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ROUNDTABLE ON "PRICE DISCRIMINATION"

-- Note by the United Kingdom --

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This document reproduces a written contribution from the United Kingdom submitted for Item 7 of the 126th OECD Competition Committee meeting on 29-30 November 2016.

More documents related to this discussion can be found at www.oecd.org/daf/competition/price-discrimination.htm

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UNITED KINGDOM

1. Introduction

1. This submission outlines some of the CMA's recent economic thinking and case experience on price discrimination.

2. The focus of the submission below is *non-exclusionary* price discrimination, though we briefly mention *exclusionary* price discrimination in section 5 below. The CMA and its predecessor bodies have considered the consumer welfare effects of non-exclusionary price discrimination both in the context of developing an economic framework to assess these effects and in the context of some of their market studies and investigations.

3. At a high level, the CMA has tended to consider price discrimination not as the source of consumer harm in its own right, but rather as a mechanism employed to exploit demand side issues which limit competition, such as weak customer engagement. The nature of the pricing behaviour of the firms in question has often also affected customer behaviour directly, for example where it involves complex or opaque pricing structures that reduce the ability of customers to compare offers and drive competition.

4. In relation to *exclusionary* conduct, the CMA has tended to treat price discrimination as a market feature that can in some cases facilitate exclusion, rather than the defining aspect of an exclusionary strategy. This submission therefore does not focus on this in detail but provides an example of this approach.

2. Economic framework to assess the effects of non-exclusionary price discrimination

5. It is a well-established result in the economic literature that non-exclusionary price discrimination has an ambiguous effect on consumer welfare, when compared to uniform pricing. In general, the CMA therefore considers the impact of price discrimination on a case-by-case basis.

6. Whether a given instance of price discrimination is likely to lead to consumer harm will depend on the specific characteristics of each market, including the nature of competition in the market, the characteristics of consumer demand and whether firms incur costs to engage in price discrimination. Given this wide range of factors, the OFT produced a report into 'the economics of online personalised pricing'[1] as part of its Call for Information on personalised pricing launched on 15 November 2012. This report included a review of the academic literature on the welfare effects of non-exclusionary price discrimination, to identify a framework for considering the market conditions under which price discrimination is more likely to be harmful for consumers. It then considers the application of this framework to online personalised pricing. This section summarises the main findings from this report.

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[1] The full literature review can be found here: http://webarchive.nationalarchives.gov.uk/20140402142426/http:/www.oft.gov.uk/shared_oft/research/oft1488.pdf

7. The OFT found that the overall impact of price discrimination on consumers depends on the net result of four different effects that arise as a consequence of price discrimination:

1. **Appropriation Effect:** price discrimination allows firms to charge a high price to customers with a high willingness to pay, thus allowing firms to extract consumer surplus that they would not be able to extract with a flat pricing policy;

2. **Output Expansion Effect:** price discrimination allows firms to charge a low price to customers with a low willingness to pay, making it possible for customers who would have not consumed under a uniform price to now buy the product;

3. **Intensified Competition Effect:** price discrimination can increase competition between firms, since they are able to specifically target the customers with preferences for other firms with competitive price offers;

4. **Commitment Effect:** price discrimination can prevent firms from committing not to decrease their prices in the future. Intuitively, this happens because price discrimination allows firms to selectively reduce prices only to the customers that a firm wants to "poach", without reducing prices on their existing customer base, making deviation from a collusive agreement more appealing for the firm.

8. Of the above effects, only the appropriation effect has a negative impact on consumer welfare, whereas the other three effects all tend to increase consumer surplus.

9. The OFT provided a framework to analyse the interplay of these four factors.

2.1 Price discrimination by monopolist

10. Where there is only one firm in a market, the overall effect of price discrimination will depend on how the Appropriation Effect balances against the Output Expansion Effect (and in some cases the Commitment Effect).[2]

11. The OFT report identifies two situations in the context of markets with a monopoly supplier where the effects of non-exclusionary price discrimination on consumers are more likely to be negative.

12. Firstly, when the monopolist focusses particularly on identifying consumers with low elasticity of demand for whom it can raise prices rather than trying to identify consumers with low willingness to pay – this makes it more likely that the output expansion effect will be small compared to the appropriation effect, and as a result price discrimination is likely to be harmful to the consumers.

13. Secondly, concerns may also arise if the form of discrimination is relatively complex and sophisticated, as this may imply that the monopolist has good visibility of the variation in customers' willingness to pay and is able to discriminate between customers in very granular segments.[3] This means that the effects of the price discrimination are closer to the theoretical case of first degree price discrimination, under which all the consumer surplus is extracted by the monopolist.

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2 The Intensified Competition Effect does not apply where there is only one firm.

3 Notice that this may be particularly relevant in online and digital settings, given the large amount of data that if often available to firms to engage in customer segmentation.

2.2 Price discrimination in oligopoly

14. Most of the cases where price discrimination occurs in practice involve competition between multiple firms. Where there is competition between multiple firms, the overall effect of price discrimination needs to also account for the Intensified Competition Effect.

15. The Intensified Competition Effect can cause price discrimination to have a positive effect on consumers. The impact of price discrimination on competition will depend on in part on the extent to which different competing firms identify the same group of customers as being more price sensitive to the price of their products (‘*best-response symmetry*’).[4]

16. In situations where each firm identifies the same segment of customers as less price sensitive, price discrimination is likely to imply market segmentation, where firms compete to charge lower prices for the more price sensitive customers and charge higher prices for the less price sensitive customers. In practice this may result in situations where firms each have an ‘inactive base’ of customers unlikely to switch while competing over an active pool of customers. The overall effect on consumers of price discrimination in these situations is ambiguous and will depend in part on the distribution of customers’ price sensitivity. This relationship is not straightforward as several other factors are also relevant. In some situations uniform pricing may benefit customers overall compared to price discrimination – for instance where a small group of less price sensitive customers are ‘protected’ from higher pricing by the firms’ incentive to compete at the margin for a larger group of more price sensitive customers. In other situations uniform pricing may lead to worse outcomes for customers overall compared to price discrimination – for instance if under uniform pricing the firms’ incentive to charge high prices to its ‘inactive base’ dominates its incentives to compete for a small group of more price sensitive customers.

17. Price discrimination in situations where competing firms identify different groups of customers as less price sensitive (‘best-response asymmetry’) – for example because customers have idiosyncratic brand preferences – may often lead to intensified competition, to the benefit of consumers. This is because firms may be able to identify and selectively target their competitors’ less price sensitive customers and have the incentive to offer them discounts. In these situations, prices will usually be lower if firms price discriminate than if there is uniform pricing.[5]

18. The OFT report identifies an additional three factors that make it more likely that non-exclusionary price discrimination would have a negative impact on consumers in markets with more than one firm:

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4 More formally, a situation is said to be best-response symmetric if the different firms in the oligopoly identify the same group of consumers as being less price sensitive to the price of their products. It is said to be best-response asymmetric if the reverse applies. One example of a best-response symmetric situation would be one in which each firm can identify a pool of price-sensitive shoppers: those would be the “weak” customer group for both firms. An example instead of best-response asymmetry would be when consumers display firm preferences: in this case, firm 1’s strong group would be firm 2’s weak group and vice versa.

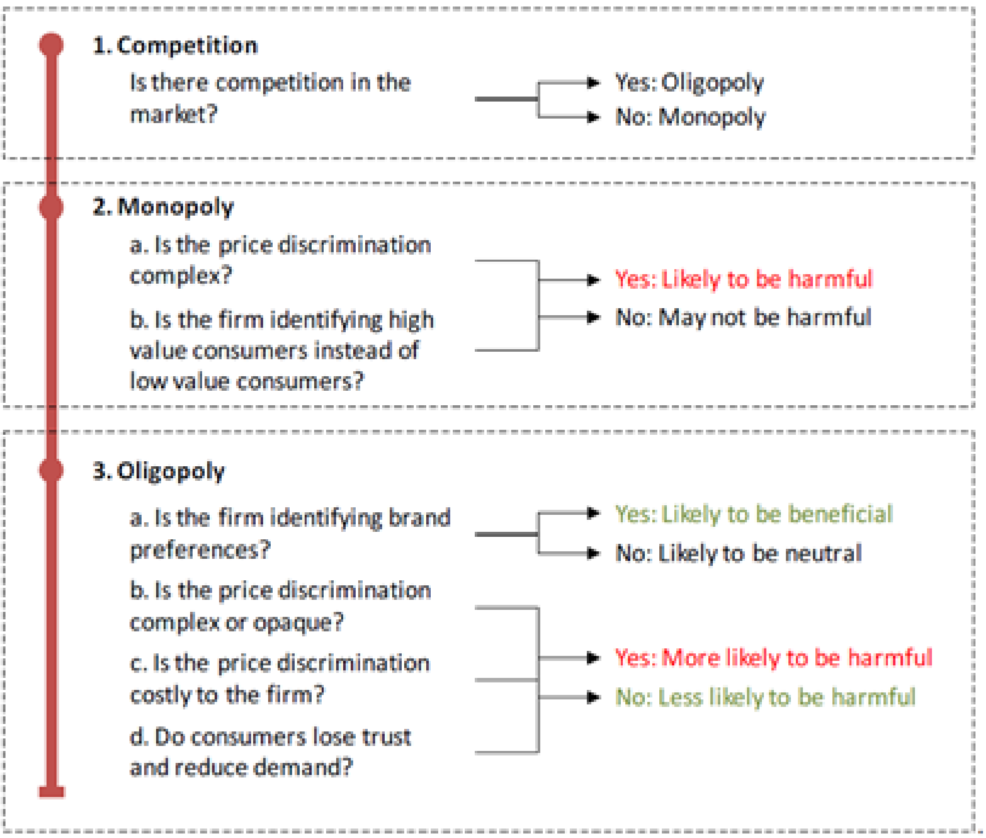
5 Theoretically, under best-response asymmetry there are cases where uniform prices could also be lower than prices with price discrimination. However the conditions under which this may happen are quite strict: demand would have to take extreme or unusual forms. For practical purposes, it seems likely that in most cases uniform prices would be higher than prices with price discrimination.

- **Unsophisticated consumers and/or opaque pricing:** if consumers are not sophisticated[6] and/or the price discrimination results in non-transparent pricing, consumers may fail to realise that lower prices are available and end up paying higher prices. Price complexity may also lead to consumers making bad decisions or deciding to remain with the status quo;

- **Costly price discrimination:** if firms have to engage in costly price discrimination (for example in carrying out research on their customers), they will pass on these costs to consumers in the form of higher prices;

- **Consumers lose trust in the market:** Several empirical studies offer initial evidence that price discrimination leads to lower reported levels of trust in the market[7] as well as that trust is an important factor in decisions on whether to purchase online at all.[8] Given this, if price discrimination is a constant and visible part of the market, some consumers might lose trust in the market and decide to abandon the market altogether and some potential gains from trade will not be realised.

Summary of framework to evaluate the likely effects of price discrimination on consumers



6 In this context, "not sophisticated" may mean for instance that consumers have limited information, exhibit weak engagement in the market or do not take account of how their behaviour affects suppliers' pricing. These considerations were relevant to several recent CMA cases which are discussed in Section 3.

7 Garbarino and Lee (2003)

8 Pavlou, Liang and Xue (2007)

2.3 Other aspects of price discrimination

19. There is some evidence that customers may object to price discrimination on principle, as they perceive it as unfair. For instance, *Englmaier, Gratz and Reisinger (2012)*[9] find in a laboratory experiment that the observed consumers' reactions to a third-degree price discrimination scheme are more coherent with consumer preferences taking fairness into account than "standard" economic preferences where such concerns are absent. Similarly, consumer outrage over different prices offered to different consumers for the same DVD on Amazon.com forced CEO Jeff Bezos to apologise for what he claimed was a "random price test".[10] Perceptions of unfairness also relate to trust as they may cause consumers to lose trust in markets where price discrimination is occurring.

20. In addition, equity considerations may also be relevant to price discrimination. This is especially relevant when firms are able to charge higher prices to vulnerable customer segments. This is of particular concern if vulnerable customers exhibit lower levels of engagement and are less price sensitive. Fairness and consideration for vulnerable groups were among the factors behind the ban on regional pricing introduced by Ofgem[11] in 2009 (discussed in more detail below). As stated in the Decision Document of June 2009: "*We identified that unjustified price differentials and discriminatory pricing structures have had a significant detrimental impact on the consumers affected and a disproportionate impact on vulnerable groups".*[12]

21. Finally, as price discrimination is often closely related to more complex pricing structures it may sometimes lead to consumers being misled. This is discussed in the next section, in the context of the CMA's recent experience in its markets work.

3. Price discrimination in markets – the CMA's recent experience

22. Under the Enterprise Act (2002) as amended by the Enterprise and Regulatory Reform Act (2013), the CMA has a duty to engage in market studies and market investigations[13] when, upon the receipt of complaints from third parties or of its own accord, it believes that a given market might not be working well for consumers. The aim of market studies and market investigations is to determine the causes of why markets may not be working well for consumers, and to propose remedies to address those causes.

23. Price discrimination has been relevant in several recent market studies or investigations, including:

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9 https://epub.ub.uni-muenchen.de/12735/1/Englmaier_Gratz_Reisinger-Price_Discrimination_and_Fairness_Concerns.pdf

10 http://www.ecommercetimes.com/story/4411.html

11 Ofgem regulates the UK gas and electricity markets

12 Ofgem – Addressing undue price discrimination (2009) – pg. 1, https://www.ofgem.gov.uk/ofgem-publications/38355/addressing-undue-discrimination.pdf

13 Market studies are initial examinations the CMA may carry out when it believes certain markets might not be working well for consumers. If, following the study, the CMA has reasonable grounds for suspecting that some features of the market prevent, restrict or distort competition, the CMA may make a reference for a market investigation, which is a more detailed examination of the market. The ultimate goal of a market investigation is to assess whether an adverse effect on competition (AEC) exists in the market, and if so, to propose remedies to address it. More information on market studies and market investigations at the CMA is available here: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/462715/CMA3_Markets_Guidance_-_updated_September_2015.pdf

- The energy market investigation;[14]
- The legal services market study;[15]
- The retail banking market investigation.[16]

24. A common theme across these cases is that price discrimination has been used by firms as a reaction to demand-side or information issues such as weak customer engagement or a lack of transparency. These cases focus on the interaction between the pricing strategies of the firms and the behaviour of their customers. In both the energy and banking markets, complex pricing offers employed by the firms had the effect of obfuscating prices and reducing the ability of customers to drive competition. The Legal Services Market Study has provisionally found in its interim report that a lack of transparency of prices is limiting the ability of consumers to effectively drive competition.

25. Below we consider the following aspects of price discrimination in the context of these market studies:

- A reaction to weak demand side engagement;
- A mechanism to exploit limited transparency;
- A tool for obfuscation.

3.1 Price discrimination as a reaction to weak consumer engagement

3.1.1 The UK Energy Market Investigation

26. The CMA completed its Market Investigation into the UK Energy Market in June 2016. It found weak consumer engagement to be a prevalent feature of the energy market.

27. The investigation found that, in the period from Q1 2012 to Q2 2015, customers could have achieved considerable savings from switching supplier and/or tariff, yet the majority of customers remained on expensive tariffs and the potential gains went unexploited. In fact, 70% of gas and electricity consumers purchasing from one of the Large Six Energy Firms[17] were on so-called standard variable tariffs, despite the fact that the price per kWh of these tariffs had been consistently higher than the price that consumers could get by switching to a non-standard tariff (the most popular ones being fixed price tariffs and capped tariffs).[18] As a result, the average consumer could have saved £45 - £245 per year by

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14 See final report (dated 24 June 2016) here: https://assets.publishing.service.gov.uk/media/5773de34e5274a0da3000113/final-report-energy-market-investigation.pdf

15 Ongoing. See interim report (dated 8 July 2016) here: https://assets.publishing.service.gov.uk/media/577f76daed915d622c0000ef/legal-services-market-study-interim-report.pdf

16 See final report (dated 9 August 2016) here: https://assets.publishing.service.gov.uk/media/57ac9667e5274a0f6c00007a/retail-banking-market-investigation-full-final-report.pdf

17 The Large Six Energy Firms are the six biggest players in the UK energy sector, which together supply around 90% of gas and electricity to UK households and businesses.

18 CMA – Final Report on Energy Market Investigation, pg. 23

switching, depending on which tariff and payment type the consumer was on at the time of the analysis.[19] The price differences between tariffs were found to be unrelated to differences in costs of supplying energy under different tariffs.[20] These findings were supported by survey results indicating that many consumers did not display a good level of awareness of the tariffs available to them: 36% of respondents either did not think it was possible or did not know if it was possible to change one or more of the following: tariff, payment method and supplier.[21]

28. The barriers to customer engagement identified in the final report included: the homogeneity of goods limiting consumers' willingness to engage in the market; complexity and opacity of gas and electricity bills; and low access to or low levels of trust in price comparison websites.

29. This lack of engagement of a significant part of the customer base of each of the Large Six Energy Firms meant that firms were in a position of unilateral market power over their "inactive" customer base. In addition, this gave them the incentive to price-discriminate between their "inactive" base and their "active" segment.

30. A key point to note is that the underlying cause of harm to consumers was not the practice of price discrimination in itself, but rather the weak customer engagement. As a result, in its remedies following the energy investigation the CMA has sought to directly address the issue of customer engagement through a series of measures, such as: the creation of an Ofgem-controlled database of "disengaged customers" on default tariffs for either Ofgem directly or suppliers to prompt these customers to engage in the retail energy markets; and the lifting of regulatory restrictions that stifled innovation and softened competition between suppliers and price comparison websites (including by reducing the incentives for price comparison websites to invest in energy services).

31. This point is reinforced by the preceding history of interventions to regulate the pricing policies of firms in the UK energy market, some of which may have had unintended and harmful consequences.

32. In 2009, Ofgem prohibited regional price discrimination practices in the energy industry. Up until that point, energy providers had been allowed to price discriminate between customers living in different regions of the UK. Before the prohibition, energy firms had generally charged higher prices to customers in their "home" markets,[22] while presenting attractive, lower-priced offers to customers in markets dominated by a competitor. The prohibition of regional price discrimination prevented this targeting, and hence removed a competitive mechanism between different energy providers. One might expect this to lead each firm to concentrate on its "home" market rather than trying to win customers in other markets. Another result of this intervention was that competition to retain and acquire customers shifted to 'promotional' fixed-term tariffs often sold face-to-face or by telephone.

33. This intuition is supported by academic literature that analyses the effects of the regulatory intervention. *Hviid and Waddams Price (2012)*[23] build a theoretical model to analyse the likely consequences of the non-discrimination clause. Relying on the concept of best-response asymmetry described in Section 2, they show that the likely effect of the clause would be to reduce the incentive of

19 CMA – Final Report on Energy Market Investigation, pg. 31

20 CMA – Final Report on Energy Market Investigation, pg. 38

21 CMA – Final Report on Energy Market Investigation, pg. 22

22 Before the liberalisation of the UK energy market, energy firms were essentially regional monopolists. Due to this, the UK energy market is still characterised by a situation in which energy firms are dominant in the area that had previously been their monopoly area – we call such area the "home" market.

23 Non-discrimination clauses in the retail energy sector, *Hviid and Waddams Price* (2012)

energy firms to compete for customers in their out-of-area markets, and as a result to increase the overall level of prices. *Waddams Price and Zhu (2013)*[24] analyse the issue empirically and find that the predictions in *Hviid and Waddams Price (2012)* are supported by empirical data: price differentials between the incumbent and the best-priced competitor declined substantially in almost every region from the start of 2009. Switching rates in the market halved between 2008 and 2013 and average firm profits increased from less than £30 per customer to around £100 per customer.[25] These papers highlight that the impact of price discrimination on consumer welfare can sometimes be negative in certain circumstances.

3.1.2 The Retail Banking Market Investigation

34. The retail banking investigation also focussed on weak consumer engagement. The switching levels observed in the market for Personal Current Accounts (PCAs) are very low, with only 3% of PCA holders having switched provider in 2015 and over a third of survey responders having stayed with their main PCA provider for more than 20 years.[26] The low level of engagement was also displayed in the market for Business Current Accounts (BCAs): over 50%[27] of start-up SMEs did not compare providers when choosing a BCA and two thirds of SMEs did not consider switching at the end of the "free banking" period.[28]

35. The CMA identified barriers to engagement such as: the complexity of pricing structures of PCAs and BCAs, which made price comparisons difficult; the absence of a contract end date, which meant that consumers were not required periodically to consider whether to switch provider; and the perception (unsupported by data) that there was little to gain from switching.

36. This created a situation similar to the one observed in the energy market. Due to low customer engagement, banks had a degree of unilateral market power over their "inactive" customer base. Banks offered differently priced products and to some extent were able to segment existing and new customers through offers to new-to-market customers and to switchers. The evidence also showed that some customers would gain financially if they were to switch to a lower priced product available from their current bank.

37. Similar to the energy investigation, the provisional remedies in the retail banking market investigation did not focus on price discrimination but aimed at addressing the underlying issue of weak customer engagement and making current account switching work better.[29]

3.2 Price discrimination to exploit limited transparency

3.2.1 The Legal Services Market Study

38. Price discrimination also plays a role in the ongoing Legal Services Market Study. The study made the preliminary finding in its interim report that a lack of price and service transparency makes it

24 Pricing in the UK retail energy market 2005-2013, *Waddams Price and Zhu* (2013)

25 However, some of this effect may be due to other factors. In particular new requirements imposed on doorstep selling may have also limited customer switching to some extent.

26 CMA – Summary of the Final Report on the Retail Banking Market Investigation, pg. xiii

27 CMA – Summary of the Final Report on the Retail Banking Market Investigation, pg. xxiii

28 Typically start-ups have a 2-year period on which they pay no fees on their BCA.

29 See https://assets.publishing.service.gov.uk/media/573a377240f0b6155900000c/retail_banking_market_pdr.pdf

harder for consumers to compare prices and identify value for money. It further found that this lack of transparency allows some providers to price on an individual basis (i.e. price discriminate) rather than committing to standard (uniform) pricing.

39. The market for legal services[30] is highly fragmented and includes a large number of suppliers who typically engage in local competition. However, the market also displays a low level of transparency: just 17% of firms publish their prices online[31] and data from consumer surveys shows that only 22% of respondents had compared two or more providers when seeking legal advice.[32] Furthermore, there are currently very few price comparison websites covering the legal services market that consumers might rely on to compare different providers. Indeed, in 2015 just 1% of consumers purchasing legal services used a price comparison website.[33] This limited price transparency translates into a high level of price dispersion in the market, especially for more complex and less commoditised legal services.

40. In this case, the fact that prices are not widely advertised generates search costs for consumers seeking to compare different providers, which provides firms with the ability to engage in price discrimination by negotiating prices on a case-by-case basis.

41. In reference to the framework summarised in Section 2, the characteristics of price discrimination in this market may make it more likely that it could be detrimental to consumer welfare. Because of the lack of transparency of prices and the resulting search costs, consumers may be unaware that price discrimination is occurring or of the alternative prices that may be available to them. In addition, the lack of competition between suppliers and the possibility that price discrimination is occurring on a case by case basis suggests that price discrimination would be more likely to be harmful.

42. In this case, the underlying cause of consumer harm appears to primarily relate to the lack of transparency of price and service which undermines the ability of consumers to drive competition. Price discrimination provides a mechanism for suppliers to profit from this reduced competition.

3.3 Price discrimination as a tool for obfuscation

43. As well as being employed as a mechanism to exploit weak customer engagement arising from other factors, price discrimination may in itself affect customer behaviour, for example through "price obfuscation". In such cases, firms may not only segment their offerings in order to charge different customer segments different prices, but may also structure their different offers in a complex way by adopting different formats across offers and/or across suppliers, or by increasing the dimensionality of their product offerings.[34] The effect of this obfuscation may be to reduce competition. Price obfuscation may occur independently from price discrimination across different customer groups, but in practice the two may occur together.

44. Price obfuscation exploits the lack of sophistication or behavioural biases of consumers who may lack the ability to compare offers expressed in multiple formats, or that involve multidimensional products.

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30 The market study covers several types of legal services for consumers and small businesses in England and Wales. It excludes criminal legal services.

31 CMA – Interim report on Legal Services Market Study, pg. 43

32 CMA – Interim report on Legal Services Market Study, pg. 39

33 CMA – Interim report on Legal Services Market Study, pg. 48

34 Good summaries of the academic literature on strategic obfuscation can be found in Grubb (2016) and Spiegler (2016).

It is also likely to create search or switching costs for all consumers, which are both costly in themselves and may prevent even sophisticated consumers from accessing the best deal for them.

45. The CMA identified price obfuscation as a concern in both the banking and energy markets. In the retail banking case, the complexity of pricing structures of PCAs and BCAs was identified as an underlying cause of weak customer engagement.

46. In the energy market, responding to concerns that pricing offers were becoming increasingly complicated for consumers to understand, in 2013 Ofgem undertook a *Retail Market Review (RMR)* with the objective of proposing reforms that would simplify tariffs and hence stimulate consumer engagement. Ofgem found that the wide range of possible tariff options had a detrimental effect on consumers by limiting their ability to effectively compare different offers and thus discouraging their engagement in energy markets.

47. However, similar to the ban on regional price discrimination described above, reforms to directly limit price obfuscation may also have unintended consequences through their impact on competition. The reforms following the RMR intervened directly on the pricing policies of energy firms by restricting the structure of price tariffs to a simple unit rate – standing charge structure, limiting to four the number of tariffs that each supplier could offer per fuel type per metering arrangement in any region, and introducing additional limitations on discounts and bundled products. The CMA found that this simplification did not seem to have achieved its stated aim of increasing customer engagement. Comparing the results from Ofgem's baseline survey, carried out in 2014, and results from the year one survey carried out a year later, no single measure of engagement seems to have improved materially.[35] Furthermore, the introduction of the limitations led to the removal of several advantageous tariffs from the market[36] and restricted the ability of firms to introduce innovation in the market through novel tariff structures, possibly dampening and softening competition between energy suppliers.

4. Price discrimination in the digital economy

48. The expansion of the digital economy is likely to have many beneficial effects for competition as it can put more information into the hands of customers, make it easier for them to shop around, and may reduce barriers to entry for suppliers. To the extent the digital economy empowers customers through more information and the ability to shop around easily, then it will help to tackle the underlying disengagement issues found in some of the CMA's previous market studies and investigations. Indeed, some of the remedies in those investigations focused on the use of digital technology to improve customer engagement.

49. Nevertheless, the digital economy is also likely to increase the opportunities for firms to engage in price discrimination. Firms operating online are likely to have a greater chance of accumulating large amounts of customer data, and improvements in technology make it now possible to swiftly analyse this data and gather very granular intelligence about the characteristics of customers in terms of preferences, purchase histories and price sensitivity.

50. This increased knowledge on the part of firms of detailed attributes of their customers means that firms are better able to segment customers and tailor their offerings accordingly, and hence engage in price discrimination. In other words, firms operating online are likely to have a much better ability to observe the underlying heterogeneity of their customers and use this to price discriminate.

35 CMA – Final Report on Energy Market Investigation, pg. 570

36 For a more extensive discussion of which tariffs were removed, refer to CMA – Final Report on Energy Market Investigation, pg. 571-572 and Appendix 9.7.

51. Section 2 above highlighted how price discrimination has ambiguous effects on consumer welfare. The general conclusions reached in that section apply to the online environment as well, therefore as a general principle the CMA takes the view that the impact of this enhanced ability to price discriminate offered by the online environment may lead to better or worse outcomes for consumers, depending on the circumstances of the specific case being analysed.

52. However, it is worth noting that the online retailing market often displays certain characteristics identified in Section 2 as making price discrimination more likely to be harmful for consumers.

- For instance, firms online are more likely to be able to implement sophisticated price discrimination relying on very granular customer segmentation. As we have seen in Section 2, this circumstance makes it more likely that price discrimination under a monopolist will prove harmful to consumers

- Also, price discrimination online can be particularly opaque. Consumers may be completely unaware that the price for a given product displayed on their computer screen is different from the price for the same product displayed to another consumer. Some consumers may even be unaware that online retailers track their data with the goal of building a customer profile and tailoring their pricing strategies. As seen in Section 2, when the price discrimination strategy is opaque, the effects on consumers are more likely to be negative even when there is competition in the market.

53. These factors are reflected in the 2013 OFT report on its Call for Information on Personalised Pricing in Online Markets,[37] which stated that it would be more likely to be concerned by online price discrimination when:

- The market is characterised by consumer inertia in switching, and hence firms may be able to exploit their "inactive" customer base while giving lower prices to "active" customers (similar to concerns discussed before in the Energy and Retail Banking market investigations);

- Price discrimination is used in an exclusionary way to engage in predatory behaviour through selective discounts;

- The groups disadvantaged by price discrimination were considered vulnerable; and/or

- Systematic price discrimination leads to a reduction of consumer trust in online markets, impairing the growth of internet shopping. Indeed, the possibility that consumers may retreat from the online market following extensive price discrimination was mentioned by the OFT as the single biggest concern about personalised pricing online.

54. The same line of reasoning is also espoused in the CMA's response to the European Commission (EC) on geo-blocking and other geographically based restrictions in online markets.[38] In this response the CMA noted that the effects of geo-blocking are likely to vary according to the specific conditions of consumer behaviour and structural features of different product markets, and it encouraged a case-by-case

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37 See full report here: http://webarchive.nationalarchives.gov.uk/20140402142426/http:/www.oft.gov.uk/shared_oft/markets-work/personalised-pricing/oft1489.pdf

38 See the published CMA response here: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/502611/Response_to_geo-blocking_restrictions.pdf

approach, arguing that "*the justification test to be applied should take account of whether price discrimination is of overall benefit to consumers given the nature of the specific market".* [39]

55. Coherently with this case-by-case approach, the CMA also took the view that "…there should not be a blanket requirement for services to be provided at the same price in all Member States. […] Where such traders do engage in price discrimination, it should not be assumed that it is necessarily harmful to consumers' overall welfare".[40]

56. The CMA noted that price discrimination could lead to an expansion of consumer welfare, explicitly mentioning two of the effects mentioned in Section 2: the output expansion effect (for instance, *"price discrimination may in some cases benefit those customers with lower incomes who may not afford to purchase a product at the higher uniform price"*[41]) and the intensified competition effect (firms might compete more aggressively for consumers who consult multiple country versions of the same website and engage in cross-border shopping).

5. Exclusionary Price Discrimination

57. In the CMA's view exclusionary price discrimination is not typically the defining aspect of an exclusionary practice, but rather may be employed as a mechanism to make exclusion easier. For instance, price discrimination often arises in rebate or predatory pricing cases, in that exclusion may be made less costly by the possibility of price discrimination as the firm may be able to target discounts specifically at its rival's customers.

58. In its assessment of exclusionary competition cases the CMA has therefore tended not to characterise the price discrimination itself as an abusive behaviour. Rather, it has tended to focus on the wider strategy of the firm. In particular, the CMA has not inferred exclusionary behaviour from the mere presence of price discrimination, but rather from the effect that wider strategies have had on competition.

59. An illustrative example of this approach is the NAPP Pharmaceutical Holdings Limited and Subsidiaries ('Napp') case, on which a decision was published on 30 March 2001.[42]

60. Napp engaged in price discrimination in the market for sustained release morphine by supplying its product to the hospital market segment,[43] where Napp faced some competition, at prices that were much lower than those charged to the community market segment,[44] where Napp faced essentially no competition. The intent of this price discrimination strategy was found to be to exclude competition from smaller suppliers in the hospital market segment, one of which indeed abandoned the market in 2000.

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39 CMA – Response to the European Commission on geo-blocking and other geographically-based restrictions, pg. 11

40 CMA – Response to the European Commission on geo-blocking and other geographically-based restrictions, pg. 6

41 CMA – Response to the European Commission on geo-blocking and other geographically-based restrictions, pg. 7

42 The published decision can be found here: https://assets.publishing.service.gov.uk/media/555de4bf40f0b669c4000169/napp.pdf

43 In this segment hospitals purchase directly from manufacturers for administration to patients in a hospital or hospice, and the product is prescribed by hospital doctors

44 In this segment the product is distributed by pharmaceutical wholesalers for resale to community pharmacies, and the product is prescribed by GPs

61. Price discrimination was not the defining feature of the exclusionary strategy, but rather arose as a consequence of two underlying market characteristics:

1. There were significant barriers to entry in the community market: community practitioners were strongly influenced by the reputation of a product and GPs were often reluctant to experiment with new products that they had not directly experienced. These elements conferred on Napp a substantial first-mover advantage in the community segment.

2. In a context of such barriers to standalone entry to the community segment, entrance in the hospital segment offered an opportunity for new entrants to access the community market in subsequent periods, as sales in the hospital segment led to follow-on prescriptions by GPs in the community as well as hospital specialist recommendations to GPs about alternative brands.

62. It was these underlying characteristics of the market that allowed Napp to use price discrimination to make exclusion of competitors easier from both the hospital segment (directly) and the community segment (as the hospital segment acted as point of entry to the community segment).

6. Concluding remarks

63. The consumer welfare impacts of price discrimination are ambiguous and in general complex to determine. As a result it is important to consider the impact of price discrimination on a case-by-case basis. The CMA has identified certain characteristics that make price discrimination more likely to be harmful and considered how they may apply to online markets.

64. Price discrimination has been a relevant factor in several recent CMA market studies and investigations, in particular banking, energy and legal services. The focus of these cases has been on weak customer engagement and the interaction between the pricing behaviour of suppliers and the ability of consumers to drive competition. In these cases, the CMA has tended not to consider price discrimination as the primary source of consumer harm in its own right, but rather primarily as a mechanism employed to exploit demand side issues which limit competition, such as weak customer engagement. However, it has also noted that the pricing behaviour of the firms in question has affected customer behaviour directly, for example where it involves complex or opaque pricing structures that reduce the ability of customers to compare offers and drive competition.

65. In these cases, where the CMA has imposed remedies, it has tended to focus on addressing the underlying demand side issues rather than on the pricing behaviour of suppliers. The UK experience in the energy market in particular illustrates the risk that interventions seeking to restrict the pricing behaviour of suppliers can have unintended adverse consequences for competition.