



Sponsored Ranking

an exploration of its effects on consumer welfare

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1 Management Summary

1. Many online platforms allow suppliers that pay extra to improve their position in the search results (“sponsored ranking”). In the present report **ACM concludes that sponsored ranking may cause harm to consumer welfare and competition on the merits. Sponsored ranking may also generate efficiency benefits which can be passed on to consumers.**
2. Based on the insights from this study, ACM presents in this report a **framework for assessing the effects from sponsored ranking on consumers.** This shows how ACM assesses the likelihood of harm and benefits for consumers from sponsored ranking in individual cases. The framework is also be useful for online platforms that wish to evaluate the effects of their sponsored ranking activities, and to identify ways to reduce potential negative impacts on consumers.
3. Finally, **prominent disclosure** of the commercial nature of sponsored results is both capable of reducing the possible harms as well as stimulating some efficiency gains. Prominent disclosure of sponsored results is therefore likely to contribute to consumer welfare. ACM sees a real risk, however, that disclosure measures taken by platforms are overlooked and/or misunderstood by a significant portion of consumers.

1.1 Motivation and purpose

4. Online platforms function as a marketplace where supply and demand meet. Due to indirect network effects the number of products or services available on a platform often is very large. In many cases the variety of supply is so large that consumers cannot compare all the offers. To assist consumers in selecting an offer **platforms make the offers searchable and present the search results in a particular order.**
5. In this study ACM investigates how platforms construct this ordered search results list, or ranking. In particular **ACM focuses on schemes for suppliers that give them a better position in the ranking in return for extra monetary compensation for the platform.** The ACM refers to this practice as ‘**sponsored ranking**’. Examples include Amazon’s auction of visible spots in the search results list among vendors, Booking.com’s and Expedia’s schemes to promote accommodations in the ranking in return for a higher commission, and Thuisbezorgd.nl’s offer to restaurants to improve their rank position in return for a higher commission.
6. As an integrated competition and consumer authority, ACM had **two main presumptive concerns** regarding this practice that motivated this study.
7. First, sponsored ranking may lead to **higher prices and/or lower quality**, through various



mechanisms. Without sponsored ranking suppliers can only obtain a better rank position by lowering price or, more generally, by improving value for money to the consumer. If a better rank position can also be obtained through a payment to the platform, at least some suppliers may choose to pay the platform instead of offering consumers a better deal. In addition, sponsored ranking may reduce the positive effect of a given increase in value-for-money for the consumer on rank position because the ranking is also determined by payments for a better position. If so, suppliers may have less incentives to compete on the merits. Finally, if a prominent position in the ranking is important or even crucial for driving consumer attention and sales, suppliers may end up in a bidding war to obtain a prominent position, the cost of which may be passed on to consumers in the form of higher prices.

8. Second, ACM is concerned that sponsored ranking would lead to **less relevant results being ranked higher**. This may lead to poorer consumer choices, more time and effort spent on finding a good (enough) product by consumers, or both.
9. The **first objective** of this study is to assess the practical validity of these concerns.
10. The **second objective** is to explore any possible **efficiency rationales** for sponsored ranking. In particular, the economic literature shows that a payment from a supplier for a better rank position may act as a signal of high quality. The underlying idea is that a high quality supplier is willing to pay more for a better rank position. The reason is that only a seller with higher quality is able to earn back the payment for a higher ranking because consumers are more likely to engage with that seller now and in the future (repeat sales). Ordering (from high to low) suppliers on the basis of their bids for higher rankings may therefore largely correspond to the sorting order on the basis of consumer relevance. In other words, contrary to ACM's second concern, sponsored ranking may improve the relevance of the ranking rather than deteriorate it.
11. The **third and final objective** of this study is to analyse the **efficacy of transparency** of sponsored ranking as a way to deal with concerns. The Unfair Commercial Practices Directive considers a practice a misleading omission if it "*fails to identify the commercial intent of the commercial practice*".¹ Applied to sponsored ranking, this means that platforms should clarify how they construct the ranking and clearly identify the results in the ranking that are sponsored.² A recent example of enforcement on the basis of consumer protection rules in this area is the CMA's acceptance of commitments by Booking.com to increase the transparency of sponsored results in the ranking.³ Following the CMA's decision, ACM and other European consumer authorities have intervened in a similar manner.⁴ In the report

¹ Unfair Commercial Practices Directive, article 7 sub 2.

² Note that in this study ACM does not lay out the consumer protection rules and how she applies these rules to sponsored ranking. For this purpose, the reader is referred to ACM's recently published *Guidelines: Protection of the online consumer*. See pp. 42-45 of the Guidelines for a discussion of the legal framework for sponsored ranking. The Guidelines can be found here: <https://www.acm.nl/sites/default/files/documents/2020-02/acm-guidelines-on-the-protection-of-the-online-consumer.pdf>.

³ See <https://www.gov.uk/government/news/hotel-booking-sites-to-make-major-changes-after-cma-probe>, visited 22 June 2020.

⁴ See <https://www.acm.nl/en/publications/bookingcom-commits-adjusting-its-website-following-action-european->



Competition Policy in the Digital Era commissioned by the European Commission (Crémer et al., 2019), the authors state that transparency is also relevant for competition policy. In their view, if a platform is dominant and it can be shown that the lack of transparency distorts competition, the platform may be in breach of article 102 TFEU - prohibition of abuse of a dominant position (Crémer et al., 2019, p. 64).

12. ACM notes that one can think of the possibility that sponsored ranking is in itself misleading and/or in breach of competition law (instead of a lack of transparency about sponsored ranking). This may be the case if the possibility of sponsoring significantly restricts competition on the merits between suppliers, or if transparency measures do not change consumer behaviour despite clear evidence that sponsoring leads to suboptimal outcomes for consumers. However, this study does not discuss this possibility, for a number of reasons. First, in this study ACM only draws conclusions on the potential risks - and benefits - from sponsored ranking. This does not yield sufficient basis to consider restricting sponsored ranking itself. Second, imposing transparency measures on platforms is less intrusive than restricting the practice itself. Third, the effectiveness of transparency measures depends on their design and case-specific circumstances (including the experience level of consumers and the nature of the product or service). As of yet there is more to learn about the effectiveness of transparency measures before one can conclude that these should be replaced by a prohibition. This study attempts to shed more light on the issue by analysing data from a natural experiment with a disclosure measure about paid ranking.

1.2 Research methods

13. This study applies various research methods to analyse the potential negative and positive effects of sponsored ranking and the impact of transparency on these effects.
14. It first draws from the economics and marketing literature on ranking, online platforms and consumer behaviour. Additionally, the ACM has conducted interviews with a selection of platforms that are active in the Netherlands and/or sell to Dutch consumers. Platforms that use sponsored ranking as well as some that do not are interviewed. Most platforms do use sponsored ranking, however. The platforms that do not are Independer and Kieskeurig. ACM has also collected information through requests for information from eight platforms that are active in the Netherlands and/or sell to Dutch consumers. The following platforms are included in the study, either through an interview, request for information or both (in alphabetical order):
 - a. Amazon.de;
 - b. Beslist.nl;
 - c. Bol.com;
 - d. Booking.com;



- e. Expedia;
 - f. Google Shopping;
 - g. Independer ;
 - h. Kieskeurig;
 - i. Thuisbezorgd.nl.
15. Finally, ACM has analysed data from a natural experiment on disclosure of sponsored items in the ranking of one undisclosed platform.⁵ Suppliers on this platform can improve their rank position by increasing the commission paid to the platform. In 2019 the platform started to add a label about sponsoring to the search results in the ranking of those suppliers that pay extra for a better position. For a period of time the label was only present on the website, and not in the app. As the ranking mechanism is identical between the website and app, this setting creates a natural experiment on the effects of the label. The platform shared with ACM detailed anonymized data on consumers purchases on the platform. ACM analysed the data in order to learn whether the disclosure measure had an effect on consumers' propensity to buy at suppliers that sponsor their position.⁶

1.3 Summary of findings

1.3.1 Framework for assessing consumer harm resulting from sponsored ranking

16. Based on the insights from this study, ACM presents a framework for assessing the effects from sponsored ranking on consumers. This framework has a dual purpose. First, it shows how ACM assesses the likelihood of harm and benefits for consumers from sponsored ranking in individual cases. Second, the framework can be used by online platforms that wish to evaluate the effects of their sponsored ranking activities, and to identify ways to reduce potential negative impacts on consumers. The framework is summarized in the table below.

⁵ We do not report the name of the platform for confidentiality reasons.

⁶ The platform currently also contains a page explaining how the ranking is constructed, including an explanation of the role of sponsoring therein. This page did not exist yet during the period in which we investigate the effect of the label. On the one hand, this means that our analysis does not study the effect on consumer behaviour of the full set of transparency measures the platform has currently in place. On the other hand, it means that our analysis of the effect of a label – a commonly used transparency measure – is not confounded by the introduction of an additional transparency measure.



Factors in assessing the effects from sponsored ranking on consumers

Factor	Low risk ←-----→	High risk
Prevalence of sponsoring	Low prevalence	High prevalence
Design	Strict quality checks	No quality checks
Platform competition	Vigorous competition	No effective competition
Efficiencies	Consumers enjoy benefits	No benefits for consumers
Transparency	Clear and prominent disclosure	No disclosure

Table 1. Factors for assessing effects from sponsored ranking on competition and consumers.

- Two of these factors are especially important. If sponsored ranking on a platform has a low prevalence, harm is unlikely to occur. Harm is also unlikely to occur if the platform clearly and prominently discloses the commercial nature of sponsored results. In case sponsored ranking is significant and sponsored results are not clearly disclosed, all five factors need to be taken into account in order to assess the likelihood of harm.

1.3.2 The mechanisms and practical relevance of sponsored ranking

- Through sponsored ranking schemes, platforms offer suppliers the opportunity to pay extra monetary compensation to the platform in return for a better position in the ranking. This phenomenon is widespread but it is implemented in a variety of ways by different platforms.
- Broadly two types of sponsored ranking models can be distinguished: **auction-based** and **commission-based** sponsored ranking. Under the former, the platform reserves a number of positions in the ranking (typically at least the top or near-top positions) and sells these positions through auctions. Bidders pay a cost-per-click and the positions are awarded both on the basis of the height of the bid as well as the relevance of the bidder's listing. Within auction-based models, platforms differ in terms of the number of spots they reserve, and whether the sponsored listing is shown in addition to the organic listing of the advertiser (the listing that is shown anyway without sponsoring) or replaces the organic listing. Under the commission-based model, all suppliers can improve their rank position by increasing the commission level that is paid to the platform for transactions. All else equal, the larger the commission increase, the larger the improvement in the rank position. Although in theory the ranking may be identical even if all suppliers pay extra for a better position, in practice the ranking is always changed because not all suppliers pay extra or they pay different amounts.
- Sponsored results are shown in the search result order that is presented by default. This sorting order has typical names such as "Recommended" or "Our choice". Platforms in our study confirm that a large majority of consumers uses the default ranking, which is in line with a common finding in the literature. Consumers are typically offered the possibility to



order results in a different way, such as based on price (ascending or descending), review score or location. These sorting orders are usually not affected by sponsoring, but in some exceptional cases these alternative sorting orders contain sponsored results as well.

21. Although our study yields limited data on the **effectiveness of sponsoring** in terms of increasing clicks on suppliers' pages and supplier revenues, the evidence shows that sponsoring does increase advertisers' page views and revenues. The precise effect of sponsoring is likely to vary substantially depending on the context. Many platforms reported that they cannot establish the effect of sponsoring in an exact way. Although some platforms provide predictions to suppliers about the effect of sponsoring on clicks and sales, others consider these predictions too unreliable. One platform stopped providing predictions for this reason.
22. A few platforms provided data on the **frequency with which results are sponsored**. The data we received show substantial variation: some platforms have less than 1 sponsored result on average in the top 10 of the default sorting order whereas the maximum observed is 5.
23. For most platforms in this study the **share of orders derived from sponsored results** in the total number of orders does not exceed 10%, and in some cases this share is only a few percentage points. However, the highest observed share is 50%. The **platforms' revenues from sponsored listings** as a share of platforms' total revenues from intermediation services (typically pre-negotiated commission fees per transaction) lies in the range of 1 through 5 percent for most platforms. However, the maximum observed is 30%. Even though the share of platform revenues derived from sponsoring is often limited, the suppliers that do sponsor their position pay a **substantial increase in the standard commission rates**. The data provided show that suppliers that sponsor their rank position increase their standard commission rate by percentages in the range of 15% to 40%. The following table summarises the results.

<i>Key figures on the practical relevance of sponsored ranking</i>	
Number of sponsored results in top 10	Varies from less than 1 to 5
Share of orders following sponsored result	Mostly below 10%, maximum observed 50%
Share of 'intermediation revenue' from sponsoring	Mostly 1-5%, maximum observed 30%
Surcharge on average commission rate paid for sponsoring	Varies from 15 to 40%

Table 2. Key figures on the practical relevance of sponsored ranking.

1.3.3 The potential harms from sponsored ranking to consumers

24. One of ACM's theories of harm is that sponsored ranking leads to a **softening of competition on price and quality** and to an **increase in suppliers' cost for using a**



platform that results from a bidding war for good positions. ACM concludes that in most cases the presence of sponsored results in top positions and the share of platform revenue from sponsoring is relatively limited. Therefore this makes it unlikely that a bidding war between suppliers leads to a significant increase in cost and/or that sponsoring replaces competition on price and quality to a significant extent. However, there are exceptions where the share of sponsored results in the top positions is substantially higher. In these cases, the possibility that sponsoring increases marginal costs and therefore price is more realistic.

25. Further, competition between platforms may counter adverse price and quality effects from sponsored ranking, because consumers can make use of alternative options and platform competition may provide an incentive to curb sponsoring. In case of vigorous competition between platforms it is therefore less likely that sponsored ranking is harmful. However, the mere existence of more than one platform does not imply that platform competition is vigorous. In case all platforms use sponsored ranking and price parity clauses are in place, the beneficial effect of platform competition may be limited. Other reasons why platform competition may not prevent harm from sponsored ranking are that platform competition is limited because of network effects, and that platform competition is limited to competition for 'sophisticated' consumers (that is, consumers who search critically, as opposed to quickly following recommendations by platforms).
26. ACM also finds that some sponsoring models are designed such that they seem unlikely to soften competition and/or raise marginal cost for suppliers. This holds for the cases where only a small number of suppliers are allowed to sponsor their listing who, moreover, are eligible for sponsoring only if they deliver the highest value-to-money to consumers.
27. Regarding the theory of harm that sponsored ranking leads to **consumers buying suboptimal products**, the findings are as follows. Firstly, the ACM considers again the extent to which sponsoring is present on the platform. As indicated above, this is relatively limited in most cases. The risk of consumers buying suboptimal products will therefore also be limited in these cases. However, there are also platforms where the share of sponsored products in top positions is substantial. In these cases the risk of consumers buying suboptimal products may be more significant.
28. Secondly, platform competition may limit this harm because it provides consumers with opportunities to buy elsewhere. Again, this beneficial effect from competition does not always arise. Apart from the reasons mentioned above why platform competition may be limited, platform competition may not necessarily provide incentives to platforms to curb sponsoring even if sponsoring were to lead to consumer buying suboptimal products. Removing sponsoring schemes, or educating consumers about the commercial nature of sponsored listings, may not be profitable for the platform, especially if a significant share of consumers does not search critically. Also the nature of the product matters: the better the consumer is able to determine the quality of the product before purchase, the more likely it



is that platform competition limits harm from sponsored ranking.

29. Thirdly, the ACM is concerned that transparency measures taken by some platforms only have a limited impact on preventing the risk that sponsoring leads to buying suboptimal products (see the section 1.3.5 for the summary of results on transparency).
30. Finally, the natural experiment about the disclosure measure finds that inexperienced consumers respond to disclosure by buying less at sponsoring suppliers. Although the effect is small (yet statistically significant), this finding suggests that inexperienced consumers discount the relevance of suppliers once they are aware of the sponsored nature of the listing. We do note that one should be careful in generalizing this result to other settings. See section 1.3.5 for a more detailed summary of the natural experiment.

1.3.4 The potential benefits from sponsored ranking to consumers

31. Regarding the potential efficiencies from sponsored rankings for consumers, ACM concludes the following. An often cited efficiency in the literature is that payments for a better position serve as a **signal about the advertiser's quality or relevance**. This signal may be directly transmitted to the platform (which observes the height of the bids) or to the consumer (that may observe the act of sponsoring by the supplier, from which the consumer may infer the supplier must be of high quality). These potential efficiencies go exactly in the opposite direction of ACM's second concern (sponsoring may lead to buying suboptimal products).
32. ACM finds that platforms have generally not well explained that and how they use the bids as proxies for relevance. On the contrary, platforms typically explain their rankings as being based on relevance and bids, to which platforms add that the impact of sponsoring is kept limited in order to keep the ranking relevant to consumers. This suggests that in general platforms do not use sponsoring to improve the relevance of the ranking but rather that allowing for sponsoring strikes a balance between relevance and other goals, such as serving sellers' interests and monetizing the platform's services.
33. Moreover, platforms possess a lot of data related to quality and relevance, and actually use these data to construct rankings. This lessens the scope for quality signaling through bids for a better position. Next, in the case of sponsored rankings on e-commerce sites, it seems the case that suppliers have many alternative ways available to signal their quality to platforms and consumers, such as setting lower prices or granting (more) warranties. Furthermore, under the assumption that advertising serves as a quality signal, one would expect that especially inexperienced consumers respond favorably to sponsoring because these consumers have the most to gain from quality signals. As mentioned above, ACM's analysis of a natural experiment on an undisclosed platform shows the opposite result. However, the literature contains examples where consumers do respond favorably to the disclosure of sponsored listings (see section 5.3.2). Finally, sponsoring can serve as a



signal directly to consumers only to the extent that the act of sponsoring is transparent. It is actually one of ACM's concerns that the way platforms disclose the commercial nature of sponsored listings may be overlooked by a substantial portion of consumers.

34. The remaining two efficiency rationales are that sponsoring may be used by suppliers **to make consumers aware of new products**, and to **attract more demand in quiet times** which improves the efficiency of the production process.
35. As to the first, ACM observes that many alternative strategies are available to achieve this end such as granting discounts. Moreover, ACM found that platforms sometimes choose to temporarily rank new items higher without sponsoring. This generates more data on how consumers perceive the item, which can then be used to improve the ranking.
36. As to the second efficiency, ACM again considers that alternative means can be employed to boost demand in quiet times, such as lowering price (which is very commonly used in e.g. the hospitality and food delivery sectors). Also, ACM's analysis of the dataset from an undisclosed platform shows that suppliers that sponsor do not change this between quiet and busy periods. This suggests that sponsoring suppliers use this option for a different reason than to increase demand in quiet times. Again, one should be careful in generalizing this result to other settings.

1.3.5 On the transparency of the commercial nature of sponsored search results

37. Prominent disclosure of the commercial nature of sponsored search results may both reduce the risks from sponsored ranking for consumer welfare and contribute to potential benefits from sponsored ranking for consumer welfare. The reason is that well-informed consumers are more likely to avoid sponsored results if consumers deem these less relevant. Moreover, to the extent that suppliers can signal their superior quality to the consumer by sponsoring the rank position, this can only be the case if the act of sponsoring is made clear to the consumer. ACM therefore concludes that prominent disclosure about the commercial nature of sponsored results increases consumers welfare.
38. As part of this study, ACM carried out an empirical analysis of **the effect of introducing a disclosure label for sponsoring** on the propensity to which consumers buy from sponsoring suppliers. For technical reasons the platform presented the label only on the website and not in the app for a period of time. The platform shared with ACM detailed anonymized buying data which makes it possible to analyse the effect of the label on consumer buying behaviour.
39. ACM finds that the introduction of the label had no statistically significant effect on the extent to which consumers buy at suppliers that sponsor their position. For the subset of inexperienced consumers (defined as buying no more than once in our dataset), ACM finds that consumers buy less at suppliers sponsoring their position although the effect is



economically small. The decrease in the share of purchases at sponsoring suppliers by inexperienced consumers is **[confidential]** percentage points, compared to a baseline of **[0 - 20]** per cent, which implies a relative decrease of only 2.6 per cent. For consumers making two purchases or more the effect is even smaller and not statistically significant. There is a number of potential explanations as to why the effect of the transparency on purchases at sponsoring suppliers is so small: i) consumers may not have noticed the label, ii) consumers did not understand the label, and/or iii) consumers do not consider the sponsored nature relevant for their order decision. The data did not allow for an empirical test of these explanations and so this is an area where ACM values more insight.

<i>Impact of transparency on purchases at sponsoring suppliers</i>			
Inexperienced consumers making 1 purchase	[confidential]	pp	(-2.6% relative to baseline of [confidential]%)
Experienced consumers making 2 or more purchases	[confidential]	pp	(-1.0% relative to baseline of [confidential]%)

Table 3. Results from natural experiment with label about sponsoring on an undisclosed platform. Only results in *italics* are statistically significant.

40. Finally, ACM is concerned that the way in which some platforms provide transparency about sponsored results in the ranking is such that a substantial share of consumers do not notice transparency labels and/or does not understand them. This concern is driven by the gist from the literature, showing that a substantial portion of consumers overlooks disclosure labels for sponsored search results. Also, ACM observes that platforms frequently use disclosure labels that have the same font and the same typesetting as other information on search results, and/or are not displayed on a prominent place in the search result concerned. Disclosure labels by themselves also may not be clear as to i) who sponsors the listing, ii) why this is done, and iii) that it affects the ranking, and how. Platforms usually provide this information, but often in a different location (e.g. a separate page devoted to the workings of the ranking or in the Terms & Conditions).
41. The empirical assessment of the extent to which consumers notice and understand disclosure labels in case of sponsored rankings is beyond the scope of this study. This is one of the areas where ACM values an improved understanding.

1.4 Outline of the report

42. The several topics of analysis in this study are arranged in different sections. Section 2 provides a framework for assessing the effects from sponsored ranking on consumers. Section 3 defines the scope of ACM's study and compares sponsored ranking to forms of online advertising, shelf fees in physical stores, and self-preferencing by vertically integrated platforms. Section 4 describes how different platforms rank results, how payments from suppliers affect the ranking, and the prevalence of such sponsoring



schemes. Section 5 discusses the practical relevance of ACM's concerns about sponsored ranking and efficiency rationales for sponsored ranking. Section 6 describes transparency measures on sponsored ranking that platforms currently take and discusses the empirical literature on the effects of disclosure measures, including our analysis of the natural experiment on an undisclosed platform. Annex A contains images showing how platforms disclose the commercial nature of sponsored search results to consumers.



2 Framework for assessing consumer harm resulting from sponsored ranking

43. The number of products or services available on an online platform is often so large that consumers are unable to compare all the offers. To assist consumers in their selection **platforms present the search results in a particular order**. In this study ACM investigates how platforms rank suppliers, and in particular how **extra payments improve rank position**. The ACM refers to this practice as '**sponsored ranking**'. Based on the insights from this study ACM presents a framework for assessing the effects from sponsored ranking on consumers. This framework can help the assessment of potential cases in this area. In addition, the framework provides guidance for online platforms that wish to evaluate the effects of their sponsored ranking activities, and to identify ways to reduce potential negative impacts on consumers.
44. ACM has identified **five factors** that determine the scope for consumer harm. Each of these factors can be scored ranging from lower risk of consumer harm to higher risk.
45. The **first factor is the prevalence of sponsored ranking on the platform**. When sponsored ranking on a platform is insignificant, the theories of harm that are identified in this study (see sections 5.1 and 5.2) are unlikely to occur. Conversely, when sponsored ranking is significant on the platform, the harms identified in our study may materialize. Prevalence can e.g. be assessed by the share of sponsored results in the top-10 results, the share of transactions following a sponsored result, the share of platform revenue derived from sponsoring, and the commission surcharge suppliers pay for sponsoring. Other relevant factors include the relative weight of sponsoring in the ranking algorithm, the number of rank positions won due to sponsoring, and the effect of sponsoring on clicks and sales. This study finds that in general the prevalence of sponsoring is currently limited. There are, however, exceptions and the prevalence may increase in the future. See section 4.4.
46. The **second factor is the design of the sponsored ranking mechanism**. The sponsoring mechanism affects the likelihood of harm to consumers. For example, if a supplier can only advertise if it offers the 'best deal' for a given product, it is unlikely that sponsoring leads to higher prices. The reason is that if the sponsoring supplier were to increase price, he would no longer offer the best deal and consequently lose prominence in the ranking. Note that in this situation, the theory of harm of less relevant products being ranked higher may still apply. Another important mechanism aspect is whether a platform uses auction-based or commission-based sponsoring regimes. Under the former only a restricted number of suppliers can sponsor their positions, whereas under the latter all suppliers can bid for a better position. Therefore, the risk of consumer harm is lower in



case of an auction-based regime, all else equal. Further, possible harm can be mitigated if a platform imposes strict quality checks on sponsoring in one way or another. Platforms can restrict the number of available sponsoring positions, limit the weight of sponsoring in the ranking algorithm, or make sponsoring available only to suppliers that meet some minimum quality criteria. For a discussion of design of sponsoring schemes, see sections 4.2 and 4.3.

47. The **third factor is the role of competition between platforms**. Platform competition potentially provides consumers with the option to search without sponsored results. Platform competition may also induce platforms to refrain from sponsored ranking, or limit its significance, in order to attract consumers that prefer 'organic-only' results (which are expected to be most consumers, see section 6.2). To assess the strength of this mechanism a natural metric is market share of a platform. Both the market share of a single 'sponsoring platform' as well as the market share of 'sponsoring platforms' combined provide useful insights in the degree of competition. Besides market share, within the context of platforms (indirect) network effects are also relevant. The reason is that network effects might cause markets to 'tip' into a winner-takes-all platform, in which case there is little competition to curb sponsoring. This study also identifies exceptions to the possibility that platform competition discourages sponsored ranking. First, when a substantial number of consumers does not search critically, in the sense that they apply rules of thumb in their search and purchase decisions such that they tend to follow platform suggestions, competition may not provide an incentive to limit sponsoring. Second, the nature of the good or service matters. When consumers can easily determine their valuation for the good while searching ('search goods'), the benefits from competition are more likely to occur compared to when consumers only learn their valuation for the good during consumption ('experience goods'). In the latter case, consumers are more susceptible to the suggestions made by platforms. Third, for competition to reduce any harm from sponsoring, consumers must understand what sponsoring means, that the ranking contains sponsored results, and which results are sponsored (see the fifth factor: transparency). For a more detailed discussion of the relationship between competition and the effects of sponsored ranking, see ACM's assessment of the theories of harm (sections 5.1.3 and 5.2.3).
48. The **fourth factor concerns the plausibility of efficiencies**. This study discusses four possible efficiency rationales for sponsoring: (i) bids for a better position may serve as a quality signal to the platform; (ii) the act of sponsoring may serve as a quality signal directly to consumers; (iii) sponsoring helps introducing new products; and (iv) sponsoring helps suppliers attract demand at quiet times. A couple of remarks are in order. First, platforms use much information to rank on relevance, which raises the question what value sponsored rankings can contribute. Second, bids for a better position are not necessarily related to relevance for consumers. Due to position effects a higher position leads to more sales. A high bid may therefore also simply reflect the supplier's desire to attract more consumers (instead of achieving a better match between searcher and supplier). Third, in a particular case, one can check whether sponsoring suppliers behave in a way that is



consistent with a potential efficiency. For example, is sponsoring indeed done by suppliers that introduce new products, or more by suppliers that face a low demand? Finally, it is possible that the act of sponsoring itself serves as a quality signal to consumers, because consumers infer from the act of sponsoring that the supplier offers high quality. The logic is that only a supplier with high quality may be able to earn back the sponsoring expenses through repeat purchases. However, this mechanism only works if consumers can easily recognize sponsoring. See section 5.3 for a more detailed discussion of the efficiencies.

49. The **fifth factor is whether sponsoring is clearly and prominently disclosed.** Disclosure can reduce any potential risks from sponsored ranking for consumers because it helps consumers who so wish to avoid sponsored results. Assuming some consumers will avoid sponsored results, transparency reduces the significance from sponsoring on the platform and stimulates competition on organic results. Also, disclosure makes it more likely that high-quality suppliers can credibly signal their high quality to consumers through the act of sponsoring. Therefore, the more transparent sponsoring is, the better the balance of potential harm and benefits for consumers.
50. The design of disclosure measures is important. This study observes that platforms frequently use disclosure labels that have the same font and the same typesetting as other information on search results, and/or are not displayed on a prominent place in the search results list. This yields a risk of consumers overlooking the message on sponsoring. Furthermore, frequently used disclosure labels may not be clear as to: (i) who sponsors the listing; (ii) why this is done; and (iii) how it affects the ranking. Platforms usually do provide this information but often at a separate page devoted to the workings of the ranking or in the Terms & Conditions. In such cases disclosure may not effectively inform consumers about sponsoring and sponsored results. See section 6 for a discussion of transparency regarding sponsored ranking.
51. The following table summarizes the factors and their effect on the likelihood and size of harm to consumers from sponsored ranking.

<i>Factors in assessing the effects from sponsored ranking on consumers</i>		
Factor	Low risk ←-----→	High risk
Prevalence of sponsoring	Low prevalence	High prevalence
Design	Strict quality checks	No quality checks
Platform competition	Vigorous competition	No effective competition
Efficiencies	Consumers enjoy benefits	No benefits for consumers
Transparency	Clear and prominent disclosure	No disclosure

Table 4. Factors in assessing effects from sponsored ranking on competition and consumers.



52. To assess the size and the likelihood of the harm, all factors identified in this framework are relevant. This means that **a less favorable score on one of the factors identified above makes harm more likely**, keeping everything else constant. In other words, each of the following increase the likelihood of harm: (i) greater prevalence of sponsoring; (ii) less favorable design; (iii) less competition on organic results; (iv) less efficiencies; and (v) less transparency. Importantly, **the factors identified in this framework need to be considered jointly**. This means that an unfavorable score on one of the factors does not automatically lead to the conclusion that harm is sizable and likely. For example, sponsoring may be significant on a platform, yet harm is unlikely because of vigorous competition from platforms that do not engage in sponsoring. As another example, competition may be absent, but the design of the sponsoring scheme contains strict quality checks such that harm is unlikely. As a final example, sponsoring may be significant, not noticed by consumers nor limited by competition, but sponsoring generates sizable efficiencies that are passed on to consumers, again leading to the conclusion that harm is unlikely. How these factors weigh off against each other depends on the particular circumstances of the case.
53. Finally, two factors have more weight and can individually give rise to the conclusion that harm to consumers is unlikely. Harm is unlikely if: (i) a platform employs clear and prominent transparency measures (meaning that consumers notice and understand the meaning of sponsoring and can identify sponsored results); or if (ii) sponsored ranking is an insignificant practice. If a practice falls outside these two factors, a full assessment on the basis of all five factors is required.



3 Scope and research methods

3.1 Sponsored ranking: definition and delineation from related practices

54. This study focuses on sponsored ranking. For the purposes of this study, the ACM defines sponsored ranking as:

“the practice whereby an online platform, in exchange for extra monetary compensation, offers a supplier a more prominent position in the search results list.”

55. Many platforms offer sponsored ranking schemes to suppliers in one way or another (see section 4.2 for a description of the various models). The central feature of these schemes is that platforms use a number of factors to determine the ranking, one of which is whether or not the supplier increases the monetary compensation for the platform (and to what extent). The supplier chooses voluntarily whether or not to use the sponsored ranking scheme.

3.1.1 Sponsored ranking and online advertising

56. In advertising terms, sponsored ranking most closely resembles what the Interactive Advertising Bureau (IAB) refers to as ‘Promoted Listings’. The IAB notes that Promoted Listings are typically found on commerce sites (IAB 2019, p. 6) and remarks on Promoted Listings that *“these units are found on sites that typically do not have a traditional editorial content well, they are designed to fit seamlessly into the browsing experience, are presented to look identical to the products or services offered on a given site, link to a special brand/product page, are typically bought on auction directly via the publisher, are hyper-contextually targeted, and are measured on direct response metrics”* (IAB 2013, p. 12).
57. In its *Native Advertising Playbook 2.0* the IAB (2019) classifies ‘Promoted Listings’ as a form of native advertising. The IAB defines native advertising as *“a concept encompassing both an aspiration as well as a suite of ad products. It is clear that most advertisers and publishers aspire to deliver paid ads that are so cohesive with the page content, assimilated into the design, and consistent with the platform behaviour that the viewer simply feels that they belong”* (IAB 2019, p. 11). The IAB distinguishes native advertising from search advertising. Although search advertising could technically be called ‘native advertising’, the IAB notes that search advertising is usually not considered ‘native’ by the industry (IAB 2019, p. 6).
58. This study follows the distinction made by the IAB between search advertising and native advertising. Search advertising is therefore not included in the study. ACM focuses on sponsored ranking at commerce platforms where consumers can directly buy products, and price comparison platforms. ACM also notes that sponsored ranking typically mixes



sponsored and non-sponsored results in one search results list. This is different from online search advertising which has paid and unpaid results grouped and ranked separately (e.g. Google Search and Bing).

3.1.2 Sponsored ranking and shelf fees in physical stores

59. Sponsored ranking has certain traits in common with fees paid by manufacturers to supermarkets, bookstores or pharmacies in return for a prominent spot on the shelf ('slotting allowances' or 'shelf fees'). In both cases, suppliers pay for prominence that the shop offers when selling to consumers. A typical saying in the distribution of shelf space in supermarkets is "eye level is buy level", meaning that products positioned at eye level tend to attract consumers' attention and sell better (Kendall, 2014; Bai et al, 2013).⁷
60. More generally, salience impacts consumer choice (Bordalo et al., 2013). This is true both in offline and in online commerce. In other words, those products, product attributes, or search results that are easiest to notice, are likely to receive the most attention from consumers and get purchased more frequently. In the case of online platforms, salient ranking results include those that appear on the top of the page and do not require scrolling down, or those on the very bottom of the page, right before consumers click through to the next page. Therefore, it is attractive for suppliers to have their results appear in those spots, as is confirmed by several platforms in this study.
61. The economic literature on shelf fees shows that these fees are typically fixed fees that are paid up front, and that they can have positive as well as negative effects on consumer welfare (FTC, 2003). For example, while shelf fees can raise prices for consumers in case of retailer market power, they can also facilitate the introduction of new products and hence increase product variety to meet consumers' differences in taste (Shaffer, 1991; Innes and Hamilton, 2013). Although slotting contracts may raise competition concerns if they are used to foreclose rival manufacturers or limit competition between retailers, for the most part they are seen as part of the normal competitive process between manufacturers and as contributing to the efficient allocation of shelf space for new products (Klein and Wright, 2007; European Commission, 2010).
62. Like slotting allowances and other shelf fees, sponsored ranking can be used to gain prominence in order to focus consumers' attention to new products, and to order search results in part based on which suppliers want to pay the most to signal their quality (see sections 5.3.2 and 5.3.3). However, there are some important **differences between sponsored ranking on online platforms and shelf fees in brick-and-mortar shops** that are relevant for the assessment of these rationales for sponsored ranking, as well as for the assessment of the potential for consumer harm.

⁷ Eye-tracking research confirms that when presented with several rows and columns of options, as in a supermarket, subjects tend to pay more attention to, and often end up choosing the products in the center and at the top. In addition, search appears to be random with respect to value, meaning that high-value products are not more likely to be noticed. Reutskaja et al (2011).



63. First, a ranking by definition suggests that the top results are more relevant, or better somehow, than the lower-ranked results. Moreover, consumers are likely to expect the search results to be presented to them in that order. To the extent that eyelevel products in retail shops may also convey a quality signal to consumers, this effect is likely to be more implicit and diffuse. After all, when standing in a supermarket aisle, consumers can look for alternatives across the entire aisle, in any order they want, without that search order necessarily being correlated with relevance or quality. Of course, consumers may be aware that cheaper private-label products tend to be stocked at the bottom shelf and top brands on eye-level, but other than that there appears to be no clear order in relevance or quality, nor do consumers necessarily expect this. Indeed, eye tracking research shows that in a setting comparable to a supermarket, consumers search randomly with regard to value, and that high-value products are not more likely to be sought first (Reutskaja et al., 2011).
64. Second, the shelf position of products in supermarkets and other retail shops is the same for all consumers who visit the shop, while ranking results on platforms can be personalised based on previous searches, search terms used by the consumer, location and other relevant factors. While this may serve consumers in the sense that it facilitates their search, it also means that individual consumers' consideration sets, i.e. the set of products they compare out of the vast amount of products offered on the platform, can be tailored to extract their maximum willingness to pay. Possibly even more than that, if they perceive the sponsored product to be better than it actually is because it is higher up in the ranking.
65. Finally, to the extent that shelf fees are lump sums that are paid up front, they can be viewed as fixed costs for manufacturers. While fixed costs are relevant for a company's decision to stay in the market, they typically do not directly affect product prices. Sponsored ranking, on the other hand, tends to occur on a per-click or per-transaction basis. As a result, sponsored ranking directly enters into the suppliers' marginal cost, i.e. the cost of supplying one more item, which in turn directly affect price. Sponsored ranking may thus result in higher prices for consumers (see section 5.1). However, this cost distinction may be less stark in practice, as shelf fees can also be variable and final prices and quality for consumers also depend on the degree of competition at the retail (or platform) level (Klein and Wright, 2007).
66. ACM concludes that on a general level shelf fees and sponsored ranking show similarities and material differences. Section 5 discusses in more detail the potential harms and benefits from sponsored ranking for consumers and the practical relevance of any differences and similarities with shelf fees.

3.1.3 Self-preferencing by vertically integrated platforms

67. Practices whereby vertically integrated platforms give preference to their own services may



be similar to sponsored ranking. This is, for example, the case when a vertically integrated platform gives its own services a more prominent position in the search results list. Self-preferencing may lead to competition issues (see e.g. Crémer et al., 2019; and Feasey and Krämer, 2019). In particular, self-preferencing may restrict competition on the merits because the favoured party does not need to compete on the merits to obtain a good position, and non-favoured parties may have a reduced incentive to compete on the merit because they are not (or less) rewarded for this anyway. **Self-preferencing by vertically integrated platforms is not within the scope of this study.** This implies that even though some platforms in this study are vertically integrated, this aspect is not analysed here.



4 Ranking and the role and importance of sponsoring

68. Platforms show consumers an ordered set of results in response to a search query. The ordered search results list (or: ranking) affects the visibility of an item in the set of results and thereby the attention it receives from the consumer. This section describes how platforms rank results, and how sponsoring affects the ranking, on the basis of the information provided by the platforms in this study.

4.1 A ranking balances interests

69. The following **three underlying aims** drive platforms' ranking decisions, which can all be reflected in the ranking algorithms used by a platform:
- servicing the consumer's interest;
 - servicing the supplier's interest;
 - servicing the platform's interest.

The platforms in our study are all two-sided platforms. They match supply and demand for a product or service. In order to be of continued value to the two groups of users (consumers and suppliers), platforms must generate transactions between the two sides and in the meantime make money doing so. These aims together determine the ranking decisions that platforms make. Although all platforms have to serve these three interests in order to be of continued economic relevance, this does not mean that all platforms explicitly account for each interest in the ranking. Some platforms rank exclusively on the basis of consumer relevance. In general, however, the platforms design their ranking algorithms in such a way that they trade off the three interests.

70. All platforms in our study use factors in their ranking algorithms that are considered to be predictors of **consumer interest**. Parameters used for this purpose include popularity (measured by e.g. the number of previous purchases and clicks), conversion rate (the historic fraction of purchases out of views), review scores, presentation of the offer on the platform (quality of text and photographs, etc.), price (and sometimes discounts), returns, and delivery times.
71. Although many platforms stress that they do serve **supplier interest**, the study did not reveal any factor in the organic ranking⁸ that is uniquely related to suppliers' interests. Typically platforms state that they serve supplier interests by serving consumer interest. By ranking products high that are most relevant for the consumer, platforms maximize the probability of a transaction, which also serves suppliers. In addition to this, many platforms offer suppliers better visibility in exchange for a payment. This sponsoring option is typically presented by platforms as a service for suppliers, but it clearly serves a platform's immediate commercial interest as well.

⁸ By 'organic ranking' ACM refers to the ranking that arises in case sponsoring has no impact on the ranking.



72. As to the **platform's interest**, the following distinction can be made. First, a few platforms in our study do not include their own financial interest directly in the ranking in any way. These platforms do not factor in the monetary compensation they receive from the 'deliverable' they produce (be it a transaction on the platform or a referral to a supplier) in their ranking algorithm, nor do they allow suppliers to improve their rank position in return for a higher compensation. These platforms construct the ranking so as to maximize the consumer's interest. The business rationale is that consumers can most easily find the deals with the greatest value for money. Second, most platforms in our study offer suppliers the possibility to increase the monetary compensation paid to the platform in return for a better rank position. These platforms have a ranking algorithm that focusses exclusively on the consumer interest *unless* the supplier voluntarily chooses to pay extra in return for a better rank position. The ACM refers to this possibility as '**sponsoring**'. Third and last, a limited number of platforms in our study base their ranking in part on the monetary compensation they receive from facilitating a transaction or referral even when abstracting from sponsoring. The monetary compensation for platforms typically differs per offer because the commission percentage differs per supplier and/or the price of the product or service differs per offer. **Some platforms design their ranking algorithm such that it always takes account of the platform's immediate monetary compensation, irrespective of suppliers' choice to sponsor their position.**
73. An important question from the point of view of consumers is **to what extent the ranking reflects their interest**. As noted above platforms generally take into account the interests of consumers, suppliers and their own when constructing a ranking. These interests do not necessarily coincide. When constructing the ranking platforms often have to trade-off and balance these interests. A striking example is the following. Platforms earn a higher commission from products or services with a higher price because suppliers typically pay a pre-negotiated commission percentage for every transaction or referral. This gives platforms a short-term financial incentive to rank higher priced items first which is clearly not in the interest of consumers. When deciding on how to treat price in the ranking, platforms thus have a choice to make as to whose interest they serve.
74. Theoretically, one could think of the **weight** the ranking algorithm puts on parameters that are related to the consumer/supplier/platform interest as the extent to which the platform serves a specific interest. Suppose that giving full priority to the consumer's interest, as some platforms in our study do, implies setting a weight of 100% on factors that (jointly) determine which deal is the best for the (specific) consumer, and rank accordingly. On the other hand, suppose that giving full priority to the platform's commercial interests would imply setting a weight of 50% on the monetary compensation the platform receives from a transaction (or a referral). Note that platforms never set the weight on their own monetary compensation equal to 100% because consumers only buy if a recommended product is sufficiently relevant. However, even then platforms have some room for setting the weight on their monetary compensation higher or lower. The greater the platform's market power, the more the platform can increase weight on its own monetary compensation.



75. When thinking about weights put on various interest in the ranking, a number of **caveats** are to be taken in mind.
- a. First, exact weights are typically hard to provide because most platforms apply self-learning algorithms that constantly evolve on the basis of observed outcomes. In this process weights on specific parameters change over time.
 - b. Second, despite a constant weight, the effect of a change in a certain parameter on the ranking of the supplier is highly dependent the scores on other parameters. An identical increase in the commission rate of a supplier may well have a different effect on the rank position of the supplier depending on the review scores, price, etc. of the supplier – as well as the other suppliers. This makes weights difficult to interpret.
 - c. Third, the relationship between an individual parameter and the rank position of a supplier is not fully captured by the weight put on the parameter. As a simple example, the ranking algorithm of some platforms puts weight on popularity as measured by the number of clicks. In this case, a change in the commission rate may not only directly increase the rank position of the supplier but also indirectly because the higher position will lead to more clicks.
76. Most platforms have not provided ACM with weights they put on specific parameters that determine the ranking. However, some platforms have provided ACM with an indication of the weights they put on the monetary compensation in their ranking algorithm. Those that did, state that the weight is less than 15%. This figure is excluding of the platforms who do not allow sponsoring and rank exclusively on the basis of consumer interest (in which case this weight is 0% by design).

4.2 How suppliers can sponsor their rank position

77. This study distinguishes sponsored ranking programs from a general dependence of the ranking on the platform's monetary compensation in the following way. Sponsored ranking programs are defined by the supplier's voluntary choice to increase the payment to the platform in exchange for a better rank position. This is different from the situation where a platform makes its ranking dependent of the monetary compensation it receives given the pre-negotiated commission rate.
78. The study revealed two types of sponsored ranking programs that are both commonly used. The first model is what ACM calls a '**commission-based sponsored ranking model**'. In this model suppliers can select a surcharge on the pre-negotiated commission rate in return for which they receive a higher (closer to the top) rank position, all else equal. The 'ranking boost' is usually implemented by putting a multiplier on the supplier's



commission rate that is proportional to the surcharge that the supplier selects. The ranking algorithm will recognize that the supplier pays a higher commission which ultimately translates into a higher rank position. A key characteristic of this model is its availability to many – or even all – suppliers. Examples of the model are Expedia's *Accelerator*, Booking.com's *Visibility Booster*, and Thuisbezorgd.nl's *TopRank*. Another example that fits reasonably well in this category is Booking.com's Preferred Partner Programme. Under this programme hotels that satisfy certain quality criteria are eligible. Eligible hotels, which make up a sizable group, choosing to participate in the program are ranked higher (again, all else equal) and pay a higher commission. Unlike Expedia's *Accelerator* and Booking.com's *Visibility Booster* the commission surcharge for the Preferred Partner Programme is fixed and cannot be selected by hotels.

79. The second model is an '**auction-based sponsored ranking model**'. Similar to search advertising, platforms offering this option reserve a maximum number of positions on the search results page. Suppliers bid a cost-per click to have their listing shown in one of the reserved spots. The reserved spots are typically the top position(s), some position(s) on the middle of the page, and some position(s) at the bottom of the page. Some platforms offering an auction-based sponsored ranking model also allow the producer of the product to sponsor the rank position of the seller that offers the product on the platform, although this seems rare.

4.3 Impact of sponsoring on rank position, clicks and sales

80. **Sponsoring clearly has a positive effect on the rank position of the supplier** in the sense that if all other factors that determine the ranking are held constant, an extra payment to the platform will improve the supplier's rank position. This can be simply deduced from how the ranking algorithms take account of sponsoring in the case of commission-based sponsoring models. Under these models, the algorithm takes account of the commission rate and assigns a higher rank position when the commission rate increases (all else equal).⁹ For auction-based sponsoring models, the conclusion follows from the fact that prominent positions are reserved for sponsored items.
81. Within auction-based sponsoring models, a distinction can be made between cases where an individual listing can be replicated on the same search results page and where this is not possible. A search results page contains a bracket of all search results, for example results 1 through 25. Some platforms allow for both the organic listing and the sponsored listing of the same product on the same search results page while others don't. However, even when duplication on the same search results page is not possible, the sponsored position will come in addition to the organic listing on some other search results page. In both cases sponsoring adds to the prominence of the listing.

⁹ Under commission based models it is theoretically possible that the ranking does not change because of sponsoring, namely in the event that all suppliers choose to sponsor their position to the same extent. This does not seem to happen empirically (see section 4.4)



82. Commission-based and auction-based sponsoring models differ in a subtle way as to what kind of visibility is sold to suppliers. Under a commission-based model a supplier pays for an improvement in the rank position. A lower rank number (where the top position has rank number 1) generally implies an increase in visibility, but not necessarily. For example, if a supplier moves from the bottom of page 1 to the middle of page 1, visibility may not necessarily increase. Positions at the bottom of the page are relatively visible. This is why under auction-based sponsoring models, positions at the bottom of the page are also sold off in auctions.
83. It is well-known that a more prominent rank position has a positive impact on the clicks and sales a supplier generates on a platform. For example, in the app stores 87% of all clicks are on the first five results (above the fold), and more than half of the consumers download the first app they click on (Dogruel et al., 2015). Data generated by an experiment on Expedia where consumers were shown a random ranking also shows that a higher rank position leads to more consideration from consumers and therefore more purchases (Ursu, 2018).¹⁰ Platforms in our study confirm that a large majority of clicks and sales take place at the top results in the ranking. ACM therefore concludes that a higher ranking has a positive impact on suppliers' clicks and sales.
84. It is considerably harder, however, to draw conclusions about the magnitude of the positive impact on rank position from sponsoring. All platforms have stated that they balance the impact of sponsoring on the ranking against the goal of showing consumers relevant results. Platforms stress that they take measures to prevent that sponsoring will lead to irrelevant results gaining a prominent position. Examples of such measures are that the commission surcharge payable for rising many positions in the ranking is set high (in commission-based sponsoring models), the number of positions that can be sponsored is limited (in auction-based sponsoring models), and to allow sponsoring only for suppliers that meet certain quality criteria (both models).
85. For example, the organisation of the platforms Amazon.de and bol.com creates a natural way to select suppliers eligible for sponsoring. These platforms show a ranking of products in response to a search. It is a feature of these platforms that the same product is often offered by multiple suppliers. These platforms select for every available product the supplier that offers the best deal for the consumer (based on price, review scores, delivery time, etc.). The ranking of products is based on these best deals. Furthermore, only suppliers that offer the best deal on a particular product can sponsor the product's listing. This design does not rule out the possibility that a less relevant *product* is shown higher in the ranking, but it does prevent that for a particular product a less relevant supplier is shown higher.

¹⁰ Note that if platforms sort results on relevance, one would also expect consumers to select top results more often. The strength of Expedia's dataset it contains data on a random ranking order Expedia presented to customers experimentally. Even in this consumers give top results more attention leading to more purchases, which provides clean evidence of 'ranking effects'.



86. As to the **effect of sponsoring on clicks and sales**, most platforms have responded to the ACM that they do not keep track of this information and/or it is hard or impossible to establish the effect. All platforms state that the effect of sponsoring is highly dependent on the context and therefore highly variable. Some platforms nevertheless provide performance reports to advertisers on campaign metrics such as clicks, conversion, and revenue on a regular basis. One platform in ACM's study mentioned an increase in revenue of 35% and an increase in views of 65% for their suppliers because of sponsoring. There are also platforms, however, that do not provide predictions of the effects of sponsoring on clicks and transactions or provide estimates that are only indicative of the order of magnitude of the effects. Another platform responded they stopped providing predictions of the effects of sponsoring to suppliers because these effects depend on many factors that differ across time – therefore any hard predictions were considered unreliable.
87. Two platforms have reported to the ACM the results of experiments conducted in-house on the effects of sponsoring on clicks and sales. One platform reported an experiment where the performance of the same supplier was compared with and without sponsoring activated. The experiment revealed an economically highly significant effect of sponsoring on clicks and revenue. That sponsored ranking is effective is also found in the literature (see Sahni and Nair, 2020a and 2020b).
88. Another platform reported an experiment that compared consumer behaviour with and without sponsoring being present on the platform. This experiment showed that the addition of sponsored results had no effect on consumer's revenue per visit to the platform. The addition of sponsored products also had no effect on conversion on the platform as a whole. The platform did not investigate whether sponsoring implied a redistribution of the revenue per visit from non-sponsored to sponsored results, or to what extent this happened.

4.4 Significance of sponsored ranking in practice

89. Our study uncovered the following insights regarding the **presence of sponsoring on platforms**. In our study, seven out of the nine platforms show sponsored results in the search results. All of these platforms include **sponsored results in the default sorting order**. This default sorting order is typically called 'Recommended', 'Featured', 'Popular', or a similar name indicating the results are sorted on being a 'good deal' for the consumer. Almost all of these platforms restrict the inclusion of sponsored items in the search results to the default sorting order but some platforms also show sponsored items in rankings based on e.g. price or review score. In these cases platforms reduce the number of sponsored items in the search results and show them in less prominent positions (lower in the ranking). Sometimes platforms use the extra payment made by suppliers for a sponsored position to solve for ties between otherwise identical offers.



90. In our study, all platforms offer alternative sorting orders for a given set of results, such as based on price. But consumers usually opt for the default settings in order to avoid complex choices, a psychological mechanism called *inertia*, *status quo bias* or *default bias*.¹¹ We also see this in our study. A very large majority of the consumers does not change the default sorting order: approximately 90% for retail platforms and 70-80% for the online travel agents in our study. Hence a large majority of consumers make their choice from a sorting order that is influenced by sponsoring. Platforms in our study also offer the possibility to filter results on the basis of product characteristics. Filtering narrows down the set of potentially relevant search results. In our study, filtering occurs more often than changing the default sorting order, but on almost all platforms that provided data on this metric, a substantial majority of consumers does not filter. One platform, which does not allow for sponsored ranking, noted that consumers filter a lot.
91. **Platforms differ in the maximum possible number of sponsored slots available.** Under auction-based sponsored ranking models, platforms reserve a maximum number of positions for sponsored results. The reserved positions are typically shown at the top and bottom of every search results page (the total set of search results is often distributed over multiple pages each containing e.g. 25 search results). The maximum possible number of sponsored positions is limited to a certain percentage of the number of results on a search page (e.g. 25%) and differs per device (desktop versus mobile).
92. Under commission-based sponsored ranking schemes all suppliers can pay extra for an improvement in the ranking. Platforms operating this model let suppliers select a commission surcharge where the higher the surcharge the greater the improvement in the rank position (all else equal). In this case the number of sponsored items in the ranking is unlimited. Finally, some platforms both have some reserved spots for advertising and let all suppliers improve their rank position in the non-reserved (organic) list. For example, Expedia allows all hotels to increase their rank position by increasing their commission in return for a better position in the ranking (“Accelerator”) and reserves some positions for sponsored items (“Travel Ads”).
93. As for the **frequency of sponsored results** in the ranking, a few platforms have been able to provide ACM with the probabilities that a specific rank position (top position, second, third, etc.) is sponsored. Based on these data ACM has calculated the average number of sponsored results in the top-10 results on these platforms. The platforms show substantial variation in the average number of sponsored results in the top-10: for some platforms this number is lower than 1 but it can be as high as 5.¹²

¹¹ Kahneman, D.; Knetsch, J. L.; Thaler, R. H. (1991). "Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias". *Journal of Economic Perspectives*. 5 (1): 193–206; Johnson, Eric J, and Goldstein, Daniel "Do Defaults Save Lives?", *Science*, Vol. 302, pp. 1338-1339, 21-11-2003. Ursu (2018, 44) reports that 34% of consumers filter the results page when searching on Expedia, and Blake et al (2016, 12) find that between 70-85% of consumers use the default sorting order with sponsored products when browsing eBay.

¹² Note that these data about the presence of sponsored results in the ranking is not informative about the effect of sponsoring on the rank position. The reason is that we cannot compare the actual position of sponsored results with the position these results would have had without sponsoring.



94. The **share of transactions that involve sponsored products again differs across platforms**. Although not all platforms could share data on this metric with ACM, more platforms could share these data than on the frequency of sponsored results. The platforms in our study differ substantially in the share of transactions that involve sponsoring. Most platforms have a share of transactions for sponsored products in the range of 1% to 10% but it can be as high as 50%.
95. The **share of platform revenues generated by sponsored listings lies mostly in the range of 1% to 5%**, but it can be as high as 30%.¹³ Finally, **suppliers that use sponsoring to improve their ranking pay a significant surcharge on their standard commission rates**. In commission based sponsoring models, suppliers self-select surcharges that lie in the range of 15% to 40% (e.g., the commission rate increases from 15% to 17%-21%). ACM has not been able to provide ranges of implied surcharges on commissions in the auction based sponsoring model. The following table summarises the results.

Key figures on the practical relevance of sponsored ranking

Number of sponsored results in top 10	Varies from less than 1 to 5
Share of orders following sponsored result	Mostly below 10%, maximum observed 50%
Share of 'intermediation revenue' from sponsoring	Mostly 1-5%, maximum observed 30%
Surcharge on average commission rate paid for sponsoring	Varies from 15 to 40%

Table 5. Key figures on the practical relevance of sponsored ranking.

¹³ This percentage is expressed as the amount of revenues from sponsoring in relation to the total amount of platform commissions.



5 Theories of harm and efficiencies

5.1 Sponsored ranking can result in higher prices and/or lower quality for consumers

5.1.1 Theory of harm

96. The economic literature shows that sponsored ranking may result in higher prices for consumers as sponsored ranking may soften competition between retailers. Compared to fully random search, in which every supplier has an equal chance of being searched first by consumers, a ranking of search results can substantially reduce search cost for consumers but can also result in higher prices. The reason is that lower-ranked suppliers infer from the fact that consumers are looking at their products that those consumers are not satisfied with the offers of the more prominent, higher-ranked suppliers (Armstrong et al, 2009; Haan and Moraga-González, 2011; and Armstrong and Zhou, 2011). Because at that point consumers will have already searched at least one other offer, and searching is costly, their demand is less price-elastic, i.e. they will more easily put up with a slightly higher price rather than keep on searching. This allows these other firms to compete less intensely and to offer higher prices compared to the case of random search.
97. While this is true for ranking in general, sponsored ranking can exacerbate this adverse price effect because it allows suppliers to gain prominence not just by lowering prices, but also by paying commission to the platform. At least some suppliers may choose to do only the latter. Given that some suppliers do not lower their price, other suppliers face less price pressure and as a result prices will rise. If sponsoring is not possible, suppliers have no other way to obtain a prominent position than through lowering price. By providing an alternative route to prominence, sponsoring may thus directly reduce price competition.
98. Even if all suppliers who use sponsoring to improve their ranking do not change their price setting (that is, they set price as low as they would without sponsoring), sponsoring may reduce price competition between suppliers. The impact that price has on the rank position is smaller if the ranking is also determined by sponsoring, all else equal. Compared to no sponsoring, a given price decrease will therefore lead to a smaller improvement in rank position. Consequently, **suppliers have less incentive to cut price** in order to improve their rank position when some suppliers pay a higher commission in return for a better rank position. Along similar lines, sponsored rankings may reduce the incentive for supplier to improve quality.
99. Another mechanism through which sponsored ranking can result in higher prices compared to ranking solely on match value, is that the **commission raises firms' marginal costs**. In contrast to lump sum shelf fees (see section 3.1.2), sponsored ranking typically occurs on a per-click or per-purchase basis, and therefore directly affects the cost of supplying one additional product, i.e. the marginal cost. Under the common assumption of rational profit-maximizing behaviour, an increase in marginal cost leads to higher prices.



100. Strong competition among suppliers on the platform does not prevent this and may, in fact, result in even higher prices. The intuition is as follows. When two firms offer the same value to consumers, the platform will rank the firm that pays the most commission higher. For each individual firm, the best strategy is to pay the commission and be ranked higher, but if all firms act accordingly, ultimately the ranking order may not be very different and all firms' marginal costs will have increased and be reflected in higher prices, compared to the case where the platform ranks only on the basis of match value (Haan and Moraga-González, 2011). The incentive for firms to escape competition is stronger when competition on the platforms is more intense, which implies, perhaps somewhat counterintuitively, that also on platforms with fierce competition between suppliers, sponsored ranking can result in higher prices.

5.1.2 Responses from platforms

101. The platforms in this study have put forward different reasons why sponsored ranking is unlikely to result in higher prices for consumers.
102. One reason put forward by platforms that offer commission-based ranking, is that competition between suppliers extends beyond any particular platform and that consumers 'multi-home', comparing offers on various platforms and seller websites. For example, one platform has indicated that hotel bookings via online travel agents average around 30 percent of total hotel bookings.
103. If competition between sellers would indeed be reduced on a particular platform due to sponsored ranking, and consumer prices on that platform were higher as a result, the competitive pressure exerted by other sales channels would simply result in a shift of sales towards those other channels and away from the platform with higher prices. The mere threat of this happening could prevent higher prices from being offered in the first place, according to these platforms.
104. The second reason put forward by these platforms is that in case of commission-based sponsored ranking, price is still an important determinant of the ranking order and commission receives relatively little weight in the ranking algorithm, suggesting that sponsored ranking only affects the relative ranking of otherwise similar alternatives.
105. The argument is different for some platforms that offer auction-based sponsored ranking, namely those that offer the possibility to sponsor the rank position of a particular product only to the seller that offers the best deal on that particular product (as is the case on Amazon.de and bol.com). These platforms have indicated that the selection of the best supplier for a given product (say children's bike A) is based only on competition parameters, including price, review scores, delivery times, etc.. In these models, only suppliers offering the best deal for a particular product can sponsor the product's position, and thus pay for sponsoring. A price increase subsequent on sponsoring would, however,



reduce the likelihood that the supplier offers the best deal. This method precludes adverse price effects as a result of sponsored ranking, according to these platforms.

5.1.3 Assessment by the ACM

106. Based on the economic literature, the ACM considers that **sponsored ranking can result in higher prices and/or lower quality** compared to ranking on match value alone, through either one or both of two mechanisms: directly, through a reduced incentive to compete on price/quality, and indirectly, through increased marginal cost that are passed on to consumers in the form of higher prices. Although sponsoring may both increase price and reduce quality, and thus more generally decrease value-for-money, in the following ACM abbreviates this to 'an increase in price'. Note that the mechanism through which sponsoring raises marginal cost only affects price.
107. The ACM considers that out of the different types of sponsored ranking, **particularly commission-based sponsored ranking may result in higher prices**, compared to ranking on match value alone, by reducing suppliers' incentive to cut prices or by raising suppliers' marginal cost, or by a combination of both mechanisms. The reason is that in the case of commission-based ranking, in principle all suppliers can choose to pay commission to gain prominence¹⁴, and some will choose not to lower price instead (because compared to ranking on match value only, it pays less to do so), making other suppliers face less price pressure and causing prices to rise as a result. In addition, those suppliers that do choose to pay commission, face higher marginal cost, which they may pass on to consumers in the form of higher prices.
108. The argument put forward by some of the platforms that price and other competitive factors are still an important factor in the ranking, and even more important than commission, does not invalidate this line of reasoning. This **argument by the platforms thus does not so much dispute the direction of the price effect, but rather argues that the magnitude of that effect is limited**. Which price-raising mechanism is most likely to apply and to what extent adverse price effects actually materialize in practice, depends on the significance of sponsored ranking and on the competitive circumstances in each individual case.
109. By far the most consumers use the default ranking order, which contains sponsored results. And by far the most purchases occur in the top ten or even top five of ranked search results, which are most salient to consumers (see section 4.4). Therefore the extent to which sponsored ranking affects these top results is relevant to determine the amount of consumer harm. Section 4.4 shows that the extent to which sponsored products are shown in top positions is relatively limited on most platforms. However, on some of these platforms the share of sponsored products in the top positions is substantial. **The data gathered in this study therefore suggests that, at least currently, on most platforms there is no bidding war in which most suppliers pay extra in order to gain**

¹⁴ However, a number of platforms have indicated that suppliers with bad reviews or bad quality are not eligible to participate in commission-based ranking.



prominence and pass their raised marginal cost on to consumers, although there are exceptions where sponsoring among the top results is substantial. At any rate, the ACM considers it possible that those suppliers who do pay extra commission, do pass on their higher marginal cost to consumers, and that the suppliers who do not pay extra commission, are less inclined to lower prices because they experience less competitive pressure as a result – particularly if there are more sponsored results in the top ranks. The extent to which prices do increase because of sponsoring is beyond the scope of this study.

110. Platform competition can reduce harm from sponsored ranking because it potentially provides consumers with opportunities to search without sponsoring, and may give platforms incentives to curb sponsoring (that is, compete on relevance). **Whether there is sufficient competitive pressure to prevent or counter any adverse price effects, as platforms have argued, remains to be seen.** The mere presence of more than one platform in a market is unlikely to be enough to do so. For example, if in a given market there are several competing platforms, that nearly all offer sponsored ranking and in addition have narrow price-parity clauses in place which prevent suppliers on those platforms to offer better rates or value on their own website – as is the case in the hospitality sector -, then arguably there is insufficient competitive pressure from outside any particular platform to curb higher prices as a result of sponsored ranking. The markets studied in this report exhibit network effects which may tip markets to one or only a few platforms.
111. Even if competing platforms would not use sponsored ranking, competitive pressure between a platform that does use sponsoring and platforms that do not, may be limited for 'naive' consumers that only compare offers on the platform rather than between platforms. If a platform can identify these consumers, based on past search and purchasing behaviour or through loyalty programs, and is able to use personalized pricing and ranking, then there is essentially no competitive pressure from outside the platform and sponsored ranking can still raise prices for these consumers, as a result of higher marginal cost and some extent of market power over these consumers. If the share of sticky consumers is large, it may also not pay off for platforms to curb sponsoring. After all, naive consumers tend to be susceptible to the platform's recommendations, even if competing platforms were to rank more relevant results higher.
112. Finally, based on the information gathered in this study, **the ACM considers it less likely that adverse price effects can materialize in the case of auction-based sponsored ranking offered only to the most competitive suppliers** (as is the case on Amazon.de and bol.com). In these models, a supplier can only sponsor if offering the best deal on a particular product. Passing on the cost of sponsoring in the form of higher prices would reduce the likelihood that the supplier offers the best deal, in which the supplier can no longer sponsor. This setup thus limits the extent to which the cost of sponsoring are



passed on through higher prices.¹⁵

113. The following table summarizes the discussion on whether sponsoring leads to higher prices and/or lower quality.

Theory of harm: higher prices and/or lower quality	
<i>Response platforms</i>	<i>Assessment ACM</i>
<ul style="list-style-type: none"> - Competition from outside the platform limits/prevents price increases - Price remains an important factor in the ranking algorithm, so any price effect will be small - Auction-based ranking precludes price effect 	<ul style="list-style-type: none"> - Currently, incidence of sponsored ranking appears limited on most platforms (i.e. no bidding war), but there are exceptions where sponsoring is substantial - Platform competition may reduce harm from sponsored ranking. However, platform competition may be limited because of network effects, and it may be limited to 'sophisticated' consumers. Further, competition does not always provide incentive to curb sponsoring. - Models where only suppliers offering the 'best deal' can sponsor, are less likely to result in higher prices

Table 6. Overview of discussion on whether sponsoring can lead to higher prices and/or lower quality.

5.2 Sponsored ranking can result in consumers buying suboptimal products

5.2.1 Theory of harm

114. Sponsored ranking can reduce consumer welfare if it results in consumers buying products that do not fit their preferences as well as a ranking based solely on relevance or match value would. This can occur in two ways. One is that **consumers simply do not realise that the default ranking contains sponsored results** and unknowingly base their purchase decision on ranking information that, to a greater or lesser extent, differs from the information that a ranking based solely on match value would convey. As a result, they may end up purchasing products that do not match their preferences as good as may have been possible through organic ranking.
115. Second, for those **consumers who do recognise that the ranking contains sponsored results, sponsored ranking increases search cost**. This means that they have to search harder or longer to find the product offer that best suits their needs, essentially discounting sponsored results, or the ranking as a whole, and inferring what the organic ranking that

¹⁵ Given that suppliers cannot raise prices (or else they would lose their sponsored position), it can still be profit-maximising for them to engage in sponsoring, as the gained prominence can increase sales. Alternatively, firms may choose to run the product as a loss leader, with the intention of using the gained prominence to increase sales of other items.



matches their preferences would look like. Because consumers have limited time and capacity for searching, and because they may not be able to correctly infer the organic ranking order, they may end up buying a suboptimal product as a result. In addition, when consumers do not trust sponsored results, they may lose confidence in online shopping altogether and purchase less.

116. There are certain parallels with advertising, in the sense that both products of which the rank position is sponsored as well as advertised products gain prominence, and therefore have a greater chance to be purchased. The economic literature on the welfare effects of advertising suggests that advertising can be welfare-enhancing if it is informative about the product and its price, as it enables consumers to make better-informed decisions (Belleflamme and Peitz, 2015). On the other hand, persuasive advertising alters consumers' preferences, by enhancing the perceived value of the product. As a result, consumers are willing to pay more for the product, and are more likely to purchase the product, than they would be without advertising. A relevant question for the purpose of assessing the potential harm of sponsored ranking is thus whether sponsored ranking is more similar to persuasive advertising or to informative advertising.

5.2.2 Responses from platforms

117. In response to this potential adverse effect of sponsored ranking, the platforms in this study offering sponsored ranking have emphasized that their default ranking is mainly based on relevance for the consumer and to a far lesser extent on commission. If it were any other way, they would lose business because consumers would search elsewhere. In other words, these platforms argue that the potential for consumers buying suboptimal products due to sponsored ranking is limited as a result of competitive constraints. These constraints may differ per platform: one of the platforms in this study has indicated it cannot include as many sponsored results in its ranking as a larger platform from whom it faces competition. The larger platform indeed includes more sponsored results in its ranking.
118. In addition, some of the platforms have indicated that, although sponsored products do appear in their default ranking, these products are clearly labelled and recognizable as such for consumers. The implication being that consumers will be able to infer from that how these sponsored products affect the ranking based on match value. However, one platform noted that when consumers opt for any ranking other than the default ranking, such as a ranking based on reviews or quality, it places the sponsored products at the bottom of the page. The reason for this, according to the platform, is to not distort the chosen ranking.
119. One platform that does not offer sponsored ranking considers that sponsored ranking could have negative reputational effects if consumers no longer trust the relevance of the ranking that is presented to them. The platform also considers that not all forms of transparency about sponsored ranking are equally effective in showing consumers the implications from



sponsoring for the relevance of the search results. According to this platform, information hidden in the small print of general terms and conditions would be ineffective, whereas a banner above the ranking saying that the ranking contains sponsored results could result in consumers disregarding that ranking altogether.

120. Finally, in response to concerns about consumers buying suboptimal products, several platforms have provided efficiency arguments for using sponsored ranking. One platform stated that even if there were any consumer detriment, the benefits for suppliers would more than outweigh it. Efficiency considerations are further discussed in section 5.3.

5.2.3 Assessment by the ACM

121. Based on economic theory, it is likely that sponsored ranking can result in some consumers buying suboptimal products, either because they base their purchasing decision on distorted information or because increased search costs prevent them from finding the product that best matches their preferences. **This study confirms some necessary conditions of these theories, namely that consumers largely use the default rankings where the sponsored results are shown and that sponsored results occur in top-positions.** One platform in fact noted that sponsored offers distort a ranking based on other parameters such as price, review score, etcetera; in ACM's view, this line of reasoning would then also apply to a utility-based ranking. **To what extent this type of consumer harm actually materializes in practice though, depends on the significance of sponsored ranking, on the persuasive nature of sponsored ranking and the effectiveness of transparency, and on the degree of competition from outside the platform.** We discuss these factors in turn below.

5.2.3.1 Significance of sponsored ranking

122. Regarding the significance of sponsored ranking, section 4.4 shows that the vast majority of consumers sticks with the default ranking order, which contains sponsored products, and that most consumers purchase from suppliers in the top ten or even top five of the ranking. The extent to which sponsored ranking affects these top results is relevant to determine the amount of consumer harm – as was the case with potentially higher prices resulting from sponsored ranking. The ACM considers that in most cases, the extent to which sponsored products are shown is relatively limited, which consequently limits the likelihood that consumers end up buying suboptimal products. However, there are also cases where the share of sponsored products in the top positions is substantial. In these cases, the risk of consumers buying suboptimal products is real.

5.2.3.2 Persuasion and the effectiveness of transparency

123. To the extent that sponsored ranking acts akin to persuasive advertising, in the sense that it alters consumers' preferences rather than provides them with factual information that improves consumers' decision-making, there are likely to be adverse welfare effects for consumers, following the theory of harm discussed above. The ACM concludes that the examples of sponsored ranking in this study generally tend to be more persuasive than



informative in nature, notwithstanding the notion that in particular cases, sponsored ranking may be more informative.

124. There are several reasons for this conclusion. First, sponsored ranking, like persuasive advertising, enhances the perceived value of the product in question. To consumers, a higher ranking position implies a more relevant search result or a better deal somehow. Yet in case of sponsored ranking, that higher ranking position may be the result of commission rather than greater relevance or a better deal. Contrary to informative advertising, sponsored ranking reduces or distorts the information about how a product compares to other, similar products. Essentially, rankings sort results from better to worse which already contains information on quality. By changing the ranking only because of extra monetary compensation, platforms distort the quality information signalled by the ranking. Sponsored ranking may therefore result in consumers buying suboptimal products, which reduces consumer welfare. Clearly, this argument hinges on platforms being able to make a proper assessment of relevance and ignores the possibility that bids for a better position may actually be a signal of relevance. This study has made clear that platforms use many factors related to relevance for the consumer, and so the first premise seems met. In case bids for a better position serve as a signal of quality, sponsored ranking may indeed generate efficiencies. This efficiency rationale is discussed in sections 5.3.1 and 5.3.2.
125. Second, if sponsored ranking was informative to consumers, rather than persuasive, one would expect especially inexperienced consumers to respond favorably to sponsoring because these consumers have the most to gain from the quality signals that sponsored results may convey (Belleflamme and Peitz, 2015). The ACM's analysis of a natural experiment on an undisclosed platform on the disclosure of sponsored results in the ranking shows the opposite result: we find no effect from disclosure on experienced consumers, but inexperienced consumers respond to the disclosure by making fewer purchases at sponsoring suppliers although the effect is economically small. This suggests that in this particular case consumers do not interpret sponsoring as a signal of quality. The natural experiment is discussed in more detail in section 6.3. We note that one should be careful in generalizing this result, because it does not rule out that sponsoring may signal quality information in another situation.
126. Finally, sponsoring can serve as a signal directly to consumers only to the extent that the act of sponsoring is apparent. Based on the published literature and ACM's analysis of the way in which platforms disclose sponsored results in the ranking (see section 6), it is actually one of the ACM's concerns that the way some platforms disclose the commercial nature of sponsored listings may be overlooked by a substantial portion of consumers. This means that the possibility that consumers assign a positive value to suppliers because they recognize that the supplier is sponsoring may not be realized because of less than prominent disclosure.



5.2.3.3 Competition

127. Finally, competitive pressure can in principle limit the degree of consumer harm in the form of suboptimal purchases. This is particularly true for search goods, which means that consumers can compare all relevant characteristics before purchase. In case of experience goods, which means that consumers only truly learn the quality of the good after consumption (such as offers by hotels or restaurants), competition is less likely to prevent suboptimal purchases because of sponsoring. After all, consumers can only learn that they purchased a suboptimal product after consumption, or in some cases not even then, because they do not know what they could have enjoyed had they chosen a better fitting option.
128. Moreover, if the share of uninformed or 'naive' consumers in the market is large enough, and hence sufficiently many consumers do not correctly assess a ranking containing sponsored offers, it may not pay for competing platforms to be more transparent about sponsored ranking, or even to refrain from sponsored ranking at all, even in a competitive market. The reason is that this may be disadvantageous for competing platforms, in the sense that greater transparency may result in fewer uninformed or naive consumers, which in turn could result in fewer purchases and less income for the platform. Refraining from sponsored ranking altogether also means less income for the platform while this is not necessarily compensated by extra traffic, namely if consumers do not recognise or consider the absence of sponsored ranking as a competition parameter. Competition thus does not necessarily prevent consumer harm from sponsored ranking.
129. The following table provides an overview of the theories of harm and the main arguments discussed in relation to these theories.

Theory of harm: consumers buying suboptimal products	
<i>Response platforms</i>	<i>Assessment ACM</i>
<ul style="list-style-type: none"> - The effect is limited as commission is only a small factor in the ranking algorithm - Competition from outside the platform prevents that commission becomes a more important factor - Sponsored products are clearly labelled as such - The benefits (efficiencies) for suppliers outweigh any adverse effects for consumers 	<ul style="list-style-type: none"> - Currently, incidence of sponsored ranking appears limited on most platforms (i.e. limited risk of suboptimal purchases), but there are exceptions where sponsoring is substantial making this risk more likely - Competition does not necessarily prevent sponsored ranking - Sponsored ranking seems more persuasive than informative in nature and reduces or distorts the information about how a product compares to other, similar products. - Transparency as commonly implemented may be easily overlooked (see section 6) - Efficiencies discussed in section 5.3.

Table 7. Overview of discussion on whether sponsoring can lead to consumers buying suboptimal products.



5.3 Potential efficiencies

130. Sponsored ranking may result in higher prices, in consumers buying suboptimal products, or both. However, sponsored ranking may also generate certain efficiencies that need to be taken into account in the overall assessment of this business practice. In this section, the ACM discusses and assesses the potential efficiency rationales for sponsored ranking that are either brought forward by the literature or by the platforms.

5.3.1 Bids for a more prominent position as a signal of quality to the platform

131. The economics literature on so-called position auctions develops the notion that payments for a more prominent position may serve as a quality signal. Athey and Ellison (2011) and Chen and He (2011) develop models in which suppliers are assumed to differ in their relevance for consumers. Suppliers have information on their relevance that the platform does not (or lacks, to some extent). Consumers can learn a firm's relevance by inspecting the supplier's search link, but this is costly. If consumers find, after inspection, that a firm is relevant both the firm and the consumer get some payoff. In such models firms with a greater relevance have a stronger incentive to be ranked higher. The reason is that they have a higher chance of getting a payoff when inspected by a consumer. As a result, more relevant firms bid more aggressively in the ad auction. The outcome is efficient: the platform ranks suppliers on the basis of their bids, which coincides with the ranking based on relevance for the consumer.

132. The platforms in our study have not explicitly put forward the notion that the bids contain valuable information on the relevance and quality of the product or service to the consumer except for one. This platform noted the existence of the efficiency argument in the economics literature described above, and cited the report *Competition Policy for the Digital Era* where this report notes that bids may contain quality information (Crémer et al., 2019, p. 64). However, this platform has not explained whether and why bids may serve as a quality signal in its own case.

133. Overall, the responses from platforms to ACM's requests for information suggest that platforms do not use suppliers' bids as a signal of quality. One platform that does not use sponsored ranking explicitly denies that this relationship exists in its context. This platform aims to evaluate the quality of the products and services for consumers as well as possible and uses, amongst others, independent experts to do so. This information is again used to construct the ranking.

134. All platforms stress that they need to serve relevant results to consumers in order to protect their long-term profitability. All platforms therefore take into account a host of factors related to quality and consumer relevance, both in the form of actual consumer behaviour (clicks, conversion rates, review scores, returns) and factors such as price, location, and warranties (or, more generally, terms of trade and trustworthiness of the seller). No platform has stated that they consider the bids from suppliers as an indication of consumer relevance or quality in their specific circumstances. Rather, suppliers' bids (and more



generally the platform's monetary compensation) are separated from the quality and relevance related factors that used for the ranking.

135. The platforms in this study generally explain sponsored ranking as a service to suppliers. Sponsored ranking is considered a marketing tool for suppliers that help them increase the visibility of their products and services which in turn increases sales. Rather than taking the bid as a quality signal for consumers, platforms perceive the bid as compensation they receive for a service delivered to suppliers. Quite a number of responding platforms explain that their two-sided nature requires them to keep both suppliers and consumers satisfied. This entails balancing these parties' interests. Most platforms claim that the impact of the bids on rank position is kept limited in order to ensure that results are sufficiently relevant for consumers. In line with this, all platforms using sponsored ranking stress that suppliers cannot 'buy their way to the top'.
136. The ACM concludes that the **efficiency rationale in which suppliers' bids serve as a quality signal is not likely to apply to the platforms that are part of this study**. First, apart from a general reference to the theoretical literature in economics, platforms have not claimed that they use bids in constructing the ranking because they serve as a quality signal. Rather, bids are seen as compensation for a service delivered to suppliers. Second, as noted above, platforms' services are data-intensive and based on a host of factors which are informative on quality and relevance, both in terms of observed historic consumer behaviour and verifiable aspects of the product or service offered (such as price). Given that platforms already are in general able to make well-informed estimates on the relevance to consumers, **the ACM is sceptical of the added information value of suppliers' bids**.
137. Third, **it is not clear that in practice the most relevant suppliers are those willing to bid the highest amount for a prominent position**. From a theoretical point of view, suppliers do not base their bid on relevance to the consumer only, but also on the basis of what a click (or transaction) from this consumer is worth to them (as acknowledged by e.g. Athey and Ellison, 2011). For example, when one considers quality and all else equal, a supplier with a higher price is generally expected to be willing to bid more for a prominent position while not being the most relevant supplier to the consumer. In addition to this, an increase in rank position may have different effects on clicks – and thus number of transactions – for different suppliers. Ghose et al. (2014) find that for luxury hotels moving from the top rank position to the fifth position equals a drop of 75 percent in click-through rate, compared to a 54 percent drop for budget hotels when facing the same move in rank position. A luxury hotel is thus likely to value a good rank position more than a budget hotel, but it is not clear that a luxury hotel is generally more relevant than a budget hotel.
138. Fourth and last, in as far as suppliers have information on their benefits to consumers that the platform does not already have, **suppliers have alternative ways to inform the platform** about these. In particular, offering discounts would be a way to signal that the



supplier is confident that it makes an attractive proposition to consumers.

5.3.2 Bids for a more prominent position as a signal of quality to the consumer

139. A classic theory of advertising postulates that the act of advertising itself may serve as a quality signal to the consumer (Nelson, 1974). The idea is that high-quality firms may be willing to incur the cost of advertising because if they can convince consumers to buy from them, they can establish a good reputation. This reputation will compensate the firm for the cost of advertising because it will either lead to more repeat purchases or the good reputation will convince other consumers to also buy from the firm. Low-quality firms, on the other hand, would not form a good reputation upon convincing the consumer to buy from them, and hence have no incentive to spend money on advertising. Because high-quality firms act differently with regard to advertising than low-quality firms, consumers can correctly infer from advertising that the firm must be of high quality. In this theory, it is not the message in the ad that can convince the consumer that the firm is of high quality, but it is the recognition that the firm is only willing to incur cost on advertising if it indeed offers high quality.
140. In the case of sponsored ranking, the signalling theory of advertising would imply that only high-quality suppliers would have an incentive to pay extra in return for a better position, and that this fact credibly signals to consumers that the firm must be of high quality. Note that this theory, as the theory discussed above, can only apply in settings where consumers cannot readily infer the quality of suppliers in other ways. The signalling theory of advertising differs from the theory discussed above. In both theories, the fact that the supplier bids for a better position conveys a signal of quality. However, in the signalling theory the signal is sent directly to the consumer whereas above the signal is sent to the platform, who then uses the signal to improve the ranking. Moreover, the signalling theory requires that it is clear to consumers that the firm is advertising because it is the act of advertising itself that serves as a credible signal to the consumer. If bids serve as a signal to the platform about quality, it is not required that consumers are aware that the firms are advertising (nor that they are aware of the height of the bids). Consumers only need to correctly believe that the platform ranks according to relevance.
141. As with the potential efficiency that bids signal quality to the platform, the signalling theory of advertising loses relevance as platforms have more information on supplier quality. The ACM also notes that **there seem to be alternatives available for suppliers wishing to signal quality directly to consumers, such as offering discounts**. ACM also notes that platforms in our study have not indicated that including sponsored results in their ranking serves to provide additional information to consumers.
142. Empirically, the signalling theory of advertising can be tested by varying the extent of disclosure about sponsored items in the ranking to consumers. Sahni and Nair (2020a, 2020b) perform such an analysis on Zomato, a restaurant reservation platform, and find that consumers make more calls to advertising restaurants due to disclosure of the



sponsored nature of these restaurants' listing in the search results. The authors interpret this response such that consumers infer from the act of advertising that the restaurant must be of higher quality.

143. As part of this study **ACM has carried out an empirical analysis of a natural experiment that gives some insights in online ranking-related consumer behaviour.** The natural experiment with transparency on an undisclosed platform yields a different result. In 2019, the platform introduced a label to the listing of suppliers that pay extra commission in return for a better position. In this experiment, we find no change in the share of purchases at suppliers as a result of the label for the full sample of consumers.
144. Moreover, we find for the subset of inexperienced consumers that they make fewer purchases at advertising suppliers as a result of the label, although the effect is economically small. Since especially inexperienced consumers may benefit from quality signals, this result suggests that the signaling theory of advertising does not apply in this context. In addition to this, this efficiency could not apply in the period before the introduction to the label because the act of advertising was not made apparent. We also do not observe an increase in the use of sponsoring by suppliers after the introduction of the label which were to be expected if suppliers signal their quality through the act of advertising. It should be noted that ACM has not been able to determine to what extent users have observed and understood the label that was introduced. Further research should shed more light on if and how such labels are perceived by consumers.

5.3.3 Introducing new products

145. Some platforms have responded that advertisers may use sponsored ranking to improve the visibility of newly introduced products. New products have little data on clicks, purchases, reviews, etc., and therefore may get little visibility on the platform. However, this is not due to a low relevance or quality per se but rather the lack of consumer experience. Improving the rank position by sponsoring increases the visibility which in turn generates more user data. In a more general sense, some platforms have argued that sponsored ranking will expose consumers to products they have not considered before. One of the platforms remarked that boosting new products in the ranking may increase search costs for those consumers simply looking for their favourite product or brand.
146. **The ACM considers that introducing new products to consumers may benefit consumer welfare, even if this increases search costs for some consumers.** Bringing new products to the attention of consumers is worthwhile because it helps consumers discover products that are better than, or valuable in addition to, what they already use. This benefit may outweigh the increase in search costs for some consumers. In addition to this, platforms may devise ways to prevent or reduce the latter cost. Some platforms let consumers tag their favourites which are then given a prominent position in the ranking. **It is less clear, however, that sponsored ranking is a well-suited instrument to achieve this goal:** in many cases there seem to be alternative methods.



147. First, many platforms included in the study can observe whether or not a product or service is new. This holds true especially in the context of platforms where the seller on the platform is also the producer of the product, such as in the food delivery and hotel sector. Of course, a product or service may also be new on the platform which is also observable to the platform. Therefore platforms can choose themselves to stimulate new products by giving new products a boost in the ranking. Some platforms actually do this. For example, Thuisbezorgd.nl gives a ranking boost to new restaurants. These restaurants also get a label “New” next to their logo.¹⁶ Amazon offers the sorting order “New arrivals” which is another way in which platforms can bring new products to the attention of consumers (and a very targeted one). Similarly, bol.com offers the possibility to sort on “date of first appearance” (“verschijningsdatum”, in Dutch).
148. One platform indicated that she considers it too risky to pro-actively boost new products in the ranking. This platform stated that she cannot determine the relevance of new products to consumers and therefore prefers to show results to consumers that proved relevant in the past. This platform leaves boosting new products to advertisers who do believe their product is relevant to consumers. Hence, for this platform, actively boosting new products may not be a viable alternative to sponsored ranking for boosting new products. Clearly sponsored ranking compensates this platform for taking the risk of showing new products higher. However, given that it is also in the platform’s long-term interest that consumers discover new but better products, the unwillingness of the platform to actively boost new products may also indicate that this platform is not convinced that consumers will value new products sufficiently.
149. Second, sellers wishing to introduce new products have alternatives to sponsored ranking. For example setting a low introductory price. Since a lower price is attractive to consumers it typically leads to a better rank position, either directly because price is one of the factors taken into account or indirectly through e.g. clicks and purchases (which are presumably based in part on the importance consumers attach to price). Another example is whether or not the seller offers warranties, and to what extent. Such information is observable to the platform and can therefore be incorporated in the ranking mechanism.
150. One of the platforms indicates that sponsored ranking is not so much used by the sellers on the platform but by the producers of the products involved. In cases like this – which seem rare – lowering the product price is not controlled by the advertiser (the producer), at least not directly. Nevertheless, producers wishing to bring new products to the attention of consumers have alternatives for sponsored ranking too. Many platforms offer display advertising possibilities, for example.

¹⁶ See <https://www.thuisbezorgd.nl/klantenservice-consument-onderwerp-de-ranglijst>, last visited 2 December 2020.



5.3.4 Filling idle capacity

151. Some platforms state that suppliers who temporarily face relatively low demand, and therefore have idle capacity, may use sponsored ranking in order to increase sales which allows for more efficient use of capacity.
152. **ACM first considers that sponsored ranking is not necessary to achieve the benefit of more efficient use of capacity.** Suppliers that unexpectedly face low demand can also offer discounts in order to sell more. As a specific example, so-called 'yield pricing' is a standard method to price e.g. hotel rooms and flights. This entails frequent price adjustments for a specific booking date over time in order to optimize the capacity rate.
153. Second, the dataset on consumer purchases provided by an undisclosed platform we find that suppliers paying for a better position hardly change this decision over time. In fact, suppliers paying extra for a better position continue doing so for busy and quiet periods. Since capacity-usage arguably varies in this context, the use of sponsored ranking by suppliers on the platform is unlikely to reflect variation in capacity levels. ACM notes that this conclusion may not generalize to other settings.

5.3.5 Conclusion

154. Regarding the **concern that sponsored ranking leads to a lessening of competition on price and quality** and an increase in suppliers' cost for using a platform due to a bidding war, ACM concludes the following.
 - a. In most cases, the presence of sponsored results in top positions is relatively limited, which makes it unlikely that a bidding war between suppliers leads to a significant increase in cost and/or that sponsoring actually replaces competition on price and quality. However, there are exceptions where the share of sponsored results in the top positions is substantial. In these cases, at least the possibility that sponsoring increases marginal costs and therefore price is realistic.
 - b. Platform competition may limit harm from sponsoring. However, platform competition may be limited and platform competition does not always provide an incentive to curb sponsoring.
 - c. ACM also finds that some sponsoring models are designed such that they seem unlikely to soften competition and/or raise marginal cost for suppliers. This holds for the cases where only suppliers are allowed to sponsor who offer the best deal on a particular product.
155. Regarding the concern that **sponsored ranking leads to consumers buying suboptimal products:**



- a. The ACM considers the extent to which sponsored products are shown in top positions. This is relatively limited in most cases. The risk of consumers buying suboptimal products will be concomitantly more limited in these cases. There are also platforms where the share of sponsored products in the top positions is substantial. In these cases the risk of consumers buying suboptimal products may be more significant.
 - b. Competition may not necessarily provide incentives to platforms to curb sponsoring even if sponsoring would lead to consumer buying suboptimal products. One reason is that educating consumers about the commercial nature of sponsored listings may not necessarily be profitable for the platform. ACM also observes that although some platforms explicitly rule out sponsoring because they believe it makes their services more relevant to consumers, the level of competition between platforms apparently does not imply that sponsored ranking is widely used in practice.
 - c. The ACM is concerned that transparency measures taken by platforms only have a limited impact on preventing the risk that sponsoring leads to buying suboptimal products.
 - d. In ACM's analysis of the disclosure measure on an undisclosed platform we find that inexperienced consumers respond to disclosure by making fewer purchases at sponsoring suppliers. Although the effect is small (yet statistically significant), this finding suggests that inexperienced consumers discount the relevance of suppliers once they are aware of the sponsored nature of the listing. We do note that one should be careful in generalizing this result to other settings.
156. Regarding the **potential efficiencies from sponsored rankings for consumers**, ACM concludes the following. An often cited efficiency in the literature is that payments for a better position serve as a signal about the advertiser's quality or relevance. This signal may be directly transmitted to the platform (who observes the height of the bids) or to the consumer (who may observe the act of sponsoring by the supplier, from which the consumer may conclude the supplier must be of high quality). These potential efficiencies go exactly in the opposite direction of ACM's second concern (sponsoring may lead to buying suboptimal products). ACM concludes that in general this efficiency rationale for sponsored ranking does not seem strong, for the following reasons:
- a. Platforms have generally not explained that and how they use the bids as proxies for relevance. To the contrary, platforms typically explain their rankings as being based on relevance *and* bids, to which platforms add that the impact of sponsoring is kept limited in order to keep the ranking relevant to consumers. This suggests that in general platforms do not use sponsoring to improve the relevance of the



ranking but rather strike a balance between relevance and other goals, such as serving sellers and monetizing the platform's services.

- b. Platforms possess a lot of data related on quality and relevance, and actually use these data to construct rankings. This reduces the scope for quality signaling through bids for a better position.
 - c. In the case of sponsored rankings on e-commerce sites, it seems the case that suppliers have many alternative ways available to signal their quality to platforms and consumers, such as setting lower prices or granting (more) warranties.
 - d. Under the assumption that advertising serves as a quality signal, one would expect that especially inexperienced consumers respond favorably to sponsoring because these consumers have the most to gain from quality signals. As mentioned above, ACM's analysis of a natural experiment on an undisclosed platform shows the opposite result. Finally, sponsoring can serve as a signal directly to consumers only to the extent that the act of sponsoring is transparent. It is actually one of ACM's concerns that the way platforms disclose the commercial nature of sponsored listings may be overlooked by a substantial portion of consumers.
157. The remaining two efficiency rationales considered in this exploration are that sponsoring may be used by suppliers to make consumers aware of new products, and to attract more demand in quiet times which improves efficiency. As to the first, ACM observes that many alternative strategies are available to achieve this end such as granting discounts. Moreover, ACM found that platforms sometimes choose to temporarily rank new items higher. This generates more data on how consumers perceive the item, which can then be used to improve the ranking. As to the second efficiency, ACM again considers that alternative means can be employed to boost demand in quiet times, such as lowering price (which is very commonly used in e.g. the hospitality and food delivery sectors). ACM's analysis of the natural experiment on an undisclosed platform shows that this efficiency is unlikely to apply there, because suppliers do not change their decision to sponsor from busy to quiet periods.



6 Transparency of sponsored results in the ranking

158. This section is devoted to the question how transparency affects the possible risks and benefits from sponsored ranking for consumers. In section 6.1 we describe how platforms part of ACM's study disclose information about sponsored items in the ranking to consumers. Section 6.2 discusses the literature on the effects of disclosure on consumer behaviour. Section 6.3 presents the analysis of a natural experiment with disclosure on sponsored ranking on an undisclosed platform. Section 6.4 concludes with a discussion of the efficacy of transparency in mitigating the risk from sponsored ranking and stimulating the potential efficiencies.

6.1 Transparency by platforms in this study

159. Most of the platforms in ACM's study disclose the commercial nature of specific paid results with the tag "Sponsored" ("Gesponsord", in Dutch) or "Promoted" ("Promotie", in Dutch). In some cases platforms show additional information, or a link to additional information, if the consumer hovers the mouse over the tag. Some platforms offer additional information through their Terms & Conditions and/or through FAQ's. A general disclosure on top of the results list – without identifying specific sponsored results – also occurs, as does the use of symbols without text.¹⁷ In the following, ACM describes the common ways in which the platforms included in our study disclose the commercial nature of sponsored results in the ranking. In doing so, ACM refers to specific examples and does not list exhaustively every transparency measure taken by any platform.

6.1.1 "Sponsored" or "Promoted" tag

160. Amazon.de is one of the platforms in ACM's study that uses the tag "Sponsored" in the listing of individual results in the ranking,¹⁸ as is shown in Figure A1 of Annex A. Hovering with the mouse over the tag shows some additional information and a link to a website with information for advertisers, as is shown in Figure A2 of Annex A.

161. Bol.com also uses the tag "Sponsored", but doesn't offer additional information through a click or hover, as is shown in Figure A3 and Figure A4 of Annex A.

162. As a final example, Booking.com offers two ways for advertisers to increase their ranking. The first one, the Visibility Booster, uses the tag "Promoted" as is shown in Figure A5 in Annex A. When the consumer hovers her mouse over the tag, additional information is shown. Booking further explains the Visibility Booster in the Terms and Conditions for consumers.¹⁹

¹⁷ Some platforms in our study do not allow for sponsored rankings, which they do explain to their customers. See e.g. <https://www.kieskeurig.nl/waaromkieskeurig>, visited on 17 April 2020 (in Dutch).

¹⁸ At the time ACM requested information from Amazon, the website Amazon.nl wasn't fully operational, so this study focusses on Amazon.de instead.

¹⁹ "Trip Providers pay a commission (being a small percentage of the product price (e.g. room price)) to Booking.com after the end user has consummated the service or product of the Trip Provider (e.g. after the guest has stayed at (and



6.1.2 Visual tags

163. Booking.com's other sponsored option, the Preferred Partner Programme, doesn't show a tag but instead uses an orange thumbs up symbol, as is shown in Figure A6 of Annex A. This tag can also be hovered over with the mouse to show additional information.

6.1.3 General message above the search results list

164. Expedia informs consumer through a message above the results feed, as is shown in Figure A7 of Annex A. The message states (in Dutch) that "Our sorting order may be influenced by what we are paid". The message is clickable and leads to the customer service page.²⁰
165. Google Shopping shows a tag "Sponsored" on the right side above the results feed, as is shown in Figure A8 of Annex A. When the consumer clicks the tag "Sponsored", a further explanation is shown mentioning that Google receives a compensation from the vendors and that one of the factors influencing the ranking is payment.²¹

6.1.4 Explanation page / Terms & Conditions

166. Expedia informs consumers of the presence of sponsored products in the ranking through its Terms & Conditions. Finally, Thuisbezorgd.nl offers an explanation on how the ranking is constructed, including the role therein of sponsoring, on a separate page on the platform.²²

6.2 Literature on transparency and consumer behavior

167. In this section we will first discuss consumers' attitudes towards paid results. Next, we discuss the recognisability of paid results.

6.2.1 Consumers' attitude towards paid results and native advertising

168. Older research on consumer's perception of sponsored results (mostly search engines) shows that consumers generally distrust sponsored results and prefer organic results.²³ These results are confirmed by more recent research, which shows that sponsoring and

paid) the accommodation). Trip Providers can improve their ranking by increasing their commission (Visibility Booster). The use of the Visibility Booster (by increasing the commission in return for better position in the ranking) is at each Trip Provider's discretion and may be used from time to time and product to product offered. The algorithm of the ranking will take an increase in commission into account when determining the Default Ranking. Preferred partners pay a higher commission in return for a better position in the ranking." (RFI Booking)

²⁰ <https://www.expedia.nl/service/#/article/20318>, visited on 17-4-2020.

²¹ The exact text reads: "Products and offers that match your query. Google is compensated by these merchants. Payment is one of several factors used to rank these results. By default, ranking on Google Shopping is based on a combination of advertiser bids and relevance, such as your current search terms and your activity. Visit Google's Consumer Ads Help Centre or the About Google Shopping page to learn more. To block specific advertisers, opt out of personalised ads or confirm your opt-out status, visit Google's Ads Settings. Prices shown include applicable taxes. Delivery costs may vary."

²² See (in Dutch) at <https://www.thuisbezorgd.nl/klantenservice-consument-onderwerp-de-ranglijst>, last visited 2 December 2020.

²³ Marable (2003) reports that searchers didn't realize that 41% of the search results page were sponsored, and responded negatively when they were informed. Search engines that were less transparent about the sponsored nature of the results lost credibility. Hotchkiss et al. (2004) find that 77% of participants favored non-sponsored content over sponsored content. Jansen et al. (2007) report that search engine users are suspicious of sponsored results and view them as less relevant than organic results.



native advertising leads to more negative evaluations of the content (Wojdyski and Evans, 2016), feelings of deception (Lazauskas, 2014; Amazeen and Wojdyski, 2018), a lower level of trustworthiness compared to display advertising (Aribarg and Schwartz, 2020) and that consumers are less likely to buy sponsored products (Ma et al., 2013). However, these effects are negligible when it concerns well-known brands and can also be mitigated by offering information about the advertisers reliability through a quality mark or user reviews.

169. The European Commission (EC, 2018) finds that awareness of and trust in sponsoring among consumers is low. However, the EC (2018) also finds that most participants do not worry much about the presence of sponsoring in the results of online search engines (Google and Bing). Participants mention that the first results are always advertising and therefore avoid them “for their lack of efficiency”. Participants also tolerate sponsoring as a source of revenue for search engines. Participants in the study believed they were protected from excessive manipulation because millions of people use these services, and participants expected that the results were ranked based on popularity (measured by number of clicks). While being “partly aware” of advertising, participants did not feel that there was an intention or interest for the platforms to manipulate the order of the results. Satisfying users with the most relevant results was believed to be the top priority. The Commission also finds that experienced users do recognize ads on search engines but for less experienced users this is not always the case. Moreover, experienced users may underestimate risks. On Amazon, consumers also consider sponsoring as part of normal commercial behavior although on Amazon respondents did not identify sponsored products as forms of advertising. The Commission concludes that it is important that consumers can clearly distinguish sponsored results from organic results.

6.2.2 Effects of recognisability of paid results on consumer behavior

170. If consumers prefer organic results over paid results, one would expect consumers not to click on them unless they do not recognize them and believe they click organic results, or unless they already know and trust the advertiser. The literature reports evidence consistent with this hypothesis. Greenspan (2004) finds that consumers are more likely to select sponsored results if they are not clearly disclosed as such, which could mean they would not have chosen them if they were disclosed more clearly. Pew Research Center (2005) reports that 45% of searchers would stop using the search engine if they thought the engine was not transparent about the presence of paid results. Wojdyski and Evans (2016) report that advertising recognition, or lack thereof, affects attitudes and intent. Campbell and Grimm (2018) cite an emerging body of studies into native advertising that suggests that consumers may fail to recognize native advertisements as advertising, leading them to respond more positively to the advertisements than when they would have recognized their commercial nature.
171. Another form of disclosure is a general message above the search results that informs the consumer that commercial incentives also influence the ranking of the results. The



literature in which this type of disclosures is tested, shows that this may not always be effective (Seizov et al, 2019; Ben-Shahar and Schneider, 2014; Milne and Culnan, 2004). This may be because consumer attention is sparse, and reading disclosures takes up attention and can even lead to less attention being available for other relevant information. Another reason is that consumers do not (fully) understand disclosures that typically address complex and unfamiliar issues. So consumers make economic rational decisions to spend their time on other things. A third reason is habituation which causes consumers to completely miss the disclosure.

6.2.3 Recognisability of current disclosures

172. In this section we discuss the recognisability of disclosures. For sponsored content, one way of disclosure is to label the content with texts like “sponsored”. However, research shows that most of the labels currently in use are not effective, either because consumers fail to see them, or because they fail to understand them correctly.
173. Campbell and Grimm (2018) find that the differences in disclosure forms used by different platforms make it more difficult for consumers to identify advertisements and learn the meaning of the different disclosures. They recommend a single or very limited number of standard disclosures that appear across all native advertising formats. This could also include a standardized disclosure symbol, uniform colors or shading patterns.
174. Pew Research Center (2005) finds that 62% of searchers are not aware of the distinction between paid and unpaid results on search engines. This is confirmed by more recent research. Franklyn and Hyman (2013) studied consumer knowledge about paid results in search engines and the effectiveness and visibility of sponsored disclosure labels. They find that most consumers pay little attention to labels, and existing labels (on Google Search and Bing) fail to effectively communicate which content is paid or not. They find, among others, that 61% of consumers is aware that search companies’ rankings are influenced by payments, around 40% of consumers knows the difference between sponsored and unsponsored results and 35% finds it easy to distinguish between sponsored and unsponsored results. Also, only 13% of consumers could correctly recall the two disclosure labels that were in use by Google’s and Bing’s search engines over the last two months preceding the study, while 22% did not notice any labels in that time period. This finding is confirmed by Hoofnagle and Meleshinsky (2015), who find that a label “Sponsored Content” for an advertorial was insufficient to make consumers aware of the commercial nature of the content. However, EC (2018) does conclude that experienced users of search engines recognize paid ads although this does not always hold for inexperienced users. EC (2018) also notes that users on Amazon do not recognize sponsored results as advertising.
175. Edelman and Gilchrist (2012) find that the wording of labels may have an impact on consumer behaviour. They find that users who were shown results with the “Paid



Advertisement” label clicked 25% (27%) less on sponsored results than users that were shown the “Sponsored Link” (“Ads”) labels. Users that were shown the “Paid Advertisement” label also correctly reported that they clicked fewer advertisements.

176. Aribarg and Schwartz (2020) find in a field experiment that more prominent disclosure of the sponsored nature of native advertisements on a news website leads to fewer clicks on the article (10.4% for low, 3.6% for medium, and 2.7% for high prominence).²⁴
177. Amazeen and Wojdyski (2018) conclude that although only 9% of the participants in their study were able to recognize native advertising in online news, effectively designed disclosure labels can enhance recognition. Recognisability can be enhanced by the language used (“paid advertisement from [name of sponsor]”), visual prominence (different font size, weight or a contrasting, colored box), the disclosure’s position within the content, and the use of the sponsor’s logo (the presence of a logo increases the odds of recognition by 1.64 times).
178. The findings from the papers discussed above do not correspond to Sahni and Nair (2020a), who experimentally test the effects of (various types of) disclosure of the commercial nature of paid results within the search results list on consumer call and click behaviour. They test this by varying the wording of the label (“Sponsored” versus “Ad”) and adding or removing a bold yellow highlight around the paid results on Zomato, a restaurant aggregator and food delivery app, and comparing these settings with a version of the app in which sponsored results are not disclosed at all.
179. The authors first establish that advertising is effective: restaurants that advertised on Zomato (in one of the five advertisement-conditions) saw the visits to their restaurant page on Zomato increase with 41% and their call rate increase with 68%, compared to the no-advertising condition. Calling to the restaurant is considered the ‘conversion’ behaviour in this context, as consumers cannot directly order on Zomato. The authors then find that the various ways of disclosing the commercial nature of sponsored results does not lead to significant differences in consumer call behaviour. Hence the authors conclude that the wording (“Ad” versus “Sponsored”) and the presence or absence of a highlight do not materially deceive consumers.
180. In addition to this, Sahni and Nair (2020a) find that consumers call significantly more to restaurants in the disclosure conditions compared to the no-disclosure condition. This effect does not run via more clicks on the ads. After being exposed to an ad, a large majority of consumers keeps on searching. The effect of disclosure on the call rate runs via clicks on the organic listing of the restaurant (note that on Zomato, the ad from advertising restaurants is shown in addition to the organic result). The authors conclude that consumers on Zomato are sophisticated ad users that update their impression of

²⁴ In this study, medium prominent disclosure reflects the minimal demands following from the FTC’s guidelines for native advertising.



advertising restaurants and discount this information in their overall search behaviour.

181. In a companion paper, Sahni and Nair (2020b) study the possibility that advertising serves as a signal about the advertising restaurant's quality to the consumer. To this end they compare the conditions with and without ad disclosure on Zomato. As in Sahni and Nair (2020a), disclosure has a positive causal effect on the call rate to advertising restaurants and disclosure does not affect page visits. The authors further explore whether the ad-disclosure effect on calls is larger for cases where consumers presumably are more uncertain about restaurant quality, namely when the restaurant has fewer ratings and the restaurant is relatively new on Zomato. The ad-disclosure effect on calls is larger for restaurants with fewer ratings, but it is independent of the duration of the restaurant's presence on Zomato.
182. **ACM concludes that the literature shows that consumers generally – but not always – prefer organic results over sponsored results and that the recognisability of sponsored results has an effect on consumers choices.** The literature also shows that how transparency is offered affects recognisability and behaviour.

6.3 A natural experiment with disclosure of sponsored results

183. During the course of ACM's study into sponsored ranking a platform active in The Netherlands started disclosing the commercial nature of sponsored listings in the search results. Suppliers can improve their rank position on this platform by increasing the commission paid to the platform. In 2019 the platform introduced a label about sponsoring next to the listing of suppliers using this possibility in the search results list. Before this date, the platform did not disclose this information to consumers in any way. For a period of time the label was only present on the website and not in the app. The reason is that the company can change the website overnight but it takes more time to have the new version of the app available in appstores because of checks conducted by the appstore. As the ranking is identical between the website and app, this setting creates a natural experiment on the effects of the label on consumer behaviour.
184. The platform shared detailed data with ACM on the purchases consumers made at suppliers on the platform. ACM analysed the data in order to learn whether the disclosure measure had an effect on consumers' propensity to buy at sponsoring suppliers. Among other pieces of information, the dataset contained the date of the purchase, whether the transaction took place via the website or the app, and whether the supplier was sponsoring its position at the time of the purchase. This information allowed us to use a so-called difference-in-differences method to estimate the effect of the label about sponsoring on the propensity to buy at sponsoring suppliers. The idea of this method is that purchases via the app, where sponsoring was not disclosed, provide information about the development of purchases at sponsoring suppliers in case of no transparency. The development of purchases at sponsoring suppliers via the website, where sponsoring was disclosed, can



be compared to this natural development, and in this way one can measure the effect of the label about sponsoring.

185. Transparency about sponsoring is implemented on the platform in the following way. The platform introduced a label about sponsoring and this label is attached to those suppliers in the search results list that pay extra for a better position. The text of the label has the same fontsize and colour as other reported properties of the suppliers and it is displayed as the last property. These properties are displayed less prominently than the name and the logo of the suppliers. The following figure gives a schematic illustration about how the search results and the label about sponsoring are presented on the platform.

Logo of supplier 1	Name supplier 1			
Property a	Property b	Property c	Property d	
Logo of supplier 2	Name supplier 2			
Property a	Property b	Property c	Property d	
Logo of supplier 3	Name supplier 3			
Property a	Property b	Property c	Property d	Label about sponsoring

Figure 1. Schematic illustration of the ranking on the platform, where supplier 3 sponsored its position.

186. The main result from ACM's analysis is that the label has **no statistically significant effect** on the share of purchases at suppliers that pay for a better position. Further analysis shows that there is a statistically significant decrease in the probability to buy at sponsoring suppliers for a subset of inexperienced consumers (as measured by making at most one purchase within our period of observation). However, this effect is economically insignificant: as a result of the label, the share of purchases at sponsoring suppliers decreases by **[confidential]** percentage points from a baseline of **[0 - 20]** per cent. This accounts for a relative decrease of 2.6 per cent.
187. There are a number of **potential explanations for our finding that consumers by and large do not respond to the label** in terms of their buying decisions.



188. First, it may be that **the label is not noticed (often) by users**. Since the label is shown in line with and in the same font as other information on the supplier, one may suspect that the label is easily overlooked.
189. Second, even when noticing the label, **users may not understand its meaning**. From the label itself it is not directly clear who sponsors the supplier, why, or that sponsoring affects the rank position (this information is presented to the user on a separate webpage). In case consumers do not understand the meaning of the label, they may ignore it.
190. Third, consumers may notice and understand the label but consciously **decide that this information is not relevant for their purchase decision**. The data did not allow for an empirical test of these explanations and so this is an area where ACM values more insight.

6.4 Transparency and potential harms and benefits from sponsored ranking

191. Consumer protection law requires transparency about the commercial nature of sponsored results in the ranking.²⁵ The goal of these rules is to enable the consumer to make informed decisions. This generally contributes to the well-functioning of markets by increasing trust between all participants. In addition, better information helps consumers make choices that better serve their interest which in turn stimulates competition on the merits. In this section, ACM discusses how effectively transparency contributes to a positive balance of risk and benefits from sponsored ranking for consumer welfare and competition.
192. ACM discerns three particular methods of disclosing the sponsored nature of some of the results in the ranking from observed practice. Our study finds that platforms provide transparency by:
 - a. an information page explaining the construction of the ranking and that the ranking is also determined by payments in return for a better position;
 - b. a disclaimer on the search results page stating the ranking may also be affected by payments to the platform;
 - c. a label added to suppliers that signifies that the supplier pays extra for a better position in the ranking.

²⁵ The Unfair Commercial Practices Directive requires traders to clearly distinguish paid or sponsored search results from natural search results, among others. Under the UCPD, failure to disclose sponsoring could firstly be in breach of the requirement to clearly distinguish editorial content from advertising content (point No 11 of Annex I). Secondly, if the conditions under point No 11 of Annex I are not fulfilled, Article 6(1)(c) prevents traders from misleading consumers on the motives for commercial practices, the nature of the sales process and direct or indirect sponsorship or approval of traders or products. Thirdly, Article 7(2) and point No 22 of Annex I prevent traders from hiding the commercial intent of a commercial practice. (<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1469512881522&uri=CELEX:52016SC0163>)



193. ACM first discusses how these transparency measures may mitigate the risks from sponsored ranking for consumer welfare and competition identified in section 5.
194. Transparency on sponsored ranking can mitigate the risks to consumer welfare and competition by diverting views and purchases away from sponsored results. To the extent that transparency has this effect, both the risk of making suboptimal choices and the risk of softening of competition on price and quality are reduced. The reason is that this response from consumers to transparency reduces the incentive for suppliers to sponsor their listing. **A number of requirements on transparency measures must be met for transparency to change consumer behaviour.**
195. A crucial aspect of transparency measures on sponsored rankings is that **a sufficient number of consumers notice and understand the disclosure provided by the platform.** ACM did not empirically investigate to which extent consumers notice the transparency measures used by the platforms. This is a clear area where ACM desires to improve its understanding. The reason is that many studies suggest that users fail to identify native advertising as such, although some papers point to the opposite direction. ACM also notes that some disclosure labels used in practice seem to blend in with the content presented because of a similar typesetting and layout of the listing. Taken together, **ACM is concerned that some disclosure labels used in practice are overlooked by a significant portion of consumers.**
196. Assuming that consumers are effectively informed about the role of sponsoring in the ranking, transparency will only reduce the risks for consumer welfare and competition in so far **consumers can somehow ‘correct’ for the sponsoring in their search and purchase behaviour.** This condition seems to be widely met by the platforms considered in this study. First, platforms generally offer different sorting orders such as price, review score, distance, etc. Importantly, these sorting orders are not influenced by sponsoring. Second, in cases where individual suppliers who sponsor their listing are labelled as such, consumers can also skip sponsored items in the ranking and click on ‘organic’ results only.
197. Well-designed transparency may not only mitigate the risks from sponsored ranking, but it may also stimulate potential benefits from sponsored ranking. In particular, under the signaling theory of advertising (Nelson, 1974), the very act of advertising may serve as a credible signal of quality to the consumer. Although ACM’s analysis of a natural experiment with disclosure of sponsored results in the ranking on an undisclosed platform found evidence contradicting this theory (in particular, less experienced consumers buy less at sponsoring suppliers after disclosure), other research found evidence supporting the theory in a different setting (Sahni and Nair, 2020a and 2020b). Moreover, it cannot be ruled out that the results from ACM’s analysis arise precisely because many consumers did not notice the label about sponsoring. As advertising only serves as a signal to consumers if the act of advertising is made apparent, the efficiency gains are more likely to arise if



consumers understand that a particular supplier paid extra for a higher position in the ranking.

198. Finally, it is hard to see why the other potential efficiencies from sponsored ranking would be less likely to arise due to transparency about sponsoring. Recall that sponsored ranking may potentially help i) the platform rank suppliers on the basis of relevance for consumers (to the extent that bids carry information about the relevance of suppliers for the consumer, section 5.3.1), ii) consumers discover new products (section 5.3.3), or iii) suppliers to use their capacity more efficiently (section 5.3.4). If one or more of these mechanisms apply, being transparent about sponsored ranking may only increase consumer trust in the ranking and add to the effectiveness of sponsoring in the first place.
199. By way of conclusion, prominent disclosure measures may increase the potential benefits from sponsored ranking and also serve to mitigate the risks from sponsored ranking for consumer welfare and competition. **Prominent disclosure of sponsoring – both on the level of the ranking mechanisms at large as on the level of individual advertisers – contributes to a better balance of risks and benefits from sponsored ranking for consumers and competition.** Although the meaning of ‘prominent’ may vary between contexts, prominence requires at least that disclosure measures about sponsoring are noticed by consumers and inform consumers about the fact that a sponsoring supplier is ranked higher because of an extra payment to the platform.



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Annex A – Tags indicating commercial nature of sponsored results

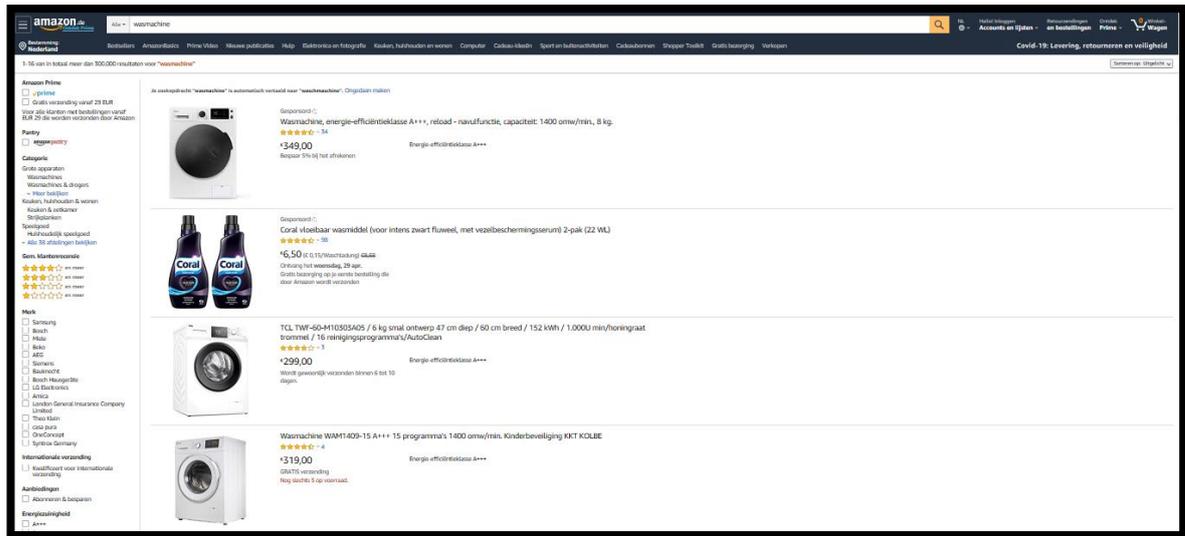


Figure A1: Screenshot from ranking on Amazon.de taken, taken by ACM on 24 April 2020



Figure A2: Screenshot showing a sponsored result in the ranking on Amazon.de, taken by ACM on 24 April 2020



'wasmachine' in Alle artikelen

Gerelateerde categorieën

Wasmachines Was-droogcombi... Droogkasten Huishoudelijke apparaten

2.740 resultaten Sorteer op: Relevantie

Whirlpool
Whirlpool FSCR70410 - Wasmachine
Vulgewicht: 7 kg | Toerental: 1400 tpm | Geluidsniveau: 76 dB | 2 jaar fabrieksgarantie en 10 jaar garantie op de motor | Waterbeveiliging
★★★★☆ (88)
Op zoek naar een wasmachine met een klein laadvermogen en handige opties om kort te wassen? Dan is de... [Meer](#)

Beste koop
6:11 2019

Vergelijk

A+++
389,-
Adviesprijs € 469,00
Je bespaart 13%
Op voorraad
Voor 23.59 besteld, morgen in huis.
Levering op afspraak. ⓘ
Verkoop door bol.com
+
Meer verkopers vanaf € 370,33
Retourneel voor € 370,33

AEG
AEG L6FB86IW - 6000 serie - ProSense - Wasmachine
Vulgewicht: 8 kg | Toerental: 1600 tpm | Geluidsniveau: 75 dB | 2 jaar fabrieksgarantie en 10 jaar garantie op de motor | Waterbeveiliging
★★★★☆ (28)
Op zoek naar een wasmachine met een ruim laadvermogen en handige opties om kort te wassen? Dan is de AEG... [Meer](#)

Vergelijk

A+++
479,-
Adviesprijs € 669,00
Je bespaart 28%
Op voorraad
Voor 23.59 besteld, morgen in huis.
Levering op afspraak. ⓘ
Verkoop door bol.com
+

Geopend
Beko
Beko WTV8740BSC - Wasmachine - BE
Vulgewicht: 8 kg | Toerental: 1600 tpm | Geluidsniveau: 76 dB | 2 jaar fabrieksgarantie en 10 jaar garantie op de motor
★★★★☆ (5)
Op zoek naar een wasmachine met een gemiddeld laadvermogen en handige opties om kort te wassen? Dan is... [Meer](#)

Vergelijk

A+++
399,-
Adviesprijs € 479,00
Je bespaart 17%
Op voorraad
Voor 23.59 besteld, morgen in huis.
Levering op afspraak. ⓘ
Verkoop door bol.com
+

Categorieën

Elektronica (3440)
Huishouden (52)
Klussen (74)
Speelgoed (46)
Wonen (9)
[Meer](#)

Vulgewicht wassen

11 kg en meer (0)
 10 kg (0)
 9 kg (100)
[Meer](#)

Merk

Bosch (158)
 Miele (140)
 AEG (74)
[Meer](#)

Toerental centrifugeren

1600 (24)
 1400 (344)
 1200 (14)
 1000 en minder (27)

Energielevel

Zeer energiezuinig: A+++ -40% t/m -65% (2)
 Energiezuinig: A+++ -10% t/m -30% (104)
 Minder energiezuinig: A+++ en lager (25)

Handige extra's

Rest(t)indicatie (202)
 Start(t)stel of eind(t)stel (274)
 Waterbeveiliging (270)
[Meer](#)

Wat vind je belangrijk?

Een stille wasmachine (9)

Figure A3: Screenshot from ranking on bol.com taken, taken by ACM on 24 April 2020



Gesponsord

Beko
Beko WTV8740BSC - Wasmachine - BE

Vulgewicht: 8 kg | Toerental: 1400 tpm | Geluidsniveau: 74 dB | 2 jaar fabrieksgarantie en 10 jaar garantie op de motor

★★★★☆ (5)

Op zoek naar een wasmachine met een gemiddeld laadvermogen en handige opties om kort te wassen? Dan is... [Meer](#)

Vergelijk

A +++ -10%

399;

Adviesprijs € 479,00

Je bespaart 17%

Op voorraad

Voor 23:59 besteld, morgen in huis.
Levering op afspraak. ⓘ

Verkoop door bol.com

+

Figure A4: Screenshot showing a sponsored result in the ranking on bol.com, taken by ACM on 24 April 2020

Apartment **Fortess Apartments** Good 7.1

Camden, London – Show on map (5 km from centre) – Metro

3 people are looking at this moment
Booked 2 times in the last 12 hours

.genius 10%

Apartment 2 – 47 m²
Only 1 left on our site!

-10% **€ 323**

See all 3 available apartments >

This property spends a little extra to promote their visibility on our site. It matches your search criteria and is a great choice for you.

Figure A5: Screenshot showing a result sponsored by means of the Visibility Booster on booking.com, submitted by booking.com in response to ACM's request for information

Sloane Square Hotel ★★★★★ Very good 8.3

Kensington and Chelsea, London – Show on map (centre) – Metro access

2 people are looking at this moment
Booked 7 times in the last 6 hours

.genius 10%

Double Room 2
Only 2 rooms left on our site!

-10% **€ 201**

See our last available rooms >

This is a Preferred property. They provide excellent service, a great value and have brilliant reviews from Booking.com guests. They pay Booking.com a bit more to be in this programme.

F Franck: "... welcoming service at reception, **great location** and nice room."

Figure A6: Screenshot showing a result sponsored by means of the Preferred Partner Programme on booking.com, submitted by booking.com in response to ACM's request for information



Expedia Vliegtickets Vucht + Hotel Zonvakanties Vakantiehuzen Alle reisproducten

Naar **Brussel (en omgeving), België** Inchecken 1 mei Uitchecken 2 mei Gasten 1 kamer, 2 gasten Je accommodatie aanbieden Aanmelden

Belangrijk: Voor deze bestemming gelden mogelijk COVID-19-reisbeperkingen, waaronder specifieke beperkingen voor accommodaties. Controleer alle nationale, lokale en gezondheidsadviezen voor deze bestemming alvorens te boeken.

Onze sorteervolgorde wordt mogelijk beïnvloed door wat we betaald krijgen

Zet nog niets vast met gratis annulering
We raden je aan een verblijf met gratis annulering te boeken, voor als je plannen veranderen.
Filter op gratis annulering

Sorteren op
 Aanbevelen
 Prijs
 Prijs + onze keuze
 Deals

Hotel Hubert Grand-Place
Quartier du Centre - Centrumwijk
Annuleer gratis
Reserveer nu, betaal later
4,5/5 Fantastisch (915 beoordelingen)
Lagere prijs beschikbaar
€149 voor 1 nacht
Prijsdetails

Thon Hotel EU
Europese Wijk

Zoeken

Figure A7: Screenshot from the ranking on Expedia showing a message about sponsoring above the search results list, taken by ACM on 24 April 2020

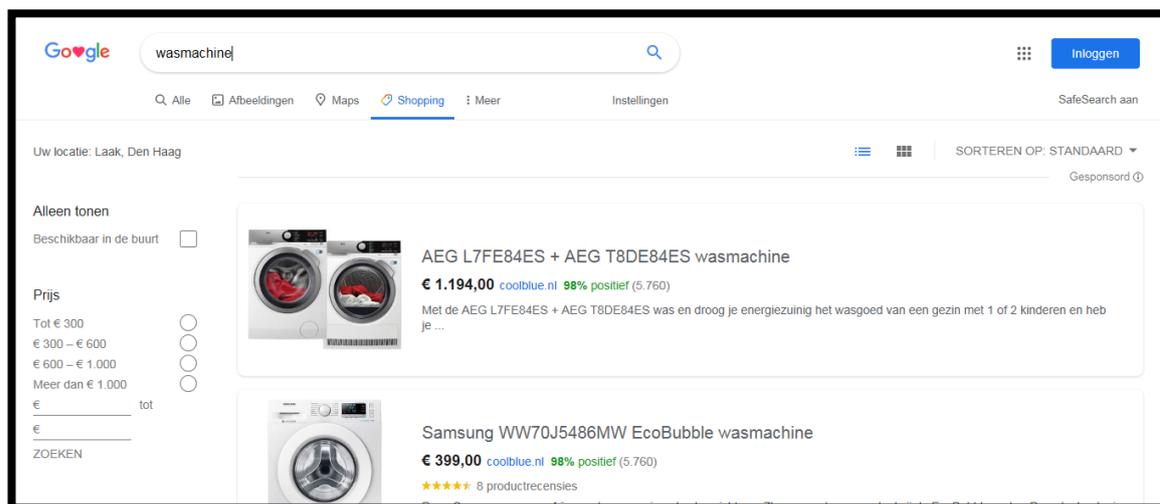


Figure A8: Screenshot from search results list on Google Shopping, showing the label “Sponsored” in the top right corner. Taken by ACM on 24 April 2020.