, while 16% did so because it was difficult to manage more than one platform, and 15% said they already had enough orders/customers. This indicates that some restaurants find the costs of multi-homing outweigh the benefits of reaching additional consumers in their area.[10]

21. In summary, the various sources of evidence indicate that the vast majority of restaurants that are listed on Hungryhouse are also listed on Just Eat but not the other way around. This is to be expected given the much larger number of restaurants listed on Just Eat compared to Hungryhouse.

22. The proportion of Just Eat restaurants that are listed on Hungryhouse is [✂] of Just Eat restaurants that list on [✂]. Thus, there is significantly more multi-homing by restaurants across the merging parties than between Just Eat and the ordering and logistics specialists' platforms.

Behaviour of consumers

23. In this section, we examine four aspects of consumer behaviour:

(a) First, we set out the analysis on the extent of single- and multi-homing by consumers across the Just Eat and Hungryhouse food ordering marketplaces;

(b) Second, we conduct a similar analysis of the extent of multi-homing between the Parties' online food platforms and those of Deliveroo and UberEATS;

(c) Third, we point to consumer survey responses which outline consumers' reasons for ordering through one of the Parties' online food platforms the last time they did so; and

(d) Fourth, we set out responses to the consumer survey that are relevant to consumers' willingness to consider ordering directly from restaurants.

24. On the question of whether consumers single- or multi-home across the Parties, data from the Parties show that:

(a) Just Eat has a much larger number of 'unique' consumers ([✂] consumers who used Just Eat but not Hungryhouse)[11] than Hungryhouse ([✂] consumers who used Hungryhouse and not Just Eat) and that there

[10] CMA Survey report, Chart 12.
[11] [✂]

are only [✂] shared consumers (ie those who had made at least one order from both Just Eat and Hungryhouse in the preceding 6 months). This represented [✂]% of Just Eat's total consumers.

(b) Of the total pool of orders made using Just Eat or Hungryhouse's food ordering marketplace in the last 6 months, [✂]% were made by consumers who only ordered from Just Eat, [✂]% were made by consumers who only ordered from Hungryhouse and [✂]% were made by consumers who ordered on both platforms. Among 'shared' consumers, [✂]% of their orders were made on Just Eat and [✂]% on Hungryhouse.

Table 4: Single- and multi-homing by consumers across the main Parties

		Relevant consumer group			
		Just Eat consumers also using Hungryhouse	Hungryhouse consumers also using Just Eat	Just Eat web visitors also visiting Hungryhouse	Hungryhouse web visitors also visiting Just Eat
Evidence sources	CMA consumer survey – used in 12 mths*	34%	78%		
	Frontier	[✂]%	[✂]%		
	CMA consumer matching	[✂]%	[✂]%		
	CMA consumer survey – searched last order†	9%	34%		
	Just Eat comScore data (PC – Mar, Sep 2016)			[✂]%	[✂]%
	Just Eat comScore data (Mobile browsing – Mar, Sep 2016)			[✂]%	[✂]%
	Just Eat comScore data (App – Mar, Sep 2016)			[✂]%	[✂]%

Source: Just Eat and the CMA.
* CMA Survey report, Chart 28.
† CMA Survey report, Chart 36.

25. The results of the CMA consumer matching analysis are broadly consistent with those obtained by Just Eat's advisers, as set out in Table 4, above.

26. We have also analysed the overlap between consumers using the Just Eat food ordering marketplace and those using Deliveroo and UberEATS ordering and delivery services. As set out in Table 5, below, we found that:

(a) [✂]% of Just Eat consumers had also used Deliveroo in the past six months, while the share was [✂]% for those areas where Deliveroo was present; and

(b) [✂]% of Just Eat consumers had also used UberEATS in the past six months, while the share was [✂]% in those areas where UberEATS was present.

Table 5: Single- and multi-homing by consumers across Just Eat, Deliveroo and UberEATS

		Relevant consumer group			
		JE consumers also on Deliveroo	Deliveroo consumers also on JE	JE consumers also on UberEATS	UberEATS consumers also on JE
Evidence sources		*National*			
	CMA matching	[✂]%	[✂]%	[✂]%	[✂]%
	CMA consumer survey – used in past 12 mths*	15%	n/a	4%	n/a
	CMA consumer survey – searched for last order†	5%	n/a	2%	n/a
		Areas where Deliveroo is present		*Areas where UberEATS is present*	
	CMA matching	[✂]%	[✂]%	[✂]%	[✂]%
	CMA consumer survey – used in past 12 mths‡	28%	n/a	8%§	n/a
	CMA consumer survey – searched for last order¶	10%	n/a	3%¶	n/a

Source: Just Eat and the CMA.
* CMA Survey report, Chart 28.
† CMA Survey report, Chart 36.
‡ Consumer survey data.
§ This share is based on an analysis of areas where Deliveroo is present rather than where UberEATS is present. However, given the overlap in the presence of these two platforms and the fact that UberEATS areas are, generally, a subset of the areas where Deliveroo is present, this is likely to be a good approximation of the true share.
¶ Consumer survey data.
Note: 'n/a' – not applicable: as our surveys were conducted on samples of Just Eat and Hungryhouse restaurants and consumers, we cannot calculate the shares of Deliveroo and UberEATS customers that are multi-homing, as we have not surveyed these populations. Our surveys can only be used to compute these shares for Just Eat and for Hungryhouse.

27. Responses to our consumer survey points towards the following aspects of consumer behaviour:

(a) Ease of ordering, quality of previous experience and having an account/app are among the main reasons for choosing either Party's online food platform.[12] The number and range of restaurants available were cited by a much lower proportion of the Parties' consumers and therefore appear to be less important factors in these customers' choices.

(b) While a large majority of customers are likely to go straight to the Just Eat or Hungryhouse platform to place an order, some may end up there following a search for a type of takeaway food.[13] It appears, however, that a substantial proportion (about a third) of Hungryhouse customers also visit Just Eat's website before ordering from Hungryhouse.[14]

[12] CMA Survey report, Charts37 and 38.
[13] CMA Survey report, Chart 35.
[14] CMA Survey report, Chart 36.

(c) Consumers tend to order takeaway from a set of restaurants or the same restaurant as in previous orders, rather than from new restaurants.[15] Related to this, a large proportion of consumers who answered our survey stated that the last time they had used the online food platform they already had a restaurant or set of restaurants in mind beforehand and even more of them had ordered from the same restaurant before.[16] Nevertheless, consumers tend to use platforms far more often than direct channels – the proportion of consumers using the online food platforms once a week or more is about four to five times the equivalent proportion for each of: using the restaurant website; phoning the restaurant; and going to restaurant. Similarly, we see substantial shares for consumers who respond that they have 'Never used' those direct channels.[17]

INEs and feedback loops

28. The Parties submitted that the market for online food platforms was characterised by strong INEs, as:

    (a) Other things equal, consumers prefer a platform with more restaurants to one with fewer; and

    (b) Other things equal, restaurants prefer a platform with more orders to one with fewer.

29. We used four sources of evidence to assess the direction and strength of these INEs: our econometric analysis, internal documents, oral evidence received from the other main online food platforms, and our consumer survey.

30. First, our econometric analysis, by showing that an increase in the number of restaurants on a platform increases the number of orders on that platform, provides an indication of the strength of indirect network effects. This effect is not particularly strong and may suggest that INEs are not very substantial.[18] However, any INE is unlikely to be detected within a month, and so would be unlikely to be picked up by our econometric analysis. This may indicate that our econometric analysis is a weak source of evidence for INEs. Furthermore, econometric results may reflect the fact that INEs are likely to decrease, at the margin, as the industry matures.

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[15] CMA Survey report, Chart 29.
[16] CMA Survey report, Charts 33 and 34.
[17] CMA Survey report, Chart 27.
[18] We note that the number of orders might increase either because the actual number of restaurants has increased, or because consumers are attracted by a particular restaurant that now lists on the platform. The latter would not provide a clear indication of INE.

31. Second, evidence from internal documents on the importance given by the Parties to the number, variety and quality of the restaurants in a local area is relevant to the assessment of both competition for restaurants and the strength of INEs. This evidence paints a mixed picture on INEs:

(a) An email written in the context of [✂].

(b) As well as the number of restaurants listed on a platform, the restaurant mix (variety and quality) is also important and better terms are offered to incentivise 'good' restaurants to sign up.[19]

(c) Hungryhouse [✂] to increase the number of restaurants in a given area.

32. Third, oral evidence from other food ordering platforms highlights the importance of INEs:

(a) Deliveroo told us that the baseline in terms of a good number of restaurants in a given area was around [✂], although this could change when moving into [✂] zones, [✂] the number of restaurants differed between local areas. Furthermore, Deliveroo told us that it understood that what consumers really cared about [✂].

(b) UberEats told us it had a diverse range of restaurants on its platform, which was a key part of its offering to consumers. [✂]. In addition, there was a clear interplay between the number of orders and the number of delivery partners required in a given local area and so both of these needed to grow, in addition to the number of restaurants on the platform.

(c) Amazon Restaurants told us that being successful in this industry involved two aspects: firstly, it was important to partner with the right types of restaurants, have reliable delivery infrastructure in place and deal with any issues that arose in a swift manner; and secondly, it was important to be able to balance the costs and revenues of the business to make it profitable.

33. Fourth, our consumer survey provides some indication of the importance of INEs. The survey indicates that, the more Deliveroo restaurants were present in the respondents' locality, the more likely respondents were to say they would divert to Deliveroo. This was true for both Just Eat and Hungryhouse consumers. As the number of Hungryhouse restaurants increases, the proportion of Just Eat consumers diverting to Hungryhouse in the event that Just Eat were to close increases up to a point. These results are consistent

[19] [✂].

with INEs being important. However, there is no clear relationship either between the number of Hungryhouse restaurants and the likelihood of Just Eat consumers diverting there, or between the number of Just Eat restaurants and the likelihood of Hungryhouse consumers diverting there.[20] Furthermore, we note that this result does not measure how participation on one side of a particular food ordering platform affects participation on the other side and therefore does not measure INEs directly. In addition, our consumer survey indicates that consumers tend to have a specific restaurant or set of restaurants in mind before ordering and tend to order from restaurants that they have used before.[21] This does not point towards INEs being especially strong.

34. In summary, while INEs are clearly an important feature of this industry, the evidence paints a somewhat mixed picture on the actual strength of these INEs. INEs and feedback loops are taken into consideration below when considering whether two or more food ordering marketplaces may be able to coexist in the UK.

The sustainability of competition between multi-sided platforms: economics literature

35. The Parties submitted that they operate in a 'winner-takes-all' market. This section analyses this issue from the point of view of the economic literature. We note, however, that the evidence on the Parties' shares of orders does not seem entirely consistent with the notion of a 'winner-takes-all' market. As shown in Table 6, the share of orders of Hungryhouse relative to Just Eat has been fairly stable over the past three years and, based on the Parties' forecasts, is only expected to decline slightly in 2017.

Table 6: Parties' annual order volumes, 2013-2017

	2013	*2014*	*2015*	*2016*	*2017 (projected)*
Just Eat	[✂]	[✂]	[✂]	[✂]	[✂]
Hungryhouse	[✂]	[✂]	[✂]	[✂]	[✂]
HH share	[10-20]%	[5-10]%	[5-10]%	[5-10]%	[5-10]%
JE growth rate		[✂]%	[✂]%	[✂]%	[✂]%
HH growth rate		[✂]%	[✂]%	[✂]%	[✂]%

Source: CMA calculations from Parties data.

36. The literature on two-sided markets provides some insights into the features that can make the coexistence of competing multi-sided platforms more or less likely in the long run. First, multiple, undifferentiated platforms can coexist if a user prefers to have fewer other users on the same side of the platform

[20] CMA Survey report, Charts 45 and 46; CMA Survey report, pages 40 and 41.
[21] CMA Survey report, Charts 33, 34.

rather than more. For example, a retailer may not want to be listed alongside a large number of closely competing retailers (in the literature, the term 'market impact effects' is used to denote this feature).[22] If customers differ in the way they value the various platforms, the likelihood of platform coexistence is also influenced by three further dimensions: the degree of platform differentiation,[23] the strength of the INEs,[24] and customers' homing behaviour.[25]

37. Market impact effects are unlikely to play a significant role in the supply of food ordering marketplaces. We have found no evidence that restaurants' willingness to join a platform is negatively affected by the number of other local restaurants listed on that platform. However, this does not by itself make the coexistence of multiple platforms difficult, in particular if restaurants multi-home.

38. Differentiated platforms, with a niche of loyal users, are more likely to coexist than undifferentiated platforms. Differentiation, in fact, reduces the importance of INEs: users may still join their preferred platform even if somewhat smaller. We note that there is not much horizontal differentiation,[26] at the moment, between Just Eat and Hungryhouse. However, limited differentiation has not been an insurmountable obstacle to the survival of smaller platforms in other European markets so far.

39. Strong INEs make the long-term viability of smaller platforms more difficult: the larger platform becomes much more attractive and feedback loops are stronger. The evidence collected in the course of this inquiry gives a mixed picture on the strength of INEs.

40. Finally, if customers multi-home, the coexistence of two or more platforms (including undifferentiated platforms) is more likely: multi-homing reduces the importance of INEs, as it eliminates the need for a binary choice between platforms. The evidence we have on single- and multi-homing behaviour on both the restaurant and consumer sides is discussed in paragraphs 16 to 26,

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[22] See Ellison, G. and Fudenberg, D., 2003. Knife-edge or plateau: When do market models tip? *The Quarterly Journal of Economics*, 118(4), pp.1249-1278.
[23] See Chen, K. and Tse, E., 2008. *Dynamic platform competition in two-sided markets*. Working Paper. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1095124
[24] See Iansiti, M. and Zhu, F., 2007. *Dynamics of platform competition: Exploring the role of installed base, platform quality and consumer expectations*. ICIS 2007 Proceedings, Paper 38. See also Ko, C.Y. and Shen, B., 2016. *From Win-Win to Winner-Take-All*. Working Paper. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2676452
[25] See Sun, M. and Tse, E., 2007. When does the winner take all in two-sided markets? *Review of Network Economics*, 6(1).
[26] Horizontal differentiation refers to differences in services offered by the platforms. Vertical differentiation refers to differences in the number of participants on each platform – an important measure of quality in a multi-sided market.

above. The high degree of multi-homing between Hungryhouse and Just Eat restaurants is particularly relevant in this respect.

41. We note that coexisting platforms do not need to be of a similar size, even in the long run. Theoretically, it is possible to have a 'winner-take-most' scenario, in which one platform is larger and more profitable, without this leading to the other platform's exit.[27] Several variables can influence the sizes of the competing platforms, including, for example, differences in the platforms' level and effectiveness of advertising and differences in the 'quality' of platforms.[28]

42. Economic theory alone does not allow us to reach a firm conclusion on whether multiple, relatively undifferentiated food ordering marketplaces can profitably coexist. However, the mixed evidence on the strength of INEs and the fact that multi-homing among restaurants is common and inexpensive suggest that platform coexistence may be possible even in the long run.

[27] The theoretical literature, however, does not take into consideration the fixed costs that platforms must cover in the long run.
[28] See Sun, M. and Tse, E., 2007. When does the winner take all in two-sided markets?. *Review of Network Economics*, 6(1).

Appendix F: Econometric analysis

1. The purpose of this appendix is to explain the methodology used for the CMA's econometric analysis, to present the main results and statistical tests, and to set out our assessment of the results of this analysis. We first discuss a performance-concentration analysis (PCA) carried out by Just Eat in the context of the CMA's phase 1 process (Just Eat's econometric analysis).

2. This appendix is organised into the following sections:

   (a) Discussion of the approach taken by Just Eat in its phase 1 submission;

   (b) Our hypothesis and analytical framework;

   (c) Methodology;

   (d) Data;

   (e) Results of the main model;

   (f) Extensions and robustness checks.

Just Eat's econometric analysis

3. In its phase 1 submission, Just Eat presented two sets of PCAs that sought to identify whether Just Eat's number of orders varied in local areas in response to the number of restaurants located in those areas that were available through the services of selected competitors. The two PCAs used a cross-section (for September 2016) and a 9-month panel data set (from December 2015 to September 2016), respectively, to capture the relationship between variations in the number of restaurants located in a postcode district that were available on a number of online food platforms (and Domino's) and changes in the number of orders made on the Just Eat online food platform.

4. Just Eat submitted that the results of both the econometric analyses showed that:

   (a) no statistically significant relationship existed between the presence of Hungryhouse in a local area and Just Eat's performance – suggesting that Hungryhouse did not exert strong competitive pressure on Just Eat; and

   (b) [✂].

5. Just Eat used the (log) number of orders placed on the Just Eat online food platform in each postcode district as its dependent variable. The explanatory variables were:

   (a) The number of restaurants on the Just Eat online food platform in each postcode district (using dummy variables for the intervals 1-4, 5-9, 10-19 and 20+); and

   (b) The number of restaurant on selected online food platforms (Hungryhouse, Deliveroo and UberEATS) and Domino's in each postcode district, using similarly constructed dummies.

6. In its cross-section analysis, Just Eat used data for September 2016, and included control variables including postcode-district characteristics (population, population density, mean age, etc.), and the (log) volume of orders on Just Eat's online food platform in September 2015.

7. We have some reservations about the model specification used by Just Eat. In particular:

   (a) As the Parties recognised, there might be a problem with endogeneity, as platform providers are likely to be more active in areas where they expect an overall high volume of orders (see paragraph 19, below). This is particularly relevant for the cross-section analysis.

   (b) In the cross-section analysis, the inclusion of lagged orders on Just Eat as an explanatory variable may mask any effect of competition where the constraint had not changed between September 2015 and September 2016. As Deliveroo and UberEATS grew significantly more than Hungryhouse in that period, the inclusion of this lagged order volume may lead to a particularly severe underestimation of the impact of Hungryhouse on the volume of orders on Just Eat's online food platform.[1]

8. In response to the reservations raised by the CMA, Just Eat argued that:

   (a) Endogeneity is unlikely to be an issue because: (i) the model specification used by the Parties includes local area characteristics as control variables; (ii) the model specification used by the Parties includes a lagged dependent variable, which acts in a similar manner to a 'fixed effect', controlling for factors in each particular area which do not change over time; and (iii) the specific endogeneity problem identified by the CMA would, if anything, lead to an underestimate of the impact of the presence

[1] If, for example, Hungryhouse had not added any new restaurant in a postcode district between September 2015 and September 2016, the impact of Hungryhouse on Just Eat would largely be captured by the lagged variable.

of competitors on Just Eat's order volumes, and the coefficient for Hungryhouse's presence is likely to be less affected by potential endogeneity issues compared with the coefficients for the presence of other competitors, such as Deliveroo and UberEATS.

(b) It is appropriate to include Just Eat's lagged orders as an explanatory variable because: (i) there has been material variation over time in the number of restaurants listed with Hungryhouse; (ii) it is a widely used approach for addressing potential endogeneity issues; and (iii) the magnitude of the standard errors of the Hungryhouse coefficients is similar to the magnitude of the standard errors of the coefficients for the other competitors, which suggests that the lack of significance of the Hungryhouse coefficients is not attributable to a lack of variation in Hungryhouse's presence over time.

9. In the extension and robustness checks section, we discuss how we replicated the panel data analysis carried out by Just Eat during the phase 1 process. Our extended results are broadly consistent with Just Eat's results in relation to the lack of evidence of a discernible constraint from Hungryhouse on Just Eat's order volumes in that specific time period.

Hypothesis and analytical framework

10. In assessing the competitive constraints on the Parties, we took a similar approach to that used by Just Eat in its phase 1 submission. We performed a performance-concentration analysis (PCA) that takes into account the two-sidedness of the market. The analysis looks at the effects of changes in the number of restaurants on different online food platforms[2] on the value of consumer orders made on the Just Eat and Hungryhouse online food platforms.

11. The analysis we carried out uses the total value of orders made by consumers on Just Eat's online food platform in each postcode district in a month as the dependent variable, rather than the number of orders. We conducted the same analysis in relation to the total value of Hungryhouse orders across postcode districts. In both cases, the results for the value of orders hold if the number of orders is used as the dependent variable, so we have not reported these results separately. As the main explanatory variables, we use a proxy

[2] We use the term 'platform' in a loose sense to include all major market players, i.e. Just Eat, Hungryhouse, Deliveroo, UberEATS, Domino's, and Amazon Restaurants. For the purposes of this appendix, we refer to Domino's as a platform alongside Deliveroo, UberEATS and Amazon Restaurant, even though it is clearly not a comparable model. However, for the purposes of the econometric analysis it has been treated in the same way and we have sought to measure the availability of its branches to deliver to consumers in a local area in the same way as we have done for the actual platforms.

for the number of restaurants available for consumers to order from in a local area (measured by the number of restaurants which delivered to a postcode district in the previous month), instead of the number of restaurants physically located in a postcode district (as used in the phase 1 analysis submitted by Just Eat). This recognises the fact that restaurants tend to deliver to multiple postcode districts and aims to capture the actual restaurant choice available to consumers in a given area in a given month.

12. The analysis seeks to identify whether there is a consumer-side response to changes in local competition between platforms in terms of restaurant availability, which we treat as a proxy for the attractiveness or quality of the platform from a consumer perspective. In doing so, the analysis seeks to identify which competitors have the largest impact on Just Eat's value of orders, and on Hungryhouse's value of orders.

Methodology

13. Our econometric model tests how the number of restaurants available to consumers in a postcode district affects the value of orders made on the Just Eat and on Hungryhouse online food platforms. This is done through a fixed-effects specification, which controls for all factors that do not change over time at the postcode-district level. We estimate the following reduced-form regression:

$$\log(y_{it}) = \alpha + \sum_{j=1}^{6} [\beta_{1j} rest_{jit} + \beta_{2j} rest_{jit}^2] + \delta_i + \theta_t + \varepsilon_{it}$$

where y_{it} is the value of orders made on Just Eat/Hungryhouse in postcode district *i* in month *t*; $rest_{jit}$ is the number of restaurants available on the platform *j* in postcode district *i* in month *t*; δ_i and θ_t are postcode district and month fixed effects, respectively; and ε_{it} is the error term. Subscript *j* identifies each of the selected competitors: Just Eat, Hungryhouse, Deliveroo, UberEATS, Amazon Restaurants and Domino's.

14. We have included a squared term for the number of restaurants among the explanatory variables. This term aims to control for non-linear effects of adding new restaurants on the value of orders received from consumers. For example, we might expect one additional restaurant on a competitor's platform to decrease the value of orders made on Just Eat by a greater amount when the number of restaurants already available on that platform is relatively low. On the other hand, the marginal effect of an additional restaurant may be small where the platform already has a large number of restaurants available to consumers.

15. For each platform *j*, the model produces coefficients β_{1j} (in relation to the number of available restaurants) and β_{2j} (in relation to the square of available restaurants) which, combined, approximate the average percentage change in the value of orders made on Just Eat (or on Hungryhouse) in a postcode district following a change in the number of restaurants available. If a β_{1j} coefficient is negative and significantly different from zero, it means that value of orders decreases following the increase in the number of restaurants available on the relevant platform, and vice versa.

16. The interpretation of the β_{2j} coefficient is slightly more complicated, as it deals with the non-linear effect of additional restaurants on the value of orders from Just Eat or from Hungryhouse. For example, if, for any competitor's platform *j*, β_{1j} is negative, and the corresponding β_{2j} is positive, the overall effect of an additional restaurant available on platform *j* on the value of orders from Just Eat or from Hungryhouse becomes smaller as the overall number of restaurants on the platform increases. This is the relationship we would expect to observe: a diminishing effect from adding more restaurants as the platform expand.

17. We include in the model the Parties' 'own-effect', ie the effect of a change in the number of restaurants available on, say, Just Eat's online food platform on the value of orders made on Just Eat's platform itself, as well as the 'cross-effect' of all main online food platforms, i.e. Just Eat, Hungryhouse, Deliveroo, UberEATS, and Amazon Restaurants, as well as Domino's. We would expect the 'own-effect' to be positive in all cases, as an increase in the number of restaurants available on a platform is likely to increase the number of orders received by itself.

18. We designed two baseline model specifications. The first uses the whole time period available, ie from April 2012 to April 2017; the second restricts the time period to January 2015 to April 2017. [✂] (see Figure 1, below).

Strengths and limitations

19. The principal issue in a PCA is the so-called endogeneity problem, ie the extent to which local competition is driven by factors such as local costs and demand that also affect performance, and that are not controlled for by the analysis. This would bias the results, as we would wrongly be conflating the impact of such factors on performance with that of local competition. Whether this bias causes the model to under- or over-estimate the impact of competition depends on how these omitted factors affect performance. The fixed effects regression helps to address this concern, by holding constant all factors that do not vary over time.

20. Even so, it is possible that there are local factors that vary over time and are correlated with both local competition and performance. Again, this would bias the results. For example, increases in local demand (due to demographic or income changes, for example) are likely to attract new restaurants on one online food platform *and* increase the value of orders placed on another online food platform. This would cause a positive bias in the results, because we would wrongly associate increased restaurant availability with increases in the value of orders on a competing online food platform. We would therefore underestimate the effect of competition on value of orders.

21. It is therefore likely that our regression coefficients suffer from a positive bias, ie our positive coefficient estimates might be bigger, and our negative coefficients smaller then they should be. That means that negative coefficients may be underestimated in absolute terms, and potentially may not be significantly different from zero and (in extreme cases) may even be positive. Therefore, when we estimate the competitive constraint posed by the an online food supplier on, say, Just Eat, we can only interpret and give weight to the statistically significant negative coefficients, and we cannot have confidence in non-significant or significantly positive results as being evidence of a lack of competitive constraint.

Data

22. We used monthly data at postcode district level for the period April 2012 to April 2017, covering a total of 2,821 postcode districts. The variables we focussed on in our analysis are:

    (a) Number and value of orders for Just Eat and Hungryhouse (the dependent variables);

    (b) Three measures of restaurants availability (the explanatory variables):

        (i) Restaurants located in a given postcode district;

        (ii) Restaurants that delivered to a given postcode district in the previous month;

        (iii) Restaurants that delivered to a given postcode district in the preceding 12 months, and that delivered in any postcode district in the last month.

23. We recognised that all of these measures of restaurants availability were only proxies for the actual choices available to consumers in a given postcode district. Having assessed the advantages and disadvantages of each

definition, and the overall quality of the data provided, we decided to use definition (ii) as our preferred measure of restaurant availability.

24. Each party provided the data requested in relation to its own restaurant availability, and we approached all relevant parties for clarification whenever we identified problems with the data, such as missing observations or inaccurate postcodes.

Descriptive statistics

25. In this section, we present descriptive statistics of the data set used in our analysis.

26. We observed monthly data for 2,821 postcode districts, of which [✂] are postcode districts where at least one order was made on Just Eat's online food platform in the relevant period, and [✂] are postcodes where at least one order was made on Hungryhouse's online food platform in the relevant period. The average monthly total value of orders placed in a postcode district over the five years considered was [✂] on Just Eat, and [✂] on Hungryhouse.

27. Table 1 summarises information about number and value of orders made on Hungryhouse and Just Eat.

Table 1: Summary statistics on Parties' orders

Platform	*Average value of orders in a month in a postcode district (£)*	*Median value of orders in a month in a postcode district (£)*	*Average number of orders in a month in a postcode district*	*Median number of orders in a month in a postcode district*
Hungryhouse	[✂]	[✂]	[✂]	[✂]
Just Eat	[✂]	[✂]	[✂]	[✂]

Source: CMA analysis of Parties' and third parties' data.

28. Table 2 below shows the average, median, standard deviation and the number of restaurants (as ranges) available on each platform over the five years that we considered.

Table 2: Number of restaurants available (where the platform is present)

Fascia	*Average*	*Median*	*Standard deviation*	*Range*
Hungryhouse	[✂]	[✂]	[✂]	[✂]
Just Eat	[✂]	[✂]	[✂]	[✂]
Deliveroo	[✂]	[✂]	[✂]	[✂]
UberEATS	[✂]	[✂]	[✂]	[✂]
Domino's	[✂]	[✂]	[✂]	[✂]
Amazon	[✂]	[✂]	[✂]	[✂]

Source: CMA analysis of Parties' and third parties' data.

29. Figure 1 below shows that the number of restaurants available on all platforms increased over the last five years. Just Eat signed up the highest

number of restaurants, and Hungryhouse the second-highest. However, both Deliveroo and UberEATS increased their restaurant numbers significantly in recent months.

30. Due to its different business model, the number of branches available on Domino's, while growing, [✂]. This lower level of variation in Domino's number of restaurants is likely to affect our ability to efficiently estimate its impact on Just Eat's and Hungryhouse's performance.

Figure 1: Number of restaurants available on different platforms

[✂]

Source: CMA analysis of Parties' and third parties' data.

31. Locally, the situation is different. If we focus on the areas where each competitor is present, and calculate the average number of restaurants available in a postcode district, we can see from Figure 2, that UberEATS and Deliveroo have the highest number of restaurants on average. They are followed by Amazon Restaurants, Just Eat and Hungryhouse.

Figure 2: Presence of platforms at local level

[✂]

Source: CMA analysis of Parties' and third parties' data.

32. However, this is largely driven by the fact that these more recent entrants cover a smaller number of more densely-populated areas. Figure 3 shows that, while both Just Eat and Hungryhouse, as well as Domino's, cover more than [✂] postcode districts, Deliveroo is present in just over [✂] postcode districts, while UberEATS is present in nearly [✂] postcode districts and Amazon Restaurants in slightly more than [✂] postcode districts.

Figure 3: Number of postcode districts covered by the different platforms

[✂]

Source: CMA analysis of Parties' and third parties' data.

33. Focusing on the dependent variable of our model, Figure 4 shows the value of orders placed on Just Eat and Hungryhouse's online food platforms every month over the last five years. The total value of orders increased for both platforms, however it is clear that Just Eat's value of orders displayed a much higher absolute growth and has grown to become significantly larger than Hungryhouse.

Figure 4: Monthly value of orders on Just Eat and Hungryhouse

[✂]

Source: CMA analysis of Parties' and third parties' data.

Results

34. Table 3 and Table 4, below, present the baseline results of the model, estimated separately for Just Eat and for Hungryhouse. The dependent variables are all in logarithms and multiplied by 100, so the coefficients in the tables are roughly equivalent to the percentage change in each dependent variable resulting from one additional restaurant being made available on the relevant platform.[3]

35. Our baseline models show that:

    (a) A change in the number of restaurants available on Hungryhouse's online food platform has a negative impact on the value of orders placed on Just Eat's online food platform and vice versa. However, we note that these effects diminish, in absolute terms, over time, with Hungryhouse imposing no discernible constraint on Just Eat when we restrict our analysis to the last year of our period (April 2016 to April 2017) – something we further explore in the extensions and robustness checks section, below.

    (b) Both Deliveroo and UberEATS affect Just Eat's and Hungryhouse's performance.

    (c) As mentioned at paragraph 30, our estimates of the effect of Domino's are very imprecise. The counterintuitive signs of the Domino's coefficients lead us to put limited weight on the interpretation of any coefficients for Domino's.[4]

    (d) Our analysis has not found an impact from Amazon Restaurants has any impact on either Just Eat or Hungryhouse, which would be consistent with its recent entry, limited geographic coverage and relatively small number of listed restaurants.

    (e) For both Just Eat and Hungryhouse, there is a positive effect from increases in their own restaurants numbers, as we would expect (as explained in paragraph 17, above).

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[3] To calculate the percentage change exactly, one should take the exponential of the coefficient and subtract 1. When the coefficients are reasonably small, as they are here, the approximation is very close. For example, exp(-0.1) – 1 = -0.095 and so interpreting the coefficient of -10 (-0.1 * 100) directly as 'minus 10 percent' leads to no loss of accuracy. We multiplied by 100 to make it easier to read the coefficients.
[4] We tested our results with and without Domino's restaurants as an explanatory variable. Excluding Domino's from the model does not affect any of the other coefficients. This suggests that the results for Domino's are of no or little importance for our purposes.

36. Somewhat unexpectedly, the baseline model suggests that Hungryhouse places a stronger constraint on Just Eat than the other way around, at least when looking at the full five-year period. This might be due to the diminishing effect of additional restaurants available on the platform. In other words, adding one restaurant on Just Eat's already large set of restaurants may do little to increase the constraint it imposes on Hungryhouse; on the other hand, one additional restaurant on Hungryhouse may have a larger impact on competition between the Parties, because of the smaller number of restaurants available on that platform – less than half as many as Just Eat, overall. We recognise that this is a hypothesis, and it is hard for us to test it, as there are very few postcode districts where their restaurant numbers are roughly equal. We therefore submit our baseline model to several robustness checks and extensions (see below).

Table 3: Baseline regression results for Hungryhouse

	(1)	*(2)*
	Last 5 years	*From 2015*
Hungryhouse	[✂]	[✂]
	[✂]	[✂]
Just Eats	[✂]	[✂]
	[✂]	[✂]
Deliveroo	[✂]	[✂]
	[✂]	[✂]
UberEATS	[✂]	[✂]
	[✂]	[✂]
Domino's	[✂]	[✂]
	[✂]	[✂]
Amazon Restaurant	[✂]	[✂]
	[✂]	[✂]
Hungryhouse (squared)	[✂]	[✂]
	[✂]	[✂]
Just Eats (squared)	[✂]	[✂]
	[✂]	[✂]
Deliveroo (squared)	[✂]	[✂]
	[✂]	[✂]
UberEATS (squared)	[✂]	[✂]
	[✂]	[✂]
Domino's (squared)	[✂]	[✂]
	[✂]	[✂]
Amazon (squared)	[✂]	[✂]
	[✂]	[✂]
Constant	653.18***	742.50***
	(3.64)	(4.67)
Observations	82,866	44,260
R-squared	0.83	0.65
Number of postcode	1,823	1,807

Source: CMA analysis of Parties' and third parties' data.

Table 4: Baseline regression results for Just Eat

	(1)	*(2)*
	Last 5 years	*From 2015*
Hungryhouse	[✂]	[✂]
	[✂]	[✂]
Just Eats	[✂]	[✂]
	[✂]	[✂]
Deliveroo	[✂]	[✂]
	[✂]	[✂]
UberEATS	[✂]	[✂]
	[✂]	[✂]
Domino's	[✂]	[✂]
	[✂]	[✂]
Amazon	[✂]	[✂]
	[✂]	[✂]
Hungryhouse (squared)	[✂]	[✂]
	[✂]	[✂]
Just Eats (squared)	[✂]	[✂]
	[✂]	[✂]
Deliveroo (squared)	[✂]	[✂]
	[✂]	[✂]
UberEATS (squared)	[✂]	[✂]
	[✂]	[✂]
Domino's (squared)	[✂]	[✂]
	[✂]	[✂]
Amazon (squared)	[✂]	[✂]
	[✂]	[✂]
Constant	811.40***	928.51***
	(2.67)	(3.79)
Observations	131,594	64,182
R-squared	0.87	0.66
Number of postcode	2,384	2,377

Source: CMA analysis of Parties' and third parties' data.

37. Figure 5 and Figure 6 graphically display the impact of an additional restaurant available on different online food platforms and Domino's on the value of orders placed on Hungryhouse and Just Eat's online food platforms. Figure 7 and Figure 8 show the same for models based on data for the period from January 2015 onwards. The red dots show the coefficient estimates from Table 3 and Table 4, while the blue lines are the 95-percent confidence intervals.

Figure 5: Impact of an additional restaurant on Hungryhouse's value of orders (Apr 2012-Apr 2017)

[✂]

Source: CMA analysis of Parties' and third parties' data.

Figure 6: Impact of an additional restaurant on Just Eat's value of orders (Apr 2012-Apr 2017)

[✂]

Source: CMA analysis of Parties' and third parties' data.

Figure 7: Impact of an additional restaurant on Hungryhouse's value of orders (Jan 2015-Apr 2017)

[✂]

Source: CMA analysis of Parties' and third parties' data.

Figure 8: Impact of an additional restaurant on Just Eat's value of orders (Jan 2015-Apr 2017)

[✂]

Source: CMA analysis of Parties' and third parties' data.

38. To put the results of our models in context, we applied them to a representative (notional) average postcode district. First, for each period, we computed the average number of restaurants available on each platform. Second, we calculated how many restaurants would be added if each platform were to increase its restaurant offer by 10%, in order to assess the impact of a comparable increase across the various online food platforms and Domino's. Third, we used the coefficients from our econometric analysis in order to compute the impact that these additional 10% of restaurants on each platform would have on the value of orders placed on Hungryhouse and of Just Eat's online food platforms. The results are presented in Table 5 and Table 6 below. Figure 9 to Figure 12 graphically display these results.

Table 5: Impact of 10% more restaurants (Apr 2012-Apr 2017)

	Average number of restaurants (where present)	*Additional 10% restaurants*	*Average impact on the value of orders of JE (%)*	*Average impact on the value of orders of HH (%)*
Just Eat	[✂]	[✂]	[✂]	[✂]
Hungryhouse	[✂]	[✂]	[✂]	[✂]
Deliveroo	[✂]	[✂]	[✂]	[✂]
UberEATS	[✂]	[✂]	[✂]	[✂]
Domino's	[✂]	[✂]	[✂]	[✂]
Amazon	[✂]	[✂]	[✂]	[✂]

Source: CMA analysis of Parties' and third parties' data.

Table 6: Impact of 10% more restaurants (Jan 2015-Apr 2017)

	Average number of restaurants (where present)	*Additional 10% restaurants*	*Average impact on the value of orders of JE (%)*	*Average impact on the value of orders of HH (%)*
Just Eat	[✂]	[✂]	[✂]	[✂]
Hungryhouse	[✂]	[✂]	[✂]	[✂]
Deliveroo	[✂]	[✂]	[✂]	[✂]
UberEATS	[✂]	[✂]	[✂]	[✂]
Domino's	[✂]	[✂]	[✂]	[✂]
Amazon	[✂]	[✂]	[✂]	[✂]

Source: CMA analysis of Parties' and third parties' data.

Figure 9: Impact of 10% more restaurants on Hungryhouse (Apr 2012-Apr 2017)

[✂]

Source: CMA analysis of Parties' and third parties' data.

Figure 10: Impact of 10% more restaurants on Just Eat (Apr 2012-Apr 2017)

[✂]

Source: CMA analysis of Parties' and third parties' data.

Figure 11: Impact of 10% more restaurants on Hungryhouse (Jan 2015-Apr 2017)

[✂]

Source: CMA analysis of Parties' and third parties' data.

Figure 12: Impact of 10% more restaurants on Just Eat (Jan 2015-Apr 2017)

[✂]

Source: CMA analysis of Parties' and third parties' data.

39. Looking at the tables above and at Figure 9 and Figure 11, our model predicts that 10% more restaurants on the Hungryhouse online food platform would have the following effects:

    (a) Increase by nearly [✂]% the value of orders on Hungryhouse (own-effect). This effect increases to [✂]% in the model which only covers data for the period from April 2015 onwards; and

    (b) Decrease the value of order made on Just Eat by [✂]% (cross-effect). Interestingly, this effect drops to [✂]% in the model based on data for the period from April 2015 onwards.

40. We can describe in a similar way the effect of 10% more restaurants available on Just Eat, which is to:

    (a) Increase the value of orders made on Just Eat by [✂]% (own-effect); and

    (b) Decrease the value of orders made on Hungryhouse by [✂]% (cross-effect) – with the effect dropping to [✂]% in the model using data for the period from April 2015 onwards.

41. As mentioned above, we note that the magnitude of the coefficients changes according to the period covered. This suggests that our results are likely to be dependent on the period of time under analysis. Therefore, we extend our analysis in the following section.

Extensions and robustness checks

42. In this section, we further explore the results to see if they are robust to different specifications, and test whether the effect of changes in the number of restaurants varies according to the existing level of competition in the local area.

43. We performed the following extensions and robustness checks:

(a) We applied the model to different geographic areas, distinguishing between areas where Deliveroo and/or UberEATS were present and where they were not;

(b) We dropped non-linear ('squared') terms from our regression model;

(c) We applied the model to different time periods;

(d) We focused on those areas where neither Deliveroo nor UberEATS are present and applied that model to different time periods too;

(e) Not fully reported here, we also:

(i) used the number of restaurants physically located in a postcode district as an alternative dependent variable (see paragraph 22, above); and

(ii) used a regression model similar to the one used by Just Eat in its phase 1 submission (see paragraph 3, above).

44. After these extensions and robustness checks, we concluded that the results from our main model were broadly robust, but with some important exceptions:

(a) The competitive constraint exercised by Hungryhouse on Just Eat appears to decline in the most recent months and we find no constraint from Hungryhouse when looking at the last year of data only (April 2016 to April 2017);

(b) Similarly, the competitive constraint exercised by Just Eat on Hungryhouse declined in the most recent months; and

(c) The competitive constraint imposed by the Parties on each other is affected by the presence of Deliveroo and/or UberEATS.

Extension 1: different geographic areas

45. We tested our results on different samples:

(a) Areas where the only online food platforms are Just Eat and Hungryhouse (with Domino's being also present, because of its wide geographic coverage);

(b) Areas where one or both of Deliveroo and UberEATS are also present alongside both Parties.

46. Applying our model to these two types of geographic areas enables us to see if, and to what extent, the Parties' constraint on each other is affected by the presence of Deliveroo and UberEATS. Therefore, we are able to estimate the strength of the Parties' constraint over different types of geographic areas by estimating different regressions for specific subsets of our main data set.

47. Figure 13 and Figure 14 below graphically display the main coefficients for the impact of an additional restaurant available on Just Eat on the value of orders on Hungryhouse, and vice versa, in the two types of areas defined above. For comparison, we present these results alongside the baseline model and the linear specification. All coefficients represented below are significantly different from zero at a 1% confidence level, except for the impact of Hungryhouse on Just Eat from January 2015 to April 2017 in areas where Deliveroo and/or UberEATS are present, which is not statistically significant.

48. The figures below also include the results for our main model without quadratic effects (ie the 'squared' terms). That is, we used a specification including only linear terms. In other words, we left the terms $\beta_{2j} rest_{jit}^2$ out of the equation described at paragraph 13, above.

Figure 13: Impact of an additional restaurants on Just Eat on Hungryhouse's value of orders

[✂]

Source: CMA analysis of Parties' and third parties' data.

Figure 14: Impact of an additional restaurants on Hungryhouse on Just Eat's value of orders

[✂]

Source: CMA analysis of Parties' and third parties' data.

49. From these results, we see that:

(a) The Parties exercise a stronger constraint on each other in those areas where Deliveroo and UberEATS are not present.

(i) Indeed, looking at the period from January 2015 onwards, the effect of an additional restaurant on Hungryhouse on the value of orders of Just Eat increases from [✂] where Deliveroo and/or UberEATS are present to [✂] where they are not. The baseline model indicated an effect of [✂].

(ii) Similarly, Just Eat's impact on Hungryhouse is [✂] in the baseline model, but is [✂] where Deliveroo and/or UberEATS are present, and [✂] where they are not.

(b) Restricting our model to simple linear effects underestimates the impact of the Parties' presence on each other. The linear model generates coefficients up to [✂] lower, in absolute terms, than our baseline. However, the sign of the coefficients is not affected.

Extension 2: different time periods

50. We have also tested our main results for different time periods. In addition to our baseline results, which already separately examined the whole period of our analysis (April 2012 to April 2017) and the more recent period from January 2015 onwards, we have also tested our results by using data from February 2013 onwards and from April 2016 onwards. We chose these dates for the following reasons:

(a) April 2012: first date available. The sample covers five full years.

(b) February 2013: when Deliveroo entered the UK market, albeit with a relatively small presence.

(c) January 2015: [✂].

(d) April 2016: last full year available in the data.

51. Table 7 and Table 8 show the results of the main coefficients for these specifications. Figure 15 graphically displays the impact of Just Eat, Deliveroo and UberEATS on Hungryhouse's value of orders. Similarly, Figure 16 graphically displays the impact of Hungryhouse, Deliveroo and UberEATS on Just Eat's value of orders.

Table 7: Impact on Hungryhouse's value of orders

	Full period	*From Feb 2013*	*From Jan 2015*	*From Apr 2016*
Hungryhouse	[✂]	[✂]	[✂]	[✂]
Just Eat	[✂]	[✂]	[✂]	[✂]
Deliveroo	[✂]	[✂]	[✂]	[✂]
UberEATS	[✂]	[✂]	[✂]	[✂]
Domino's	[✂]	[✂]	[✂]	[✂]
Amazon	[✂]	[✂]	[✂]	[✂]

Source: CMA analysis of Parties' and third parties' data.

Table 8: Impact on Just Eat's value of orders

	Full period	*From Feb 2013*	*From Jan 2015*	*From Apr 2016*
Hungryhouse	[✂]	[✂]	[✂]	[✂]
Just Eat	[✂]	[✂]	[✂]	[✂]
Deliveroo	[✂]	[✂]	[✂]	[✂]
UberEATS	[✂]	[✂]	[✂]	[✂]
Domino's	[✂]	[✂]	[✂]	[✂]
Amazon	[✂]	[✂]	[✂]	[✂]

Source: CMA analysis of Parties' and third parties' data.

Figure 15: Impact on Hungryhouse's value of orders

[✂]

Source: CMA analysis of Parties' and third parties' data.

Figure 16: Impact on Just Eat's value of orders

[✂]

Source: CMA analysis of Parties' and third parties' data.

52. From these results, we see that:

(a) The effect of additional restaurants on Just Eat, Hungryhouse, and Deliveroo diminishes over time.

(b) Hungryhouse's effect on Just Eat becomes insignificant if we look at the last year.

Extensions 3: different time periods in specific geographic areas

53. In this extension, we combined extension 1 and extension 2. We restricted our sample to only those areas where neither Deliveroo nor UberEATS is present. We then applied our model to the same time periods as those analysed under extension 2, which are:

(a) April 2012 - April 2017;

(b) February 2013 – April 2017;

(c) January 2015 – April 2017;

(d) April 2016 – April 2017.

54. Figure 17 and Figure 18 below show that Hungryhouse's constraint on Just Eat decreases, in absolute terms, over time from [✂]%, and becomes significant only at a 10% significance level in the last year considered. On the other hand, Just Eat's constraint on Hungryhouse remains relatively stable over time, with its main coefficient in the range [✂]% to [✂]%.

Figure 17: Impact of Hungryhouse on Just Eat's value of orders in areas where neither Deliveroo nor UberEATS are present

[✂]

Source: CMA analysis of Parties' and third parties' data.

Figure 18: Impact of Just Eat on Hungryhouse's value of orders in areas where neither Deliveroo nor UberEATS are present

[✂]

Source: CMA analysis of Parties' and third parties' data.

Extensions 4: additional robustness checks

55. Finally, we performed additional robustness checks, the results of which we do not report here, as they do not add much to the results presented above.

56. First, we used the number of restaurants physically located in a postcode district as an alternative definition of restaurants availability, which is similar to what Just Eat did in its Phase 1 submission. The results are broadly consistent with our baseline results; however, the coefficients are larger in magnitude. This is likely to be due to the different scale of the explanatory variable and its imperfect approximation of the delivery areas covered by a restaurant – which we believe our baseline model better captures (although, admittedly, also imperfectly).

57. Second, we applied the specification that Just Eat used in its phase 1 submission (see paragraph 3) to two models: one using the number of restaurants physically present in a postcode district (as Just Eat did in its submission); the other using the number of restaurants that delivered to a given postcode in the latest month. The model uses a set of four dummy variables per platform to categorise the number of restaurants.

58. Results are hard to compare directly to our baseline model, but in general are in line with our results: showing that the constraint from Hungryhouse is much weaker – and even not statistically significant – in the most recent periods.

59. We also tested our baseline results to the inclusion of Domino's presence in our model. Excluding Domino's from our baseline regressions does not affect our other results.

Glossary

Amazon	Amazon Online UK Limited. Amazon. It owns the Amazon Restaurants service.
Amazon Restaurants	This refers to Amazon's online food platform.
App	An app is a self-contained program or piece of software designed to fulfil a particular purpose. Apps can be downloaded to a range of electronic devices such as a tablet or mobile device. In this case, it allows users to order food online.
CMA	Competition and Markets Authority.
Deliveroo	Deliveroo is the online food platform owned by Roofoods Limited. We use the term Deliveroo to refer both to the online food platform and Roofoods Limited.
Delivery Hero	Delivery Hero AG is a publicly listed online food platform based in Berlin, Germany and operating in many countries across the world.
Dine in	This refers to restaurants that allow customers to consume food on the premises of the restaurant (as opposed to 'takeaway' restaurants).
Domino's	Domino's Pizza Group plc (DPG) is a Master Franchisee from Domino's Pizza Inc. Domino's Pizza Inc is the American Corporation which owned the Dominos brand.
Foodora	Foodora GmbH is an online food platform based in Berlin and operating in various countries worldwide.
Food ordering marketplace	A food ordering marketplace provides consumers with access to multiple restaurants, and restaurants with access to multiple consumers, on a single online platform.
foodpanda	Foodpanda is an online food platform focussed on emerging markets.
FY	Financial year.
Hungryhouse	Hungryhouse Holdings Limited and its subsidiaries.

INE	Indirect network effect.
IPO	Initial public offering refers to the first time that the stock of a private company is offered to the public.
Just Eat	Just Eat.co.uk is a wholly owned subsidiary of Just Eat Holding Limited, which is itself wholly owned by Just Eat PLC, together, they are referred to as Just Eat.
Just Eat.co.uk	Just Eat.co.uk Limited.
Multi-homing	Customers are described as 'multi-homing' when they use more than one online food platform. We consider that restaurants are multi-homing when they are listed on more than one platform. On the consumer side, a consumer may have an account with more than one platform, but this may not necessarily be an example of multi-homing. A consumer may have access to more than one platform, but may use them for different purposes. A strict definition of multi-homing on the consumer side would only apply to instances where a consumer uses more than one platform in making a purchasing decision, for example searching for restaurants on two platforms and then deciding which one to order through.
Online food platform	Terms used to refer to either a food ordering marketplace or an ordering and logistics service. Throughout the report, when referring to 'the online food platforms', we mean: Just Eat, Hungryhouse, Deliveroo, UberEATS and Amazon Restaurants collectively.
Online ordering	This refers to ordering food via a website or app.
Ordering and logistics specialists	Ordering and logistics specialists offer food ordering marketplace' services and manage the delivery function on behalf of restaurants.
Parties	Just Eat and Hungryhouse are together referred to as the 'Parties'.
PPC	Pay per click
Restaurant chain	A restaurant chain refers to a set of related restaurants in a number of different geographic locations that are under shared corporate ownership or franchising agreements. Examples of

	large branded restaurant chains/groups are Burger King and McDonalds, although smaller restaurant chains with far fewer restaurants do exist.
Restaurant services	These refer to services offered to restaurants by online food platforms which may include: portals, driver management solutions, white-label websites/services, online store/shop, menu printing services, co-marketing campaigns and delivery services.
Single-homing	Customers are described as 'single-homing' when they only use one online food platform.
SLC	Substantial lessening of competition.
Takeaway.com	Takeaway.com BV is a publicly listed online food platform based in the Netherlands and operating in many countries across Europe and globally.
Takeaway restaurants	This refers to restaurants which prepare food to be taken away and consumed at the consumer's premises, as opposed to restaurants that prepare food that can be consumed on the premises of the restaurant.
Uber	Uber London Limited, which is typically known for its rides booking services, but also owns UberEATS.
UberEATS	This is Uber's online food platform.
Vertically integrated food chains	These are 'restaurant chains' which have developed the necessary technology to enable their customers to order food online (ie through websites and/or mobile apps) and allow the restaurant chain to deliver the food to the consumer. These chains' websites do not offer customers access to other restaurants.
White label	These are products or services produced and supplied by one company and then rebranded by another company to make the product/service appear to be their own (eg white-label ordering websites or managed call centres).