KENNESAW STATE UNIVERSITY
COLES COLLEGE OF BUSINESS
Bagwell Center for the Study of Markets and Economic Opportunity

Commentary

Title:

"Basic Economic Theory and the DOJ's Google Lawsuit"

Author(s):

Brian Albrecht, Assistant Professor of Economics, Bagwell Center Affiliated Faculty

March 2021

Just before the November 2020 election, the United States Department of Justice finally filed a lawsuit against the monster Google for anti-competitive behavior.[1] In this Commentary, I want to discuss some basic economic theories that we have at our disposal, "off the shelf," to make sense of the U.S. Department of Justice's lawsuit against Google. I do not mean this to be a proclamation of "what economics has to say about X," but merely just to help us frame the issue.

The two main complaints brought by the DOJ were that: (1) Google paid phone manufacturers for Google to be the default search engine and (2) the agreements were "exclusive" and prevented the phone manufacturers from dealing with other search engines.

Default Status

Let's start with the economic concerns of Google paying phone manufacturers (Apple, in particular) to be the default search engine installed on phones. While there is not a large literature on the economic effects of default contracts, there is a large literature on something that I will argue is similar: trade promotions – such as slotting contracts – where a manufacturer pays a retailer for shelf space.[2] Despite all the bells and whistles of the Google case, I will argue that, from an economic point of view, the contracts that Google signed are just trade promotions. No more, no less. And trade promotions are well-established as part of a competitive process that ultimately helps consumers.

However, it is theoretically possible that such trade promotions hurt customers, so it is theoretically possible that Google's contracts hurt consumers. Ultimately, the theoretical possibility of anticompetitive behavior that harms consumers does not seem plausible to me in this case.

There are two reasons that Google paying Apple to be its default search engine is similar to a trade promotion. First, the deal brings awareness to the product, which nudges certain consumers/users to choose the product when they would not otherwise do so. Second, the deal does not *prevent* consumers from choosing the other product.

In the case of retail trade promotions, a promotional space given to Coca-Cola makes it marginally easier for consumers to pick Coke, and therefore some consumers will switch from Pepsi to Coke. But it does not reduce any consumer's choice. The store will still have both items.

This is the same for a default search engine. The marginal searchers, who do not have a strong preference for either search engine, will stick with the default. But anyone can still install a new search engine, install a new browser, etc. It takes a few clicks, just as it takes a few steps to walk down the aisle to get the Pepsi; it is still an available choice.

How should we think of a default option in economic terms? The simple idea of a default is that it makes the default search engine less costly and so to the marginal users it is effectively the same as a price discount for using Google over another search engine. But some customers will have to incur costs to change the default app.

So if we were to stop the analysis there, we could conclude that some individual consumers are better off while others are worse off. Collectively, consumers as a group are possibly better

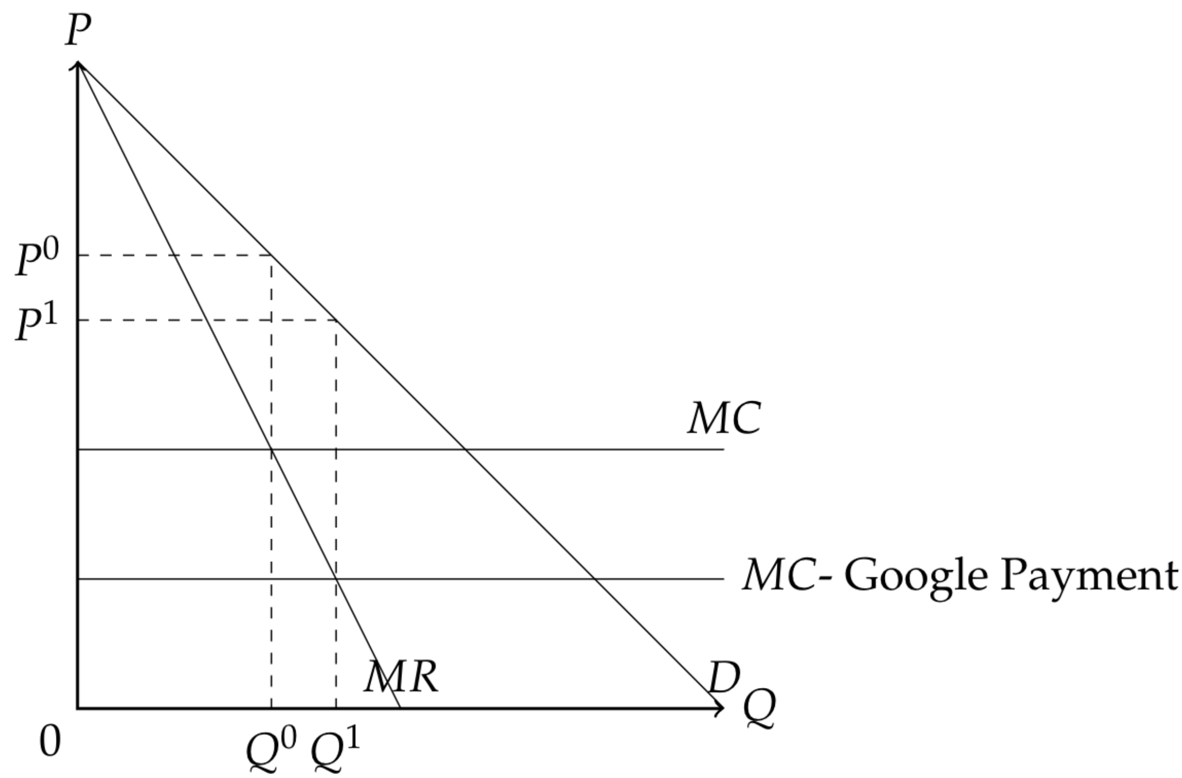
[1] United States v. Google LLC, No. 1:20-cv-3010 (D.D.C. Oct. 20, 2020) (Compl.); Press Release, DOJ, Statement of the Attorney General on the Announcement Of Civil Antitrust Lawsuit Filed Against Google (Oct. 20, 2020), *https://www.justice.gov/opa/pr/statement-attorney-general-announcement-civil-antitrust-lawsuit-filed-against-google*.

[2] See Klein, Benjamin, and Joshua D. Wright. "The Economics of Slotting Contracts." *The Journal of Law & Economics*, vol. 50, no. 3, 2007, pp. 421–54.

off or worse off. But we also need to remember that this contract is part of a more general competitive process. The retail stores are also competing with one another, as are smartphone manufacturers.

Despite popular claims to the contrary, Apple cannot charge anything it wants for its phone. It is competing with Samsung, LG, and even Google. Therefore, Apple has to pass through some of Google's payments to customers to compete with these other manufacturers. Prices are lower because of this payment. Google is effectively subsidizing the iPhone. This cross-subsidization is a part of the competitive process that ultimately benefits consumers through lower prices.

These contracts lower consumer prices, even if we assume that Apple has market power. Those who recall your Econ 101 know that a monopolist chooses a quantity where marginal revenue equals marginal cost. With a payment from Google, the marginal cost of producing a phone is lower, therefore Apple will lower its price and increase its quantity sold. To see this in the simplest model, assume the payment from Google to Apple is per-phone. This is shown below:



Since payment is a per-unit subsidy to Apple, the price goes from P0 to P1 and quantity from Q0 to Q1. Consumers gain through lower prices and greater quantities (for those who really recall their Econ 101, these gains are increases in Consumers' Surplus).

Now let's think a little longer term. Suppose Apple develops a reputation for good quality products. People use the default more than on other phones because people trust Apple's opinion. (I'd argue this knowledge is *the* unique thing that Apple sells. It is ready to go out of the box.) In that world, over time, customers become more responsive to the default search.

In the extreme, suppose everyone keeps the default. Is this bad for consumers, since they are "stuck" with whatever Apple chooses? No. Apple can now go to Google and say "We have all of these customers who will use **whatever** search engine we tell them to. They would even use Bing if we tell them to! Pay us even more or we will go to Microsoft." This is not an idle threat. Microsoft has plenty of money to compete with Google.

So Apple can effectively bargain for the customers for an even larger subsidy from Google. And this is then passed onto customers through lower prices on iPhones.

This is a simplification of the problem; it's a model. But it should give us pause about the lawsuit. If we are using a consumer welfare standard, how is this arrangement bad for consumers?

Exclusive Dealings

The second main complaint brought by the DOJ centered around concerns that parts of Google's agreements prohibited manufacturers from dealing with Google's competitors. As the complaint states: "In many cases, the agreements relating to mobile devices go even further, expressly prohibiting (1) the preinstallation of any rival general search services, and (2) the setting of other defaults to rival general search engines. This means that Google is the only preset default search provider preinstalled on the device."

Now, exclusive dealings may give us more concern, as a form of anti-competitive behavior, than default status. This is explicitly about keeping certain players out of the market. That has much more of the feeling of anti-competitiveness than paying Apple and its customers money.

However, there's fair reason to believe that these exclusive contracts intensify competition.[3] Again, it is important to see this as part of a more general system of competitive contracting, not just pricing. Apple could also sign contracts with Microsoft to default to Bing.

These agreements contractually assure Google that Apple will not turn around and do something to send customers to Microsoft. Because Apple can promise this, Google will have more of an incentive to raise its offer to Apple. Again, this type of agreement allows Apple and ultimately consumers to extract more surplus.

Now I do not mean to imply that no actions can ever be anti-competitive. Price fixing does occur. As I argued before, the real problem is that the monopoly/innovators like Google and Apple aren't able to extract enough of the surplus they could generate through a simple price.

But paying money to other firms and restraining each other's behavior are completely natural parts of a competitive process. Google is simply offering better terms to Apple and customers than Microsoft can offer.

One of the surprising things about markets is that buyers' and sellers' incentives can be aligned, even though it seems like they must be adversarial. Companies can indirectly bargain for their consumers. Commenting on *Standard Fashion Co. v. Magrane-Houston Co.*, where a retail store contracted to only carry Standard's products, Robert Bork (1978, pp. 306–7) summarized this idea as follows:

> The store's decision, made entirely in its own interest, necessarily reflects the balance of competing considerations that determine consumer welfare. Put the matter another way. If no manufacturer used exclusive dealing contracts, and if a local retail monopolist decided unilaterally to carry only Standard's patterns because the loss in product variety was more

---

[3] Klein, B., & Murphy, K. M. (2008). Exclusive Dealing Intensifies Competition for Distribution. *Antitrust Law Journal*, *2*, 433–466.

> than made up in the cost saving, we would recognize that decision was in the consumer interest. We do not want a variety that costs more than it is worth … If Standard finds it worthwhile to purchase exclusivity … the reason is not the barring of entry, but some more sensible goal, such as obtaining the special selling effort of the outlet.[4]

How Trade Promotions Could Harm Customers

Since Bork's writing, many theoretical papers have shown exceptions to Bork's logic. There are times that the retailers' incentives are not aligned with the customers, and we need to take those possibilities seriously. The most common way to show the harm of these deals (or more commonly exclusivity deals) is to assume:

1. There are large, fixed costs so that a firm must acquire a sufficient number of customers in order to enter the market; and
2. An incumbent can lock in enough customers to prevent the entrant from reaching an efficient size.

Consumers can be locked-in because there is some fixed cost of changing suppliers or because of some coordination problems. If that's true, customers can be made worse off, on net, because the Google contracts reduce consumer choice.

To understand the logic, let's simplify the model to just search engines and searchers. Suppose there are two search engines (Google and Bing) and 10 searchers. However, to operate profitably, each search engine needs at least three searchers. If Google can entice eight searchers to use its product, Bing cannot operate profitably, even if Bing provides a better product. This holds even if everyone knows Bing would be a better product. The consumers are stuck in a coordination failure.

We should be skeptical of coordination failure models of inefficient outcomes. The problem with any story of coordination failures is that it is highly sensitive to the exact timing of the model. If Bing can preempt Google and offer customers an even better deal (the new entrant is better by assumption), then the coordination failure does not occur.

To argue that Bing could not execute a similar contract, the most common appeal is that the new entrant does not have the capital to pay upfront for these contracts, since it will only make money from its higher-quality search engine down the road. That makes sense until you remember that we are talking about Microsoft. I'm skeptical that capital is the real constraint. It seems much more likely that Google just has a more popular search engine.

The other problem with coordination failure arguments is that they are almost non-falsifiable. There is no way to tell, in the model, whether Google is used because of a coordination failure or whether it is used because it is a better product. If Google is a better product, then the outcome is efficient. The two outcomes are "observationally equivalent." Compare this to the standard theory of monopoly, where we can (in principle) establish an inefficiency if the price is greater than marginal cost. While it is difficult to measure marginal cost, it can be done.

There is a general economic idea in these models that we need to keep in mind. If Google takes an action that prevents Bing from reaching efficient size, this could lead to a technological externality – sometimes called a network effect – and so that action may hurt consumer welfare.

I'm not sure how seriously to take these network effects. If more searchers allow Bing to make a better product, then literally any action (competitive or not) by Google is a technological

---

[4] Bork, Robert H. *The Antitrust Paradox: A Policy at War with Itself*. New York: Basic Books, 1978. Print.

externality. Making a better product that takes away consumers from Bing lowers Bing's quality. That is, strictly speaking, an externality. Surely, that is not worthy of antitrust scrutiny simply because we find an externality.

And Bing also "takes away" searchers from Google, thus lowering Google's possible quality. With network effects, bigger is better and it may be efficient to have only one firm. Surely, that's not an argument we want to put forward as a serious antitrust analysis.

Put more generally, it is not enough to simply identify some externality and then have the antitrust authority come and try to sort matters out. For me to take the network effect argument seriously from an economic point of view, compared to a legal perspective, I would need to see a real restriction on consumer choice, not just an externality. One needs to argue that:

1. No competitor can cover their fixed costs to make a reasonable search engine; and
2. These contracts are what prevent the competing search engines from reaching size.

I am skeptical the DOJ will be able to coherently and persuasively make that argument and so I am skeptical of the case on economic grounds.

In closing, I want to make clear that nothing in my argument implies that actions can never be anti-competitive or that antitrust should not exist. Price fixing does occur and should be subjected to antitrust action. But the Google lawsuit appears to be more for political theater, an antitrust ribbon cutting ceremony devoid of real economic impact, compared to some consumer-welfare-maximizing antitrust policy.