The American Antitrust Institute

THE PROPOSED GOOGLE-YAHOO ALLIANCE

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Introduction

Google and Yahoo, the two largest providers of paid search advertising, reached an agreement earlier this summer whereby Yahoo would be able to display paid search advertising from Google. With a U.S. market share approaching 70% to 80% depending on how the market is defined, Google would already be considered a near-monopolist under traditional antitrust standards, and the combined market share of Google and Yahoo would likely exceed 90%. The parties agreed to delay implementation of their agreement for three and a half months to facilitate a review of the arrangement by the Antitrust Division of the United States Department of Justice. Since that time competition authorities in both Canada and the European Union have stated their intentions to review the agreement.

The review of the proposed agreement must address the central question of how the Google/Yahoo deal will affect competition in the paid search advertising market. Will it help solidify Google's monopoly power? Or will it maintain the current level of competition and infuse Yahoo with enough capital to enable it to better compete with its wealthier rivals? Will this transaction lead to the demise - or the resuscitation-of Yahoo?

Keeping Yahoo in the market as a viable competitor should be the government's the primary goal as it undertakes its review of the proposed arrangement. The loss of an innovative

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competitor in the extraordinarily concentrated market would surely have anticompetitive effects for advertisers that would undoubtedly ripple into other online advertising markets to the detriment of content providers, advertisers and consumers generally. To date, the publicly available evidence does not suggest that either the agreement itself or the possible exit of Yahoo from the market would generate any procompetitive efficiencies. Consequently, the government should view the agreement as inherently suspect.

Nonetheless, the proposal as described by the parties, including the release of a highly redacted version of the document, does not actually call for the parties to engage in any anticompetitive conduct. The agreement does not require Yahoo to exit the market, nor does it prohibit Yahoo from displaying advertising from Microsoft or future entrants into the paid search market. The parties have not agreed on the price or price mechanism that will be used by either party to determine what advertisers are charged. The agreement, at least in its redacted form, does not provide for the sharing of any information between the parties regarding price or quality determinations of the ads prior to Yahoo's decision to display Google ads in response to an end user's search query.

The parties have also stated that the agreement will keep Yahoo in the market by providing it with the funds it needs to continue to develop its own paid search technology, and enjoining Yahoo from using Google's paid search ads may not prevent Yahoo's exit. Google and Yahoo reached this agreement in the wake of a failed bid by Microsoft, the third largest provider of paid search, to acquire Yahoo. Prohibiting Yahoo from using Google ads could result in Yahoo's acquisition by Microsoft, which would effectively remove Yahoo from the market. While the government could challenge such a merger, in the end the government cannot simply mandate that Yahoo compete with Google and Microsoft. Consequently, the government should ask the courts to enjoin the agreement unless it receives adequate assurances that Yahoo will have sufficient economic incentives to compete against Google and Microsoft.

Overview

Definitions

Organic Search, also known as non-paid or algorithmic search, consists of the results generated by a search engine on a website such as Google, Yahoo or MSN in response to a query or search by an end user. The search engine ranks and displays the search results according to its perception of their relevance to the end user's query. Advertisers and other website owners do not pay for placement in organic search results.

Paid Search, also known as sponsored search, consists of the advertisements displayed on a web page containing the results of an Internet search. Advertisers bid for placement of their advertisements along side the organic search results generated in response to specific keywords or sets of keywords. The ads consist of a short amount of text and a link to the advertiser's website. These ads are sold on a "pay per click" basis, *i.e,* the advertiser pays for the advertisement only if an end user clicks on the ad.

Quality Overlays, also known as ad quality scoring, consist of algorithms that attempt to factor in both the amount an advertiser has bid *and* the likelihood that the end user will click on the advertisement in making the determination as to placement of paid search advertisements. The algorithms for quality overlays are proprietary, and some advertisers have expressed concern about the lack of transparency over how paid search providers, particularly Google, choose the winning bids.

The Parties

Google has a dominant share of both organic and paid search. Although Google did not create either technology, Google's has made important innovations to both. Larry Page and Sergey Brin founded Google in 1998 to commercialize their belief that counting the links to webpage rather than the existing practice of counting the keywords found on a webpage would provide more relevant organic search results. Google also introduced the use of quality overlays to paid search. Advertisers bid for keywords using Google's AdWords service. Google also places ads (mostly textual) on other web sites ("Ads by Google"), including other organic search sites, using its AdSense product.

Microsoft provides the operating system used on over 90% of the world's personal computers. The various versions of Microsoft's web browser, Internet Explorer, have a combined usage share of about 75%.[2] Microsoft competes with Google and Yahoo in a variety of markets, including both the paid and organic search markets with its adCenter and Live Search products respectively. Since its failed effort to acquire Yahoo earlier this year, Microsoft has announced a number of competitive innovations,[3] including paying cash to end users who click on ads displayed by Microsoft's paid search technology.[4]

Yahoo became one of the first "dotcoms" when Jerry Yang and David Filo moved their index of websites off Stanford's servers. Today, Yahoo is a conglomerate of Internet services and sites. Yahoo began using Google's organic search in 2000. In 2003, however, Yahoo acquired Overture, the company that invented paid search. Yahoo ended its initial relationship with Google and returned to the organic search market in 2004, but Yahoo did not adopt the use of quality overlays until 2007 with the introduction of its Panama technology as part of its Yahoo Search Marketing product. Since 2007, Yahoo has provided a source of competitive innovation, including the beta testing of its BOSS ("Build your Own Search Service") technology that will enable developers to create applications that access Yahoo's search technology and display paid search advertising from Yahoo as the "price" for access.[5]

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[2] For a collection of publicly available and relatively current statistics regarding the usage shares of popular web browsers, *see Usage Share of Web Browsers,* http://en.wikipedia.org/wiki/Usage_share_of_web_browsers (last visited July 17, 2008).

[3] *See, e.g.,* Stephen Shankland, *Microsoft Sees Tailored Search As Way to Pierce Google's Armor,* cnet News, Aug. 19, 2008, http://news.cnet.com/8301-1023_3-10020157-93.html.

[4] Microsoft Corp., Live Search Cashback, http://search.live.com/cashback/ (last visited Aug. 30, 2008). The publicly available evidence suggests that this strategy has not resulted in a sustained increase in Microsoft's share of search queries. Erick Schonfeld, *Microsoft's Live Search Cashback Scheme Fails to Move the Market Share Needle,* TechCrunch, Aug. 28, 2008, http://www.techcrunch.com/2008/08/28/microsoft-live-search-cashback-scheme-fails-to-move-the-market-share-needle/.

[5] Stephen Shankland, *Yahoo Seeks Ad Revenue by Fueling Others' Search Innovation,* cnet News, July 9, 2008, http://news.cnet.com/8301-1023_3-9986424-93.html.

The Google-Yahoo Agreement

On June 12, 2008, Google and Yahoo announced an agreement that allows Yahoo to display paid search advertising from Google alongside the organic search results generated by Yahoo in the United States and Canada. The agreement was recently made public, but in a very highly redacted form, which means that our comments on it may necessarily overlook aspects that have not been made public. The agreement does not cover organic search. The "agreement has a term of up to ten years: a 4-year initial term and two 3-year renewals at Yahoo's option."[6] The agreement also provides for the interoperability of Google's and Yahoo's instant messaging (chat) services. The parties delayed implementation of the agreement for three and a half months in order to provide the DOJ with time to review the agreement. This period expires on September 25, and Google has indicated that it intends to go forward with implementation of the agreement by October 11 regardless of whether the government has concluded its review.[7]

The visible terms of the redacted agreement do not require Yahoo to use any ads from Google. They merely lay out in rather vague terms the means of access to the ads and the conditions of use. Under the known terms of the agreement, Yahoo alone determines whether and how many Google ads it will display in response to an end user's search query. Google alone determines which ads to provide Yahoo. The agreement does not appear to call for any cooperation between the parties as to the bidding or quality overlay processes. Nor does the agreement prevent Yahoo from accepting ads from sources other than itself or Google.

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[6] Press Release, Google Inc., Google Announces Non-Exclusive Advertising Services Agreement with Yahoo! in U.S. and Canada (June 12, 2008), *available at* http://www.google.com/intl/en/press/pressrel/20080612_yahoo.html. Yahoo filed a redacted version of the Agreement with its SEC 10-Q filing on August 8, 2008. *See* Yahoo! Inc., Quarterly Report Pursuant to Section 13 or 15(D) of the Securities Exchange Act of 1934 (Form 10-Q), Ex. 10.19 (Aug. 8, 2008), *available at* http://www.sec.gov/Archives/edgar/data/1011006/000089161808000399/f42710exv10w19.htm.

[7] Michael Liedtke, Google CEO Won't Delay Yahoo Deal Any Further, ABC News (Sept. 18, 2008), http://abcnews.go.com/Technology/wireStory?id=5828873

Nothing in the agreement, however, requires Yahoo to continue its presence in the paid search market or to invest any of the estimated $800 million per year in revenue generated by the use of Google in the development of Yahoo's own paid search technology. Nor does the agreement in any way prevent the parties from subsequently agreeing to allow Yahoo to use Google ads outside North America. In its redacted form, it is not clear whether Yahoo has incentives to expand its usage of Google ads such as an increasing share of the price per click based on the volume of Google ads displayed by Yahoo.

Affected Markets

Relevant Geographic Market

Although there has been discussion of the impact of the agreement on very precise searches for vendors in narrowly defined geographic markets, *e.g.,* flower shops in Jackson Hole, Wyoming, it seems evident that the United States constitutes a relevant geographic market. The agreement itself covers paid search in the United States and Canada.[8] Nonetheless, it seems unlikely that Yahoo would remain in the paid search advertising markets in Europe and elsewhere if it exited the market in North America. While the agreement is ambiguous about precisely what constitutes Yahoo properties inside US and Canada, Section 2.1.1 specifically provides that Yahoo may use Google ads regardless of the end user's location. The agreement also seems to allow Yahoo to display Google ads even if the advertisers are outside North America. Consequently, it is not surprising that European Union has launched its own investigation into the agreement.[9]

Relevant Product Market

Whether paid search constitutes a product in a larger advertising market or a market of its own remains a difficult question to answer. Last year the Federal Trade Commission (FTC)

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[8] The Canadian Competition Bureau is conducting its own review of the Google-Yahoo agreement. Matt Hartley, Competition Watchdog Reviewing Google's Yahoo Deal, ReportonBusiness.com (Globe and Mail) (Aug. 26, 2008), http://www.theglobeandmail.com/servlet/story/LAC.20080826.RGOOGLE26/TPStory/Business.

[9] EU competition officials probing Google-Yahoo deal, (Sept. 15, 2008), http://news.yahoo.com/s/nm/20080915/wr_nm/yahoo_google_eu_dc

refused to accept "all online advertising" as the relevant product market for analysis of Google's merger with DoubleClick.[10] As the FTC explained, advertisers "purchase different types of ad inventory [on the Internet] for different purposes, and one type does not significantly constrain the pricing in another."[11] This suggests that paid search does in fact constitute a relevant product market. In the paid search market, Google appears to have a market share of 70%, followed by Yahoo with a market share of 22%, and Microsoft with about 8%.[12]

Including within the market other forms of online advertising would reduce Google's market share. Paid search accounts for 41% of online advertising, but display advertising accounts for 34%.[13] Google has only a 1.5% share of display advertising.[14] Display advertising, unlike

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[10] Google/DoubleClick, FTC File No. 071-0170, Statement of the Federal Trade Commission (Dec. 20, 2007), *available at* http://www.ftc.gov/os/caselist/0710170/071220statement.pdf.

[11] *Id. at* 7.

[12] SearchIgnite, Potential Impact of Google-Yahoo! Partnership & Cost to Marketers 9 (2008), http://www.searchignite.com/si/cm/tracking/trackredirect.aspx?siclientid=76&redirecturl=http://www.searchignite.com/whitepapers/SearchIgnite_2008_Q2White_Paper_FINAL.pdf&SICustTransType=1052. This market share is measured by dollar volume. Similarly, RKG, a search engine marketing firm that assists advertisers in using paid search, found that "Google received 79% of our clients' ad dollars. Yahoo received 17%. Microsoft received 5%." Alan Rimm-Kaufman, June 2008 Google, Yahoo, Microsoft Paid Search Market Share (July 7, 2008), http://www.rimmkaufman.com/rkgblog/2008/07/07/ppc-share-june-2008/.

These estimates are consistent with a recent report that in the organic search market, Google has a 61.9% market share, followed by Yahoo with 20.5%, and Microsoft with 8.5%. See Associated Press, Google Nears 62 Percent of Searches in July (Aug. 21, 2008), *available at* http://www.businessweek.com/ap/financialnews/D92MUUO80.htm. *See also* Hitwise Pty, Ltd, Google Continues Ascent, Close to 71 Percent of U.S. Searches in July 2008 (Aug. 12, 2008) http://www.hitwise.com/press-center/hitwiseHS2004/google-ascent-searches-july.php ("Google accounted for 70.77 percent of all U.S. searches in the four weeks ending July 26, 2008, Hitwise announced today. Yahoo Search, MSN Search and Ask.com each received 18.65, 5.36 and 3.53 percent respectively. The remaining 47 search engines in the Hitwise Search Engine Analysis Tool accounted for 1.69 percent of U.S. searches.").

[13] Kara Swisher, Microsoft's Trojan Horse (Also Google's): Display Advertising, All Things Digital (July 18, 2008), http://kara.allthingsd.com/20080716/microsofts-trojan-horse-also-

paid search, is highly fragmented. Fox Interactive Media has the largest market share with 15.9%, followed by Yahoo with 10.5%, AOL with 5.8%, and Microsoft with 4.7%.[15] In response to questions, the witnesses at the U.S. Senate Judiciary Committee's hearing on the Google-Yahoo deal appeared to share the view that eventually paid search and display advertising will be offered to advertisers as a bundle. The publicly available information does not suggest that bundling has become a common practice yet.

Display advertisements, unlike the text ads that will be made available to Yahoo, do not depend as heavily on end users clicking on the advertisement for their effectiveness. Since display ads may contain graphics, video and other multimedia content, consumer impressions as well as clicks have value to advertisers. To the extent that Microsoft has a better quality overlay, Yahoo could find it more profitable to choose Microsoft's ads even if they have lower bid prices than Google because Microsoft's ads would be clicked on more often. Five one dollar ads that get clicked on are more valuable than any number of ten dollar ads that receives no clicks.

Competitive Effects Analysis

Any agreement between two dominant firms in an already concentrated market that results in a combined market share in excess of 80% raises serious competitive concerns. The agreement between Google and Yahoo has the potential to move the paid search market HHI from 5448 to 8528. Markets with an HHI in excess of 1800 are considered highly concentrated under the government's Horizontal Merger Guidelines. The Guidelines presume that mergers in highly concentrated markets are anticompetitive when they result in an HHI increase of more than 100. The agreement between Google and Yahoo is not a merger, of course, but serious concerns have been raised that the agreement will effectively

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googles-display-advertising/.

[14] Dawn Kawamoto, Study: Fox Interactive tops digital display ad market, cnet News (Aug. 27, 2008), http://news.cnet.com/8301-1023_3-10026578-93.html.

[15] *Id. See also,* Thomson Financial News, CORRECTED-MySpace Overtakes Yahoo in Display Ad Views -- Report, Forbes (Aug. 31, 2008), http://www.forbes.com/afxnewslimited/feeds/afx/2008/08/31/afx5374404.html

result over time in Google's acquisition of all or at least a substantial part of Yahoo's paid search business. Viewed in this light, one would have to conclude that the agreement, raising the HHI in an extraordinarily highly concentrated market by 3080, is presumptively anticompetitive.

Although Google has announced that it will no longer use minimum or reserve prices,[16] concerns have been raised about the ability of Google, either alone or in concert with Yahoo, to set prices through reserve prices. While it remains unclear whether Google's abandonment of reserve prices is permanent, with a market share in excess of 90%, there would seem to be little doubt that Google could dictate the terms on which advertisers would receive paid search. One could easily imagine that Google would require advertisers to purchase their display ads from Google in order to obtain paid search. While it may be feasible for the government to challenge such conduct as tying in the future, a successful challenge would occur only after the bundling had caused actual injury to participants in the marketplace. There is evidence that Google is already using its dominant position to discriminate against disfavored advertisers.[17]

Less frequently discussed, would be the loss of Yahoo as a source of competition for Google in the market for placement of ads on third party web sites. Should Yahoo exit the paid search market, it would likely result in Yahoo's departure from the market for placement of the same ads on third party web sites. Google pays web site owners a portion of the revenue derived from the ads the owners place on their site using AdSense. Without competition from Yahoo Publisher Network, Google would be in a stronger position to insist that the

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[16] *See* Treveor Claiborne, Quality Score Improvements, Inside Adwords (Aug.11, 2008), http://adwords.blogspot.com/2008/08/quality-score-improvements.html. Google will give advertisers feedback from the quality overlay process about the likelihood of their bid winning instead of setting reserve price. Given the lack of transparency in the quality overlay process, Google could simply advise advertisers to raise their bid prices, *i.e.,* the feedback could become a minimum price by another name.

[17] *See* Joe Nocera, Talking Business-Stuck in Google's Doghouse, New York Times (Sept. 12, 2008), http://www.nytimes.com/2008/09/13/technology/13nocera.html.

website owners accept a smaller share of the revenue.[18]

The anticompetitive concerns rest in large part on a question that cannot be answered from publicly available data, *i.e.,* will Yahoo abandon the paid search market and rely on Google for most, if not all, of the paid search advertisements displayed on its site? Yahoo has stated that it plans to continue its development of Panama and eventually wean itself off of Google's ads. Yahoo's apparent need for its own paid search engine in markets outside North America as well as its BOSS technology lend credibility to these statements of intent. Consistent with the statement of the parties, nothing in the redacted agreement obligates Yahoo to use any ads from Google. It strains credulity, however, to believe that Google would agree to an arrangement that gives its chief rival $800 million[19] to invest in efforts that would, if successful, reduce Google's market power.

Regardless of Yahoo's or Google's sincerity, Yahoo may nonetheless find taking a slice of the revenue from Google ads to be more profitable than keeping 100% of the revenue from its own ads. To the extent Google has more bidders than Yahoo, Google's winning bid prices will tend to be higher because greater demand for a limited product can be assumed to drive prices upward. Since a winning bid in Google's auction will not only receive placement on Google's search results page but also a chance to appear on Yahoo's,[20] some advertisers who might otherwise bid in both auctions may choose to bid only in Google's auction, a choice which can only diminish the value of Yahoo's independent paid search placements.[21]

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[18] Gauging the full effect of Google's enhanced power in this market is difficult since Google has a smaller share of this market to begin with, and it would still face competition from non-search providers such as Blogads.

[19] Verne Kopytoff, Google, Yahoo to Proceed with Ad Deal, SeattlePI.com (Aug. 28, 2008), http://seattlepi.nwsource.com/business/376975_google29.html.

[20] According to the parties, Google will not know whether an ad will receive placement on a Yahoo search result for a keyword until the moment that Yahoo requests the ad in response to a particular end user's request. Consequently, advertisers who to maximize the chances of their ads appearing alongside a Yahoo organic search result will still have to bid in both Yahoo's and Google's auctions.

[21] It is no doubt easy to exaggerate the transaction costs associated with placing bids for a keyword with all three paid search providers. It would seem that the major cost is

It is possible that Yahoo's algorithm for choosing whether to use Google ads will alleviate this problem, especially if the algorithm only uses Google ads when Yahoo has no ads of its own. Google and Yahoo have suggested that Yahoo will not have access to the bid price of the ads prior to making its decision to display the ads in response to a search query, so it is not inconceivable that the algorithm will be written to fill only blank space. But the algorithm is not publicly available, and it seems more than plausible that Yahoo will track how much it earns from its own ads as opposed to Google ads. The redacted agreement does not limit Yahoo to using Google ads only when it does not have a sufficient number of its own ads. If Yahoo learns from experience that Google ads tend to be more profitable than its own, then it seems likely that the algorithm would take this experience into account and begin to request Google ads to use instead of Yahoo ads rather than just to use when Yahoo does not have an ad of its own.

To date, Microsoft has failed to achieve a significant market share in paid search. Microsoft, however, has not fully exploited its dominant position in the web browser market in service of its efforts in paid search market. If brand loyalty to organic search engines is low, then simply making Microsoft's organic search engine the default choice for users of Internet Explorer could significantly erode Google's dominance in organic search, which would erode Google's dominance paid search. Earlier this year, for example, Hewlett-Packard agreed to make Microsoft's Live Search the default on its PC's.[22] Perhaps in reaction to this

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determining which keywords to bid on, and once that has been determined the same bid may be submitted to all three auctions. The process has been further simplified by the rise of marketing consultants who specialize in search engine optimization. Nonetheless, if bidding on Yahoo's Panama does not improve an advertiser's chances of appearing alongside a Yahoo organic search research result than a bid Google's AdWords, there is simply no reason for an advertiser to place a bid on Panama.

[22] *See* Thomas Claburn, Microsoft Strikes Search Deal with HP, InformationWeek (June 2, 2008), http://www.informationweek.com/news/internet/search/showArticle.jhtml?articleID=208401589. This observation raises the question of why Microsoft is not already engaging in such tactics generally to increase its market share in organic and paid search. Perhaps Microsoft fears that manipulating the search settings in Internet Explorer would create problems in its own antitrust case. Furthermore, it is not clear that such manipulation would work. The mere existence of the verb "to Google" suggests brand loyalty to Google. So it may be that Microsoft has chosen to test the tactic with HP's help rather than to simply

threat, Google has announced the development of its own web browser.[23]

Consistent with the characterization of the arrangement by Yahoo and Google, nothing in the redacted version of their agreement prohibits Yahoo from displaying ads from Microsoft or some future entrant into the paid search market. To date, Microsoft has not publicly attempted to take advantage of this opportunity. It could be argued that such an effort by Microsoft would be futile. Such an argument focuses on Google's advantage in number of advertisers and the concomitant advantage this gives Google in terms of bid price. The profitability of an ad for Yahoo, however, depends not only on the bid price but also whether the ad gets clicked on. To the extent that Microsoft has a better quality overlay, Yahoo could find it more profitable to choose Microsoft's ads even if they have lower bid prices than Google.

Entry and Efficiencies

A key question in evaluating this transaction is whether it will lead to the demise – or the resuscitation—of Yahoo. If the former, there is a concern that loss of the third major Internet platform could be of major significance, especially if entry is difficult, making it unlikely that someone would take Yahoo's place as a competitive Internet system. The absence of organic search results on which to display paid search advertising provides the chief barrier to entry. The evidence regarding the ease of entry into the organic search market is mixed. On the one hand, Yahoo estimated that new entrant would need at least $300 million for startup costs, implying that entry would be unlikely.[24] On the other hand, new entrants such as Cuil[25] have entered the organic search market since the announcement of the Google-Yahoo deal. Since Cuil does not currently provide its own paid search, it

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force Live Search as the default setting on Internet Explorer.

[23] *See* Heather Green, Google's Broadside Against Microsoft, BusinessWeek (Sept.15, 2008), at 62.

[24] Stephen Shankland, *Yahoo Seeks Ad Revenue by Fueling Others' Search Innovation,* cnet News, July 9, 2008, http://news.cnet.com/8301-1023_3-9986424-93.html.

[25] http://www.cuil.com/ (last visited Sept. 11, 2008).

could conceivably provide the organic search results on which to display the paid search from new entrant into the paid search market.

In other words, the evidence of whether a new entrant into the paid search market could get access to organic search results is mixed at best. Creating its own organic search engine could increase the cost of entry by as much as $300 million, but, as Cuil's entry into the organic search market suggests, new entry into organic search is not only possible, it is happening now. Cuil's entry into organic search also suggests that there may be more organic search providers in the future. If so, those new organic search providers will almost certainly be looking to partner with a paid search provider, and it is not inconceivable that a new organic search provider such as Cuil would choose to partner with a new entrant into paid search. At the same time, not too much should be read into the Cuil entry, in that it is recent, fringe, and entirely uncertain as to its prospects for becoming competitively significant.

Once a transaction in the nature of a merger is found to be anticompetitive, the discussion turns to whether it can be justified on the basis of new efficiencies it creates. It is difficult to see how the proposed agreement would create significant efficiencies that could serve as a defense. The agreement, at least in redacted form and as described by the parties, presupposes that both Google and Yahoo will remain in the paid search market and continue to incur the marketing, operational and research and development costs. Of course, advertisers would benefit from a slightly reduced cost of having to place bids in two auctions in order to have a chance for their ads to appear along side both Google and Yahoo organic search results, but the available evidence suggests that the cost of bidding in multiple search engines is quite small.

One could argue that agreement would enable Yahoo and Google to avoid some duplication of costs if Yahoo exits the paid search market, but there is not sufficient publicly available data to determine how much duplication exists, let alone whether these savings would exceed the harm to competition from the loss of Yahoo as a competitor, not it will create efficiencies by causing Yahoo to achieve lower costs or higher quality.

Comments on proposed remedies

We believe that the transaction could be blocked on antitrust grounds, based on the high level of concentration in search advertising, the lack of entry prospects, and the absence of a strong efficiencies story. Moreover, the background fear that the transaction could end up as a black hole that swallows up Yahoo, despite Yahoo's intentions to stay in business, may be sufficiently great to justify an injunction. However, as our discussion has shown, there are questions about virtually every part of the previous two sentences. It is possible that the transaction will throw off sufficient revenue for Yahoo to not only protect its core business during difficult economic times but to underwrite its plans to become a stronger competitor than it now is and that this is sufficiently important in this critical, highly concentrated, and extremely dynamic industry, to withhold the strongest sanction, which would be to block the transaction. We have not found sufficient information to conclude with certainty in either way. It may be possible, however, to permit the possible benefits of the transaction to accrue, while also protecting against the downside risks.

Simply prohibiting the agreement between Google and Yahoo would eliminate the potentially positive effects of the proposal. The procompetitive potential of the arrangement depends on Yahoo remaining in paid search. The government cannot compel Yahoo to do this. However, the government can insist, as a condition of its not taking a position resting on presumptions of illegality, on legally enforceable requirements that will ensure that Yahoo has an incentive to continue to develop and deploy Panama. These legally enforceable restrictions might include a consent decree that prohibits Yahoo from using Google ads (1) on organic search results outside North America and (2) on any third party web sites. Second, such a consent decree might also prohibit Google and Yahoo from setting minimum bid or reserve prices. And third, the decree could prohibit Yahoo from using Google ads when Yahoo has a sufficient number of ads of its own to fill the white space surrounding an organic search result on Yahoo's site. Finally, the government could insist that the share of revenue that Yahoo receives from each click be constant, *i.e.,* that the agreement does not reward Yahoo with a higher share of revenue for using more Google ads.

While these or similar conditions would go a long way toward insuring that Yahoo has sufficient economic incentives to remain in the paid search market, it remains to be seen whether it is possible to draft these remedies with sufficient simplicity and clarity to allow for effective enforcement by the Department of Justice. A simple injunction prohibiting Yahoo from using Google ads would not impose any of the regulatory burdens on the government that might come with a complicated scheme for limited restrictions. For example, it is not clear how the Department of Justice could determine whether Yahoo had ads in its own inventory but chose to use Google's instead. Presumably, Yahoo could disclose its algorithm for choosing to request ads from Yahoo to the government and that algorithm could be written in such a way to ensure that Yahoo ads are used first. It remains unclear how the government could be sure that the algorithm provided to it by Yahoo would in fact be the algorithm loaded into Yahoo's servers. We believe these issues can be worked out, but the details would be critical and difficult to negotiate as part of a consent decree.

Conclusion

The government should insist on a consent decree which preserves Yahoo's incentives to remain in the paid search market. If such a consent decree cannot be achieved, then the government should seek an injunction to prevent Google and Yahoo from implementing their agreement. The publicly available data, including the briefings provided to AAI by the parties, do not rebut the concerns that the Google-Yahoo agreement is anticompetitive. Such concerns would arise in any case where the top two firms in a highly concentrated market reach an agreement that potentially gives the dominant firm a market share in excess of 90%. The parties' statements of good intent cannot be relied upon to override the economic incentives that may be generated by this agreement to engage in what may turn out to be anticompetitive conduct.

Appendix

On June 16, 2008, AAI raised seven questions about the proposed transaction between Google and Yahoo http://www.antitrustinstitute.org/Archives/google7question. Since that time, the DOJ has opened what appears to be a serious investigation and we have had our own discussions with Google, Yahoo, Microsoft, and others in order to answer the seven questions and consider other possible antitrust concerns. Here is what we have learned in the interim.

Seven Questions with Tentative Answers

1. How will the agreement affect competition between the Google, Microsoft, and Yahoo platforms? *Would the deal be reasonably likely to lead to the reduction of the number of independent search advertising competitors from three to two, a circumstance that almost always violates the antitrust laws?*

Google, Microsoft, and Yahoo are not just advertising distributors. All three provide competing platforms for information collection, processing and distribution, e.g., email, chat and calendaring services, and they have the potential for competing with one another well into the future as new uses of the Internet are developed. From this broader perspective, advertising may be less a separate market than a component part of broader system. A rough analogy might be the check out lanes in a grocery store.

While this expansive view of competing platforms has its attractions, especially given the advent of cloud computing, it is probably too abstract and overbroad to allow for meaningful analysis, and there is very little if any evidence that any of the market participants share this perception. But even if there is platform competition, that does not mean that it is not also appropriate to focus on the narrower relevant advertising market.

As of this writing, the focus of antitrust concern has been Yahoo's role as a provider of paid search advertising. Google, Microsoft, and Yahoo are the three major providers of paid search. Google has dominated paid search since its entry into the market, both in terms of market share (by dollar and by volume) and innovation, although Yahoo's reentry into the market with "Panama" and its announcement of BOSS (Build your Own Search Service) technology demonstrate that Yahoo does provide a source of competition in terms of innovation.

Pricing by all three providers is set by auction, and it is not at all clear that the elimination of Yahoo as a competitor would have an impact on the total cost an advertiser would pay, assuming the advertiser currently bids in all three auctions. Assume you—an advertiser-- have the winning bid on "flowers" with all three paid search engines at $1 per click, and you get one click from each organic search engine, your total cost is $3 and revenue to each provider is $1. The elimination of Yahoo as competitor could mean that the advertiser still pays a total of $3, only now, Google or Microsoft gets $2 of revenue.

Simple price theory would predict that the loss of a competitor in a highly concentrated market would result in a price increase, and more bidders in any given auction would generally result in a higher price, but the evidence is not clear. For example, a recent study both predicts a 22% price increase from the loss of competition from Yahoo and points out that Yahoo, a distant number two to Google, currently receives a higher price than Google for commonly searched keywords and brand names.[26]

Minimum bids (reserve prices) provide another area of concern. Google has announced that plans to replace minimum bids with feedback about ad quality as determined by Google's quality overlay. This change should, however, still have the effect of raising bid prices since the clearest way for an advertiser to compensate for a low ad quality score is to raise the bid price. The presence of Yahoo in the market may act as a constraint on Google's ability to use minimum bids or the feedback from its quality overlay to extract monopoly profits from

[26] Michael Learmonth, *Google Will Increase Yahoo Search Rates 22%, Says SearchIgnite,* Silicon Alley Insider, July 15, 2008, http://www.alleyinsider.com/2008/7/google-will-increase-yahoo-search-rates-22-says-searchignite. SearchIgnite is "is a leading search bid management and portfolio optimization technology that uses complex algorithms to help marketers and advertising agencies achieve their ROI metrics across all the major engines." SearchIgnite: About Us, http://www.searchignite.com/about.aspx (last visited July 31, 2008). It is not clear whether SearchIgnite produced its report independently or at the behest of one of the interested parties.

advertisers. Currently, an advertiser may choose to give up its bid on Google secure in the knowledge that it has a chance of winning the auction on Yahoo and Microsoft, even though that will mean also giving up the potential to be seen and clicked on by 60% to 70% of end users. The elimination of Yahoo as competitor, however, would that advertiser must bid the higher amount or give up roughly 90% of end users. Finally, with only two competitors in the market, it will be easier for each competitor to observe and, therefore, to follow the other's lead on prices.

If Yahoo does not exit the market, then its agreement with Google might be pro competitive. After all, advertisers will have at least two competing products to get their paid search advertisements in front of end users using Yahoo's organic search. Currently, they have only one. Since Yahoo won't know which specific ads it will receive from Google until after it decides to asks Google for the ads, an advertisement rejected by Yahoo in its auction may still appear on alongside a Yahoo organic search result. Furthermore, advertisers unhappy with the terms offered by Yahoo may still bid for a chance to appear on Yahoo by placing bids with Google, and advertisers dissatisfied with Googles terms would not have to give up their chance of appearing on Yahoo since they could place their bid with Yahoo directly.

Arguments suggesting Yahoo will not exit the market point to Yahoo's need for a source of paid search advertising revenue in markets outside the US and Canada as well as the fact that Yahoo does not have to share the revenue on advertising generated by Panama. However, advertisers outside North America may place bids for ads to be shown inside the territory and Section 2.1.1 of the agreement specific provides that Yahoo may display Google ads on its US and Canadian properties regardless of where the end users are located, and it is not at all clear which Yahoo properties are located within the US and Canada. We cannot tell from the redacted agreement of the parties, for example, whether Yahoo's UK portal is outside North America. Furthermore, nothing in the agreement between Yahoo and Google prevents Yahoo and Google from extending its outside North America in the future. Similarly, 100% of the revenue from $1 ad generated by Panama would still be worth less to Yahoo than 50% of $3 ad provided to Yahoo by Google. Arguments suggesting that Yahoo will exit the market assume that the use of Google provided ads will prove more profitable due to Google's ability to obtain higher priced bids, larger pool of bidders, better quality overlays, and the savings to Yahoo from ending research and development on Panama.

There is not enough publicly available evidence to predict with any confidence whether its agreement with Google will lead Yahoo to exit the market. Two critically important, but non-public pieces of information are the results of the test conducted by Yahoo using Google's AdSense in April and the algorithm that Yahoo will use to determine whether and how to use a Google ad in response to an organic search request.

2. If someone invented a better method of searching the Internet, how long would it likely take to implement the invention and be able to compete effectively with Google, Yahoo and Microsoft for advertisers? *Regardless of whether the relevant market consists of competing systems or competing search advertising algorithms, will Google not only strengthen its dominant position on this critical component for business on the Internet but also be protected from new entry?*

How long it would take a new entrant to compete effectively for advertisers would depend largely on its ability to gain access to an organic search engine. Google has a dominant share of organic search, followed by Yahoo and Microsoft, respectively. All three currently use their own paid search engines, although insofar as Yahoo's agreement with Google is non-exclusive there is a chance that it might accept ads from a new paid search provider. Ask, the fourth place organic search provider, relies on Google for paid search. The details of the agreement between Ask and Google are unknown. Nonetheless, it seems likely that a new entrant into paid search would have to come into the market with its own organic search engine or partner with a new entrant in organic, *e.g.,* Cuil.[27]

In short, what would most likely protect Google from new entry is the closing of Yahoo to alternative paid search providers.

3. Will the agreement enable creation of new barriers to entry? *Will Google's enhanced share of Internet advertising entail the power to create new barriers to entry such as long- term exclusive*

[27] Cuil launched its search engine at the end of July 2008.

contracts with advertisers or content providers which could harm either the search advertising market or competition among systems?

To the extent the agreement opens Yahoo's organic search to competing paid search providers, it actually lowers barriers to entry. Long-term exclusive contracts would create new barriers to entry, and the loss of Yahoo as an alternative for advertisers and content providers would enhance the prospect of such conduct by Google.

That said, it bears repetition that the agreement does not call for or by its own terms necessarily lead to Yahoo's exit from the paid search market. The argument that Yahoo will exit assumes that Yahoo will find it more profitable to rely on Google ads rather than to generate its own, and the evidence to support or disprove that assumption is not yet publicly available.

Nonetheless, if the DOJ does not challenge the agreement between Yahoo and Google, the enhanced risk of Google obtaining and using monopoly power in the paid search does suggest, at the least, the need for increased vigilance of Google's conduct in the future.

4. **To what extent does search advertising compete with display advertising?** *The decision to allow Google's acquisition of Double-Click would suggest these are separate markets, but what does post-merger experience have to teach us?*

The conventional wisdom on all sides seems to be that the bundling of display and paid search advertising is a question of when, not if. For the convergence to happen, however, will require end users to accept a new search interface. The vast majority of end users use Google, and Google believes that the absence of graphics in its search results is part of what attracts end users. Ask, by way of contrast, has heavily promoted its use of multimedia in search results without much success in attracting end users.

5. **What percentage of search and display advertising is now placed through intermediaries, such as advertising agencies?**

Intermediaries include not only advertising agencies but also firms specializing in search engine optimization, *i.e.,* helping business get their links placed in organic and paid search results. If intermediaries purchase a significant quantity of Internet advertising, then special attention needs to be focused on their particular purchasing decisions and needs in addition to that of their clients. There does not appear to be any publicly available data as to the quantity of paid search placed through intermediaries versus directly with Google, Yahoo, and Microsoft.

6. **How much of a transaction cost savings would arise if advertisers or their intermediaries were to deal with two search companies?** *In other words, what are the costs associated with having advertising placed through more than one company? By the same token, what are the costs to content providers for carrying ads placed by more than one provider? Do many or most of these intermediaries currently deal with only one search company? Is there a strong preference for "one stop shopping" for their varied clients? And how will the proposed auction system affect this dynamic?*

The transaction costs of bidding on all three paid search advertising auctions seem to be quite small, consisting chiefly of filing out a short form on each provider's web site. Numerous third party intermediaries exist, but it appears that the value added by these organizations is not in the mechanics of filling out the forms, but rather in formulating the advertisement (including how to optimize the advertiser's quality overlay result) and choosing the keywords to bid on. These may be large costs, but we have not found any evidence that they are repeated for each paid search providers. In other words, a reduction in the number of paid search providers would not significantly reduce the transaction costs of advertisers or their intermediaries.

7. **Would a combined Google-Yahoo produce a strong monopoly position in search advertising that would enable them to leverage themselves into a dominant position in display advertising?**

Dominance in both forms of Internet advertising could be expected to result in even higher prices to advertisers and lower shares of revenue to content providers since neither would have access to substitute products. Depending on the source of data, Yahoo has a 10-20%

share of the display ad market. Google has a market share of about 1%. This makes Yahoo either the first or second largest provider in this market. The display ad market is much more fragmented than paid search. Nonetheless, the paid search appears to be the more valuable product to advertisers. The consensus opinion appears to be that the bundling of display and paid search is a question of when, not if it happens. Consequently, the creation of a monopoly position in paid search would create a significant risk of Yahoo and Google leveraging that position into a dominant position in display advertising as well.