

COMPETITIVE MARKETS AND CONSUMER WELFARE

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CLEAR AND INTUITIVE DISCLOSURES BENEFIT CONSUMERS ON ONLINE MARKETPLACES

A new EU Directive increases the transparency of online marketplaces by requiring the clear disclosure of a range of important consumer information. The clarity, and thus effectiveness, of online disclosures can vary significantly depending on the presentation of the information, as demonstrated by the study in this article concerning paid rankings.

Paid ranking involves providers paying extra in exchange for a higher position in search results on online marketplaces. If consumers are unaware of payments affecting the search results, there is a risk

that they may be misled. Transparency through mandated disclosure can limit this risk, but what does it take for consumers to notice and understand the disclosed information?

This study finds that prominent, clear and intuitive disclosure nearly triples the share of consumers aware of paid search results, compared to a baseline disclosure.

1. Introduction

The Danish Competition and Consumer Authority (DCCA) has conducted a behavioural study to determine how presentation formats affect consumers' awareness and understanding of the information requirements proposed by the European Commission's initiative "A New Deal for Consumers". Specifically, the study tests various disclosures of paid rankings, i.e. when providers pay extra to achieve a better placement in the search results on an online marketplace.

Paid rankings could lead to less favorable deals for consumers, if consumers are unaware of the fact that some search results are presented higher up in the ranking due to extra payments, and not due to a higher relevance. Moreover, this could potentially restrict competition among providers, since it is possible to climb the rankings by paying extra instead of making a better offer.

The study finds that the share of consumers aware of paid search results nearly triples, to 67 pct.¹, when the prominence, clarity and placement of a label is improved. These modifications also nearly double the share of consumers that are able to identify paid search results. The results also highlight that disclosure should be intuitive, i.e. easy to understand without the need for further explanation, as consumers were not able to make the necessary connection between a non-intuitive icon indicating paid search results, and the explanation of the icon.

Furthermore, the study finds that consumer awareness and understanding of a general disclosure about the search results is low, with only one in ten consumer noticing and understanding it.

The result from the study highlights the importance that prominence, placement and intuitiveness of the disclosure has on consumer awareness and understanding. Clear and effective disclosure requires, at a minimum, that the information is:

- Prominent, i.e. "stands out" from the general online interface
- Proximate, i.e. placed in close proximity to what it refers to
- Intuitive, i.e. easy to understand without the need for further explanation.

2. A New Deal for Consumers

The New Deal for Consumers initiative aims to strengthen consumer protection by modernizing EU consumer protection rules, in light of an increasingly globalized consumer marketplace and the rise of e-commerce, cf. Box 1.

One aim of the directive is to increase the transparency of online marketplaces, and thus to enable consumers to make more informed choices. This is done by obligating online marketplaces to disclose information to consumers on a number of aspects. For some information, such as information about the status of a third party trader, the directive sets specific requirements for how the online marketplace should, and should not, present this information to the consumers. In general, however, the directive underscores that information should be **clearly** disclosed by the online marketplace.

Box 1: A New Deal for Consumers

Following the EU Commissions "New Deal for Consumers" initiative, the Enforcement and Modernisation Directive (EU) 2019/2161 ("Omnibus Directive") was adopted by the European Parliament and the Council on 27 November 2019 and should be adopted by the member states before 28 November 2021.

The Omnibus Directive aims to strengthen consumer rights through enhanced enforcement measures and increased transparency measures, requiring the disclosure of the following information²:

- The "status" (listed trader or private individual) of the supplier selling the product on the online marketplace
- The main criteria of the ranking of offers provided in response to a search query
- Whether a search result is shown higher up in the ranking due to payments to the online marketplace
- The ways in which the online marketplace ensures that consumer reviews are genuine
- Whether the prices shown to the consumers are based on an algorithm taking into account their personal behaviour
- The main characteristics, contract duration and the termination conditions of "free" services
- The lowest price of the product within a period of at least 30 days preceding a price reduction claim

In an online experiment, the DCCA tested how various modifications to the presentation format affect consumers' awareness and understanding of the disclosed information, i.e., how clear the various disclosure formats were. Specifically, the tests centre on consumers' understanding of disclosure of how payments affect the rankings on an online

¹ An average of the two intervention groups.

² European Commission Factsheet "The New Deal for Consumers: What benefits will I get as a consumer?" November 2019, https://ec.europa.eu/info/sites/info/files/factsheet_new_deal_consumer_benefits_2019.pdf

booking platform. The experiment was designed to test how modifications to three attributes of the disclosed information affect consumer awareness and understanding. The attributes tested were:

- 1: Prominence: To what degree the disclosure “stands out” from the general online interface and is salient for consumers
- 2: Intuitiveness: Is the disclosure easy to understand without further explanation, or are there prerequisites for understanding the disclosure (e.g., when a non-intuitive icon is used for the disclosure)
- 3: Proximity (Placement): Is the disclosure presented in an intuitive location on the online interface, e.g. in close proximity of the claim that raises the need for disclosure, so that these can be viewed simultaneously.

3. Background - E-commerce and online marketplaces

Online shopping is continuing to increase in the European Union. In 2018, 60 pct. of the population aged 16 to 74 had shopped online, up from 32 pct. in 2009³. Danes were particularly avid online shoppers, with 84 pct. of the population having shopped online in 2018, the highest share recorded.

While many companies sell their products via their own websites and apps, 40 pct. of companies also offer their products for sale on online marketplaces. Online marketplaces are intermediaries, where multiple third parties can market their products and services. In response to a consumer’s search query, the online marketplace ranks the listed products, allowing consumers to quickly find what they are looking for, decreasing search costs and thus increasing consumer welfare.

However, despite the many benefits of online marketplaces, the consumers still need to be aware of their operating principles to avoid problems. For example, consumers that use an online marketplace, may be under the impression that they are entering into an agreement with the operator of the marketplace, and not the third-party supplier listed on the online marketplace. Problems might also occur when consumers are presented with the ranked search results, and be unaware that results are not solely ranked according to the consumers’ needs, but that some results might be ranked better due to payments received by the marketplace.

These aspects could lead to consumer detriment, as the traders’ status (professional or private) affect consumer rights, and the rankings themselves can affect consumer choice⁴.

Moreover, if consumers are unaware of paid rankings, it could potentially restrict competition among providers, since it is possible to climb the rankings by paying extra to the provider of the marketplace instead of making a better offer.

The solutions proposed to these potential problems, in the New Deal for Consumers, is to increase the transparency of online marketplaces, by requiring them to clearly inform consumers about such aspects. While the disclosure requirement in itself might be considered a necessary condition for increasing transparency, the empirical question is what constitutes “clear” disclosure, and how this is affected by the presentation of the information. Or more succinctly, what does it take for consumers to notice and understand these types of disclosures on online marketplaces?

4. Paying for increased visibility on online booking platforms

As mentioned, the New Deal for Consumers specifically addresses the issue of payments to the online marketplace that affect the search result rankings.

In the specific example of online hotel booking platforms, the context for the behavioural experiment in this article, suppliers (hotels) listing their product on the marketplace have two general ways in which they can pay for a more favourable position in the ranking. The suppliers can either:

- 1: Pay a higher commission for a limited time in exchange for increased visibility on the platform (hereafter referred to as **paid ads**)
- 2: Pay a higher commission rate by participating in a partnership program, which increases visibility on the marketplace (hereafter referred to as **paid partnerships**)

The current practice of disclosing these payments includes using labels and icons on the specific products (hotels), where a higher commission has improved the ranking of the hotel. Additionally, a general statement on the page with search results is used to notify consumers of the fact that payments affect the ranking of the results.

5. Designing effective online disclosure

A number of academic articles, studies, and guidelines have been published on the design of effective online disclosure⁵, also specifically addressing aspects from A New Deal for Consumers⁶. To demonstrate the effect of some of the principles, the DCCA conducted an online experiment, modifying the presentation of the disclosure on commissions in

3 Eurostat, “Online shopping continues to grow”, April 2020, <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20200420-2>

4 Ursu, R. M. (2018). The power of rankings: Quantifying the effect of rankings on online consumer search and purchase decisions. *Marketing Science*, 37(4), 530-552.

5 See e.g. Federal Trade Commission (2013), .com Disclosures How to Make Effective Disclosures in Digital Advertising

6 European Commission (2018), Behavioural Study on the Transparency of Online Platforms

the ranking of the search results. The modifications (see Figure 1) focussed on three existing disclosures on online booking platforms, namely:

- A) The labelling of paid ads
- B) The labelling of paid partnerships
- C) The general statement about the ranking being affected by payments to the platform

The modifications increased the prominence of the label for paid ads by increasing the text size of the disclosure, using a distinctive background colour for the label, and contrasting the text colour with the background.

The placement of the label was modified, with the label being placed in close proximity to the name of the product (in this case the name of the hotel), ensuring that consumers associate the label with the correct product. Linking the placement of the label to the name of the product also increases the prominence of the label, as this naturally has a prominent placement on the page.

The wording of the label was changed to more clearly indicate that it referred to a paid ad, by using “paid” in the label. This has in other studies been shown to increase user understanding of paid search results compared to using labels such as “sponsored”⁷.

Furthermore, the experiment tests consumer understanding of information substitutes, e.g. icons, that are not intuitive, but require the consumer to first attend to the explanation of the icon.

6. The three tested versions

In total, the experiment consisted of three different versions of the booking platforms, which were combinations of modifications of the attributes mentioned above. The three versions are illustrated in Figure 1.

In the control group, the labelling of paid ads (A1, Figure 1) was based on the current practice on the booking websites. The exact appearance of the label differed slightly between the four booking websites, but was in general not particularly prominent⁸. Paid partnerships were not labelled in the control group. Across all four booking websites, the general statement about the ranking being affected by payments was disclosed directly before the search results, using plain text (C1, Figure 1).

In Intervention 1, the prominence, placement and clarity of the label for paid ads was modified (A2, Figure 1). Paid partnerships were labelled with an icon (B2, Figure 1). The participants should associate this icon with the general statement (C2, Figure 1), which explains that hotels from which the platforms earns more, are shown higher up in the ranking. The prominence of the general statement is also modified, by presenting it on a blue coloured background, which is the same colour used in the icon indicating paid partnerships, and the wording made clearer.

In Intervention 2, both paid ads and paid partnerships get a prominent yellow label (A3 & B3, Figure 1). The label is identical to that for paid ads in intervention 1, however, the wording of the label is changed to “paid ranking”. Compared to intervention 1, the label for paid partnerships does not need additional explanation to be understood. The colour of the general statement (C3, Figure 1) is modified to match the labels used for the paid search results, and the wording made clearer.

⁷ Edelman, B., & Gilchrist, D. S. (2012). Advertising disclosures: Measuring labeling alternatives in internet search engines. *Information Economics and Policy*, 24(1), 75-89.

⁸ The results from part two of the experiment indicate that there are no differences in consumers understanding of the different labels for paid ads on the four booking websites in the control group. The results presented in this article for part two are show the averages over the platforms in each group, but the results for specific platforms are available on request.

Figure 1 The three versions of disclosure

Control:

Berlin, Tyskland

Sorter efter **Vores anbefalinger** Antal stjerner Afstand fra Gæstebedømmelse Pris

Størrelsen på vores kompensation har indflydelse på din sorteringsrækkefølge **C1**

Steigenberger Hotel Berlin
Los Angeles-Platz 1, Berlin, BE, 10789, Tyskland

City West
1,6 km til Centrum
16 km til Adlershof

Indsamlet natter

Pool Parkering til rådighed Spa
Motionscenter

8,6 Fremragende
2.262 Hotels.com gæsteanmeldelser

2.650 DKK
for 1 værelse for 2 nætter inkl. skatter og gebyrer

A1 Sponsorerede annoncer

Vælg

Adina Apartment Hotel Berlin Hackescher Markt
An der Spandauer Brücke 11, Berlin, BE, 10178, Tyskland

Berlin Mitte
3,7 km til Centrum
14 km til Adlershof

Indsamlet natter

Parkering til rådighed
Motionscenter Køkken

9,4 Enestående
931 Hotels.com gæsteanmeldelser

15% rabat
Vi har 4 tilbage til ~~2.478 DKK~~
1.851 DKK
for 1 værelse for 2 nætter inkl. skatter og gebyrer

Vælg

Intervention 1:

Berlin, Tyskland

Sorter efter **Vores anbefalinger** Antal stjerner Afstand fra Gæstebedømmelse Pris

Nogle hoteller betaler ekstra for en bedre placering i dit søgeresultat. **C2**

A2 **Betalt annonce** **Steigenberger Hotel Berlin**
Los Angeles-Platz 1, Berlin, BE, 10789, Tyskland

City West
1,6 km til Centrum
16 km til Adlershof

Indsamlet natter

Pool Parkering til rådighed Spa
Motionscenter

8,6 Fremragende
2.262 anmeldelser

2.650 DKK
for 1 værelse for 2 nætter inkl. skatter og gebyrer

Vælg

B2 **Adina Apartment Hotel Berlin Hackescher Markt**
An der Spandauer Brücke 11, Berlin, BE, 10178, Tyskland

Berlin Mitte
3,7 km til Centrum
14 km til Adlershof

Indsamlet natter

Parkering til rådighed
Motionscenter Køkken

9,4 Enestående
931 anmeldelser

15% rabat
Vi har 4 tilbage til ~~2.478 DKK~~
1.851 DKK
for 1 værelse for 2 nætter inkl. skatter og gebyrer

Vælg

Intervention 2:

Berlin, Tyskland

Sorter efter **Vores anbefalinger** Antal stjerner Afstand fra Gæstebedømmelse Pris

Nogle hoteller betaler ekstra for en bedre placering i dit søgeresultat. **C3**

A3 **Betalt placering** **Steigenberger Hotel Berlin**
Los Angeles-Platz 1, Berlin, BE, 10789, Tyskland

City West
1,6 km til Centrum
16 km til Adlershof

Indsamlet natter

Pool Parkering til rådighed Spa
Motionscenter

8,6 Fremragende
2.262 anmeldelser

2.650 DKK
for 1 værelse for 2 nætter inkl. skatter og gebyrer

Vælg

B3 **Betalt placering** **Adina Apartment Hotel Berlin Hackescher Markt**
An der Spandauer Brücke 11, Berlin, BE, 10178, Tyskland

Berlin Mitte
3,7 km til Centrum
14 km til Adlershof

Indsamlet natter

Parkering til rådighed
Motionscenter Køkken

9,4 Enestående
931 anmeldelser

15% rabat
Vi har 4 tilbage til ~~2.478 DKK~~
1.851 DKK
for 1 værelse for 2 nætter inkl. skatter og gebyrer

Vælg

- A) Label for a paid ads. In the control group the label translates to “Sponsored ad”, for Intervention 1 “Paid advertisement”, and “Paid ranking” for Intervention 2.
- B) Label for a paid partnerships (in the control group, paid partnerships are not labelled). For intervention 2, the label translates to “Paid ranking”
- C) General statement about ranking being affected by payments to the platform.

7. Design of the experiment

The experiment was distributed as an online survey, cf. Box 2, and over 1000 responses were collected. The experiment could be completed on a desktop computer or a tablet⁹. The experiment consisted of a simulated buying experience on mock-ups of four popular online hotel booking platforms,

with the modifications to the disclosure as discussed and illustrated in Figure 1. In the experiment, a participant only saw one of the versions of the online hotel booking platforms, as the main purpose of the experiment is to compare the awareness and understanding of the disclosures between participants seeing the different versions of the platforms.

Box 2 Online surveys

Online surveys are increasingly used in academic and marketing research, as it is a less costly and time-consuming method compared to more traditional approaches, such as face-to-face, postal or telephone surveys, and have proven to provide similar results.

Simulated, hypothetical, buying experiences are widely used when studying consumer behavior and preferences. However, the results can only be considered valid to the extent that participants in the experiment behave the same as real consumers.

In the experiment, the participants are asked to complete a simulated buying experience on a computer. An invitation to participate in the experiment was sent out by a professional market research company to a pre-recruited panel of respondents. The market research company ensured that the demographical variables (age, gender and location) of the final sample of participants completing the survey matched the general adult population in Denmark, i.e. that the answers are representative of the general Danish population.

⁹ Mobile phones were excluded, due to technical limitation such as screen size.

The experiment consisted of two main parts. In the first part, participants in all groups were shown a list of search results from four different online hotel booking platforms (representing hotels in four different European capital cities), and asked which hotel they would choose to book, if they were travelling to the city and had to choose one of the presented hotels. Each booking website showed a list 12 search results, six of which were paid search results, i.e. gaining a better ranking due to an agreement of a larger payment to the booking platform. Out of these six, three were paid partnerships, and three were paid ads¹⁰. After having seen all four booking platforms¹¹, the participants were asked:

- Whether any of the hotels they had been shown had paid for a better placement in the search results?
- Whether they had noticed any statement concerning the search results they had been shown?

The aim of the first part was to test to what degree the participants noticed, and were able to recall, disclosures about paid ranking, in a simulated buying experience on an online booking platform.

In part two of the experiment, the participants revisited one of the booking websites they had seen in part one, and were asked to identify all the individual search results that had paid for a higher ranking. The aim of part two was to see, to what degree the participants understood the specific labels when asked to identify paid search results.

8. Result - Prominent labels get noticed

In the control group, 25 pct. of the participants said they had been shown paid search results, when asked about it after having visited the four online booking websites in part one of the experiment. This share increased to 65 and 71 pct. in the two intervention groups, where the prominence, placement, and wording of the label for paid search results was modified¹², cf. Figure 2. The change is statistically¹³, and practically, significant, and translates into a 158 and 181 pct. increase in the shares of participants aware of having been shown paid search results.

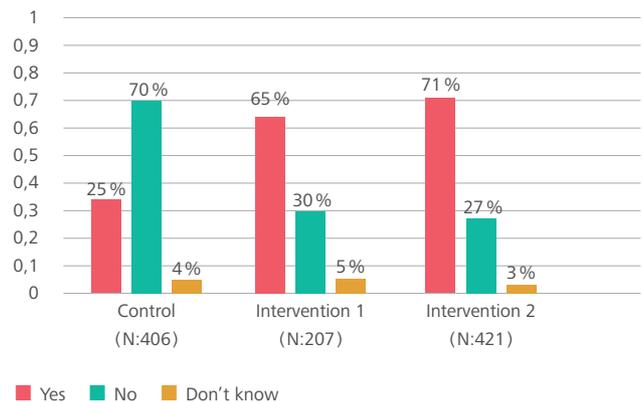
¹⁰ In an additional version of the experiment, the number of paid partnerships was increased to seven, i.e. ten of the 12 search results were affected by payments to the platform. The labelling in this version was similar to Intervention 1 (see Figure 1). The results are not reported, as they are similar to that of Intervention 1.

¹¹ The participants could not revisit the booking platforms.

¹² In the control group, three out of 12 hotels were labelled as a paid ads. In the intervention groups, three additional hotels were labelled as paid partnerships, bringing the total number of labelled hotels to six in the intervention groups. The increase in awareness in the treatment groups could thus also be driven by the increased number of labelled hotels, in addition to the modifications to the disclosure. However, given the results from part two (see Figure 4), that very few participants associate the icons for paid partnerships used in Intervention 1 with paid search results, it is unlikely that the increase in labelled hotels is driving the difference in awareness between the control and intervention 1.

¹³ The p-values for the differences between the control and the two intervention groups are smaller than 0,01 for both comparisons, based on a chi-square test. The difference between the intervention groups is not significant.

Figure 2: Participants answers to: “Were you shown paid search results?”



Note: Participants were asked, after having visited four online booking platforms, whether they had been shown hotels that had paid extra for a better placement in the search results. Paid search results were shown on all booking platforms across all treatments.

Source: Behavioral experiment, DCCA, 2020

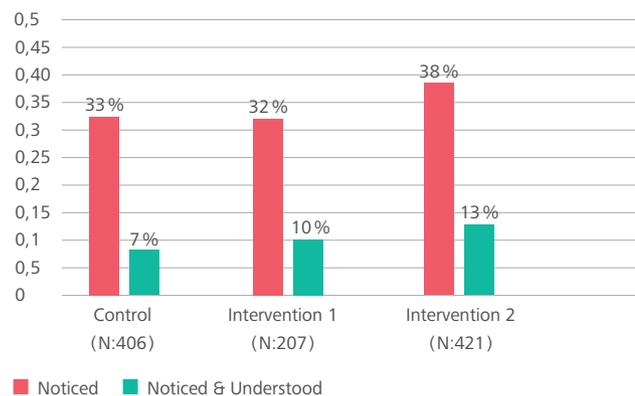
Furthermore, in the control group, 70 pct. of the participants were under the impression that they had not been shown hotels that had paid for a better placement in the search results, compared to only 27 and 30 pct. in the treatment groups. Across all groups, between 3 – 5 pct. answered the question with “don't know”.

9. Result - The general statement goes unnoticed

Between 32 and 38 pct. of the participants stated, in the first part of the experiment, that they had *noticed* a disclosure about the search results, cf. Figure 3. When these participants were asked what this statement was about, between 22 and 34 pct. correctly answered that the statement specified that the ranking of the hotels was affected by the commission paid to the booking platform. This means that out of all the participants, between 7 and 13 pct. were aware of, i.e. *noticed and understood* the content of, the statement, cf. Figure 3.

In the control group this particular share is statistically smaller than in intervention group 2, where the prominence of the statements is increased, but the overall level is still low.

Figure 3: Share of participants noticing and understanding the general statement



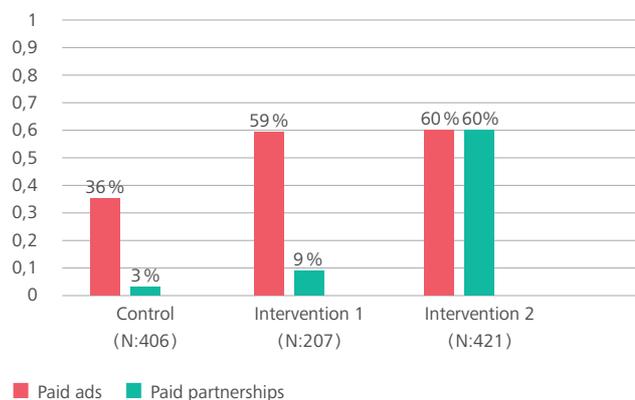
Note: Participants were asked, after having visited four online booking websites, whether the websites had explained anything about the ranking of the search results. The participants answering that they had noticed an explanation, were asked what the explanation concerned. All booking platforms used a general statement in the start of the search results to explain that the ranking of the search results was affected by payments to the website.

Source: Behavioral experiment, DCCA, 2020

10. Result - Disclosure should be intuitive and prominent to be clear

In the second part of the experiment, 36 pct. of the participants in the control group correctly identified all three paid ads on the online booking platform. This share increases to 59 and 60 pct. in the intervention groups (red bars in Figure 4), indicating that the prominence of the label is an important part of what enables consumers to identify paid search results.

Figure 4: Share of participants identifying all paid ads or paid partnerships



Note: Participants revisited one of the four booking platforms they had seen, and were asked to identify the search results that had paid extra for a better placement in the ranking. The shares represents the respondents that identified all the three paid ads or all the three paid partnerships. Some of the participants identifying all the paid ads or all the paid partnerships also identified organic search results as paid. The shares of participants that only identified all the paid ads or all the paid partnerships is not markedly different from the above.

Source: Behavioral experiment, DCCA, 2020

In intervention 1, 9 pct. of the participants identified all three paid partnerships (blue bars, Figure 4), labelled with a blue icon, which, to be understood, required that the consumers first attend to the general statement at the top of the page. This share increases to 60 pct. in intervention 2, highlighting the importance of intuitive disclosure¹⁴.

In the control group, paid partnerships are not labelled, and there are only a few participants that, by chance, identified all of them as paid search results.

11. Result - Clear disclosure of payments is important for consumers, and prominence improves clarity

In follow up questions after the experiment, 37 pct. of the participants said they knew, prior to participating in the experiment, about the practice of payments affecting the ranking of online booking websites. 64 pct. said that they think it is important that paid search results are clearly labelled and easy to distinguish from organic search results. There were no differences in the expressed prior knowledge of, or attitude towards the labelling of, paid search results, between the control group and the two intervention groups.

The more prominent disclosures used in the intervention groups did not seem to disturb the participants' user experience of the online booking website, as no difference in the share of participants reporting that they were disturbed by the disclosure was found between the control (26 pct.) and the intervention groups (on average 32 pct.).

When explicitly asked, in a follow up question after the experiment, a larger share (on average 57 pct.) of the participants in the intervention groups said that it was clear that certain hotels in the experiment had paid for a better ranking in the search results, compared to the control group (29 pct.). This provides qualitative support for the results presented in section 8 (Figure 2), where respondents were asked whether they had been shown hotels that had paid extra for a better placement in the search results.

12. Result - Increased transparency and consumer awareness does not seem to impact preferences

In the first part of the experiment, the participants were asked to choose one hotel that they would book on each of the four booking websites. Across all groups, hotels labelled as paid ads were chosen in 23 – 25 pct. of the booking scenarios¹⁵, and paid partnerships in 35 – 38 pct. of the scenarios. This means that while the participants in the intervention groups were more aware of paid search results, this did not reduce the likelihood of choosing hotels that had paid for a better placement in the search results.

¹⁴ The shares of paid ads and paid partnerships identified in intervention 2 is identical, which is natural since an identical labels is used for both types.

¹⁵ The consumers chose a hotel in each of four booking platforms presented. The percentages represent an average of the four bookings within each group.

The results regarding the participants choice of hotel should, however, be treated with caution, as the experiment was not specifically designed to elicit consumer preferences, and the results might thus suffer from hypothetical bias¹⁶.

13. Conclusions and recommendations

This study has tested consumer awareness and understanding of disclosures, related to payments for achieving a higher ranking of products within the search results, on online marketplaces. As part of the increased transparency obligations for online marketplaces in the New Deal for Consumers, this information should be **clearly** disclosed to consumers.

The result from the study highlights the importance that prominence, placement and intuitiveness of the disclosure has on consumer awareness and understanding. Clear and effective disclosure requires, at a minimum, that the information is:

- Prominent, i.e. “stands out” from the general online interface
- Proximate, i.e. placed in close proximity to what it refers to
- Intuitive, i.e. easy to understand without the need for further explanation.

Providing absolute guidelines for the prominence and placement of online disclosure is difficult, as these depend on the overall online interface in which the disclosure appears. One solution could thus be to define these attributes in relative terms, for example by linking the prominence (e.g. size and colour of the disclosure) to naturally prominent elements of the online interface (e.g. a product name).

¹⁶ Hypothetical bias occurs when participants experimental behavior does not represent what they would do in a real situation. The key driving factor for hypothetical bias is that the behavior in the experiment has no real consequences for the participants.