

REPORTS OF ANTITRUST'S DEATH HAVE BEEN GREATLY EXAGGERATED:

Economics, Law, and Technology in the Supreme Court's *Amex* Decision

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EXECUTIVE SUMMARY

This brief provides an economic and legal analysis of the Supreme Court's decision in *Ohio v. American Express Co.* and discusses the implications of the case for technology platforms. Antitrust revisionists — also called neo-Brandeisians or Antitrust Hipsters — claim this precedent will devastate antitrust law and immunize Big Tech from effective scrutiny. Using the Court's novel economic framework, the facts of the case, and data on the stock market reaction to the decision, this brief argues that *Amex* is a red herring for the antitrust revisionist movement. Misconceptions about the case arose from a refusal to acknowledge the existence of two-sided markets, the difference between direct and indirect network effects, and the purpose of subsidizing one side of a market at the expense of the other. Furthermore, when predicting how this decision will affect the tech giants, many analysts have overestimated the Court's new standard for consumer harm and conflated two-sided transaction and non-transaction markets. In actuality, the economics of two-sided markets are not too complex for the legal system to grasp and technology platforms are not guaranteed to avoid antitrust liability.

INTRODUCTION

Prior to the invention of refrigeration, various methods were used to preserve fish long enough for inland transportation. Herring that was split, salted, dried, and smoked to the point of being partially-cooked and reddish-brown in color would keep for months but was notoriously pungent; it was known as red herring. In 1807, radical journalist William Cobbett published a childhood story about a time he used red herring as a decoy to throw some hounds off the scent of a hare. The tale was a metaphor for how the press was being misled about a supposed defeat of Napoleon to distract the public from domestic affairs.ⁱ

Last month, the Supreme Court handed down its decision in *Ohio v. American Express Co.*, unintentionally serving up its own red herring for the antitrust revisionist movement.ⁱⁱ By a 5-4 majority that broke down along party lines, the Court ruled that the credit card issuer did not violate federal antitrust law by employing antisteering provisions in its merchant contracts. Many analysts, Court-watchers, and antitrust activists believe the decision has significantly weakened antitrust regulation in general and, in particular, immunized the tech giants — Facebook, Apple, Amazon, Microsoft, and Google — from effective scrutiny at a time when their power is causing growing public concern.ⁱⁱⁱ

But it is far from clear that Big Tech will be exempt from antitrust liability going forward, and the ruling was probably even pro-competitive for the credit card market.^{iv} There are a few mistakes that have caused analysts to over-interpret the decision, including:

1. An unwillingness to differentiate between **one-sided** and **two-sided** markets.
2. An under-appreciation of the difference between **direct** and **indirect** network effects.
3. A failure to distinguish between two-sided **transaction** and **non-transaction** markets.

4. An incorrect interpretation of the Court's position on **gross vs. net** consumer harm.

This brief will address each of these misconceptions and offer a more sober economic analysis of the *Amex* ruling, its implications for future antitrust cases, and the intersection of multisided markets and the technology industry.

THE ECONOMICS OF MULTISIDED MARKETS

Before venturing into the significance of the *Amex* ruling, a brief overview of the basic case facts is in order. American Express charges higher merchant fees than its competitors to offer higher benefits to its cardholders. Merchants that accept American Express have an incentive at the point of sale, then, to get customers to switch from American Express to a lower-fee credit card. To prevent this free riding, American Express includes “antisteering provisions” in its contracts which function as a gag order — merchants cannot tell customers about their fees or incentivize customers to use a different credit card.

Are these antisteering provisions anticompetitive? Historically, the courts have been sympathetic to antitrust claims for horizontal restraints (i.e., between competitors) and skeptical of claims for vertical restraints (i.e., between firms at different points in the supply chain). But in this case, the District Court found that American Express's actions were anticompetitive and a violation of federal antitrust law.^v The case was then appealed to the Second Circuit, which overturned the decision.^{vi} The key difference in reasoning between the two courts was whether the credit card market should be defined as a one-sided market or a two-sided market.^{vii}

The number of “sides” refers to the number of distinct customer groups a business serves. Most markets are one-sided, but some — such as the credit card market — are two-sided. In the latter

case, the company’s goal is to bring two different groups of customers together to enable them to interact or transact with each other. For example, credit card issuers need both merchants and cardholders to adopt their credit cards for transactions to occur. But there is a chicken and egg problem: customers only want to carry credit cards that are widely accepted and merchants only want to accept credit cards that are widely carried.

This shows why two-sided markets are hard to get started but valuable once created. Economists call the interdependence between the two sides an *indirect network effect*. As one side of a network grows, the value of the network to a user on the other side grows as well (these are also known as “cross-side exchange benefits”). *Direct network effects*, by contrast, occur when the value of the network to a user scales with the size of their own side (these are also known as “same-side exchange benefits”; think of telephone systems or fax machines).

To overcome the chicken and egg problem and leverage the indirect network effects of two-sided markets, operators often identify one side as the “subsidy side” and the other side as the “money side.” Market operators want to subsidize the side with a higher elasticity of demand (i.e., quantity demanded is more sensitive to price) and pay for the cost of that subsidy by charging the money side. As price goes down on the subsidy side, participation goes up, which increases the value of the service to the money side. For credit cards, the cardholders are the subsidy side (with some even paying a negative price after earning rewards such as airline miles or cash back) and merchants are the money side (with their fees paying the majority of the cost of the transaction).

Multisided markets can also be divided between *transaction* and *non-transaction* markets. The credit card market is a two-sided *transaction* market, which means credit card issuers facilitate a sale between merchants and cardholders. In this market, the unit of sale is the credit card transaction. Businesses that operate two-sided *non-transaction* markets — such as television networks, newspa-

pers, and social media platforms — facilitate interaction but not sales between customer groups.

These economic realities formed the foundation for legal interpretations of the *Amex* case, which are the focus of the next section.

ANTITRUST AND THE *AMEX* DECISION

Following the Supreme Court’s decision in favor of American Express, Tim Wu, a professor at Columbia Law School, published an op-ed^{viii} in *The New York Times* arguing that the ruling “devastates antitrust law.” But Wu omits half of American Express’s market when describing its business strategy:

The trial court in this case, after a full trial, found direct evidence that American Express’s gag orders were anticompetitive and thus an illegal restraint on trade. This included evidence that the gag order allowed American Express to raise its fees 20 times in five years.

What Wu fails to mention is that those increases in merchant fees were accompanied by increases in cardholder benefits. American Express’s unique selling proposition in the credit card market is that it offers higher rewards to cardholders to encourage higher spending. Merchants benefit from this practice by making bigger sales, but the flipside is that Amex also charges them a higher fee per dollar to pay for the cardholder rewards. You can’t have the higher cardholder spending without the higher merchant fees.

The traditional test for antitrust cases is to find evidence of higher prices, lower output, or a decrease in quality.^{ix} Based on that test, the Court in *Amex* reasoned that if a company passes on revenue from one customer (i.e., merchants) to another customer (i.e., cardholders) without taking a big rake, then it is not abusing its market power; it is just adjusting relative prices between customer groups. The decision is clear on this point:

[American Express's] increased merchant fees reflect increases in the value of its services and the cost of its transactions, not an ability to charge above a competitive price. It uses higher merchant fees to offer its cardholders a more robust rewards program, which is necessary to maintain cardholder loyalty and encourage the level of spending that makes it valuable to merchants.^x

As for nonprice consumer welfare metrics, credit card transaction volume rose by 30 percent between 2008 and 2013 and quality improved, with low-income customers benefiting from free banking and card-payment services and higher-income customers enjoying more premium card categories with higher rewards.^{xi} By definition, market power is “the ability to raise price profitably by restricting output.”^{xii} As Joshua Wright, a professor at George Mason University’s Antonin Scalia Law School, observed, “Reminder to those suggesting the SCOTUS decision is the end of antitrust: monopolists reduce output. Output went up.”^{xiii}

As Gus Hurwitz, an assistant professor of law at Nebraska College of Law, noted,^{xiv} it is deeply ironic that many dissenting observers and pundits are harping on price impacts alone when the *raison d’être* of the antitrust revisionist movement is to argue that the courts rely too heavily on this one factor, to the exclusion of a wider variety of potential consumer harms, such as output, quality, and excessive concentration of political power.^{xv}

The Court did note, however, that American Express’s merchant price increases “were not wholly offset by additional rewards expenditures or otherwise passed through to cardholders, and resulted in a higher net price.”^{xvi} Based on the Court’s reasoning, the most important question in analyzing two-sided markets is how increasing the price on one side of a transaction affects the net price across both sides. Unfortunately, neither American Express nor its critics provided a reliable way of measuring the net price in this situation, according to the U.S. District Court that initially handled the litigation.^{xvii} So we don’t know whether the price increases were offset by, say, 10

percent or 90 percent. In attempting to ascertain competitive harm, this detail matters greatly.

American Express overcame this empirical omission by arguing that the slightly higher net price, combined with the higher level of output, was the result of an increase in demand, not an abuse of market power.

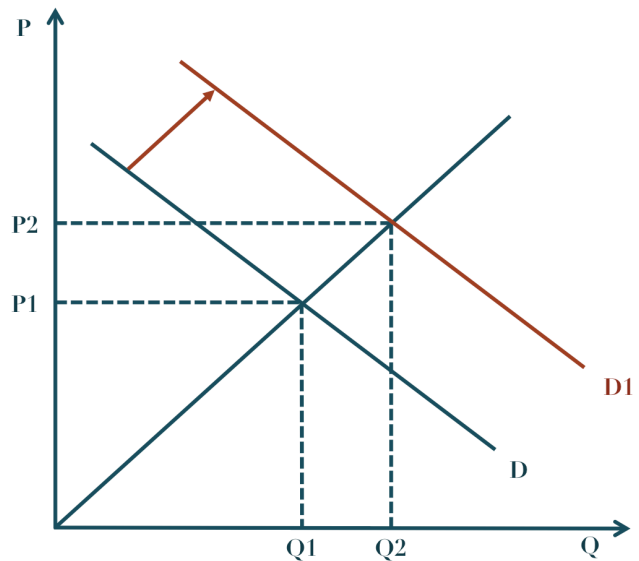


Figure 1: The change in price (P_1 to P_2) and quantity (Q_1 to Q_2) associated with an outward shift of the demand curve (D to D_1).

Harkening back to Economics 101, we can recall that an outward shift in the demand curve results in both an increase in output and price. Increases in consumer income or the number of consumers would increase demand, as would increases in the price of competing payment methods. In the context of *Amex*, this argument is consistent with changes in the credit card market since the trough of the Great Recession.^{xviii} As Scott Sumner, the chair of monetary policy at the Mercatus Center at George Mason University, constantly implores: never reason from a price change.^{xix} Instead, we should look for the supply and demand shifts that *cause* prices to change.

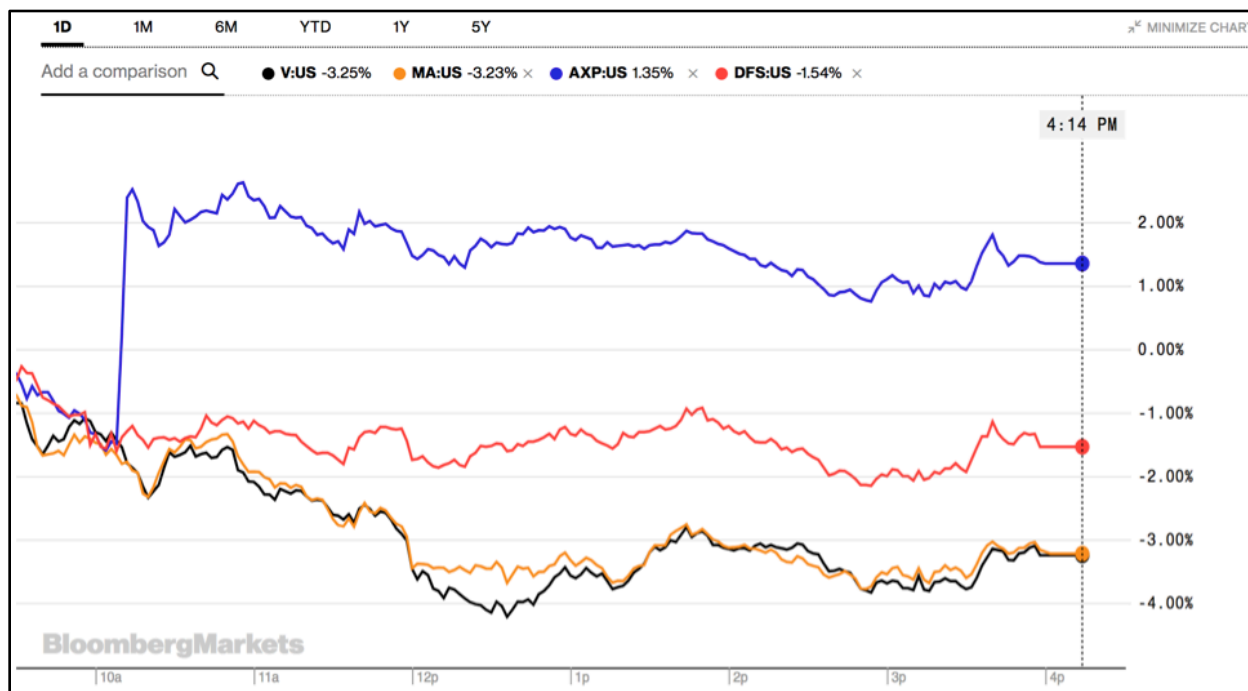


Figure 2: Changes in stock prices of Visa (V), Mastercard (MA), American Express (AXP), and Discover Financial Services (DFS) on 25 June 2018. Source: <https://www.bloomberg.com/markets/stocks>.

FOLLOW THE MONEY

So the Supreme Court ruled that the antisteering provisions did not constitute anticompetitive behavior. *Cui bono?* To assess the impact of this decision on consumer welfare and the level of competition in the credit card industry, it would be helpful to look at changes in stock prices following the ruling *across the entire industry*.

Unsurprisingly, this decision boosted American Express's market capitalization to the tune of \$1.13 billion. But this gain was more than offset by losses from competitors Visa, Mastercard, and Discover. On net, the credit card industry lost \$15.16 billion in market value on the day of the ruling.^{xx} These losses mean investors expect the aggregate profitability of this oligopoly to be *lower* in the future, which will likely redound to the benefit of both merchants and cardholders. How could this decision simultaneously stamp out competition in the industry and make it less profitable? The next section, will dig deeper into the implications of *Amex* for the technology industry and why they are not as clear-cut as many presume.

GROSS VS NET CONSUMER HARM

The most significant error that Antitrust Hipsters make in their interpretation of the *Amex* decision is overestimating how high the Supreme Court has set the bar for future antitrust cases in two-sided markets. Many of them claim that plaintiffs now need to prove that *both* sides in a market were harmed. This is not true.

In a March op-ed for *The New York Times* following oral arguments, Lina Khan, the director of legal policy at the Open Markets Institute, used a hypothetical example from the ride-hailing industry to make this claim:^{xxi}

If the Supreme Court ratifies the Second Circuit's approach, platforms will be able to engage in anticompetitive activity with one set of users, so long as they can plausibly claim that harmful conduct enabled them to benefit another group. Say, for example, that Uber prohibited its drivers from also serving rivals like Lyft, suppressing driver income. Under

the current approach, these exclusive agreements would likely violate antitrust law. But under the Second Circuit’s analysis, the case would go nowhere unless plaintiffs could show that this practice also harmed riders. (emphasis added)

But Khan’s interpretation of the Court’s analysis in this hypothetical situation is self-contradicting. She is correct in the beginning to state that the courts would want to see benefits and harms roughly net out between customer groups in a single two-sided market. In the case of ride-hailing exclusivity agreements, that means riders would need to *benefit* about as much as drivers are harmed to avoid regulatory action. It is not necessary, as Khan claims, to prove that riders were also harmed; plaintiffs would just need to show that they didn’t receive an adequate offsetting benefit.

Khan is not alone in making this error.

Barry Lynn, her boss at the Open Markets Institute, makes a similar assertion in a *Financial Times* op-ed.^{xxii}

Rather than being required to serve sellers and buyers, these platforms will be free to manage these markets in pretty much any way they wish. As long as they can argue that their decisions serve the interest of the “consumer”, it does not matter what happens to the sellers. (emphasis added)

As does tech analyst Ben Thompson in an article at *Stratechery*.^{xxiii}

What this means is that any company involved in transactions — like Amazon, Uber, Airbnb, etc. — are in a much stronger position after this ruling, because a successful antitrust suit would have to show harm to both sides of a market (i.e., in the case of Amazon, merchants and consumers). (emphasis added)

And in a piece for *The Intercept*, David Dayen says:^{xxiv}

It’s not enough that suppliers or workers are screwed; for a violation to occur, the company must screw everyone at once. (emphasis added)

But the Supreme Court could not be more clear: they care about net consumer harm, not gross harm. From the majority opinion:^{xxv}

Price increases on one side of the platform ... do not suggest anticompetitive effects without some evidence that they have increased the overall cost of the platform’s services. (emphasis added)

This was also the explicit reasoning in the Second Circuit’s opinion,^{xxvi} which was affirmed by the Supreme Court:

Plaintiffs bore the burden in this case to prove net harm to [American Express] consumers as a whole—that is, both cardholders and merchants—by showing that [American Express’s] nondiscriminatory provisions have reduced the quality or quantity of credit-card purchases. (emphasis added)

Beyond this misinterpretation of the Court’s standard for competitive harm, many technology and antitrust analysts are also conflating different types of two-sided markets when extrapolating what this decision means for antitrust claims against technology platforms.

DISTINCTIONS WITH DIFFERENCES

As discussed in the first section, operators of two-sided markets often serve as matchmakers for different groups of customers. Amazon and eBay match third-party merchants and customers in their marketplaces. Apple and Google’s app stores for iOS and Android, respectively, serve this purpose for third-party developers and smartphone users. Uber and Lyft match drivers and riders; Airbnb: hosts and guests. All of these are two-sided *transaction* markets because they “facilitate a

single, simultaneous transaction between participants.”^{xxvii}

While Facebook and Google are also two-sided markets, they are not two-sided *transaction* markets. Users go to these markets for the freebies — social networking and web search — not the ads. Advertisers pay Facebook and Google for the right to some of their users’ attention. These services have high direct network effects — more total users mean the free service is more valuable for each user — but not necessarily high indirect network effects.

The majority opinion in the *Amex* case is clear about which category of two-sided markets its style of legal and economic analysis should be applied to: two-sided *transaction* platforms with significant indirect network effects.

To be sure, it is not always necessary to consider both sides of a two-sided platform. A market should be treated as one-sided when the impacts of indirect network effects and relative pricing in that market are minor. Newspapers that sell advertisements, for example, arguably operate a two-sided platform because the value of an advertisement increases as more people read the newspaper. But in the newspaper-advertisement market,

the indirect network effects operate in only one direction; newspaper readers are largely indifferent to the amount of advertising that a newspaper contains. Because of these weak indirect network effects, the market for newspaper advertising behaves much like a one-sided market and should be analyzed as such.”^{xxviii} (emphasis added)

It is important to note, however, that the Court may have erred in its economic reasoning here. As Thompson goes on to mention in his piece, the Court’s focus on simultaneity is misguided. The defining feature of two-sided markets is the interdependence of demand between the two sides. Will Rinehart, the director of technology and innovation policy at the American Action Forum, observed in a recent article that “If the lower courts come to rely on [simultaneity] to define platforms, then some assessments of competitive effects are likely to be wrong.”^{xxix}

So Facebook and Google (Wu’s aptly labeled “attention merchants”) would not benefit from this new framework.^{xxx} For Big Tech, that would mean the matchmakers are protected while the attention merchants are still vulnerable. Tables 1 and 2 provide a taxonomy of two-sided markets in the technology industry.

TRANSACTION	MONEY SIDE	SUBSIDY SIDE	EXAMPLES
Credit Card Market	Merchant	Cardholder	American Express Visa Mastercard Discover
Direct Network Effects			
Indirect Network Effects			
Marketplaces	Seller	Buyer	Amazon eBay Uber and Lyft Airbnb
Direct Network Effects			
Indirect Network Effects			
App Stores	Developer	User	Google Play Apple App Store
Direct Network Effects			
Indirect Network Effects			

Table 1: Network effects in two-sided *transaction* markets. Red indicates high network effects; blue indicates low network effects.

NON-TRANSACTION	MONEY SIDE	SUBSIDY SIDE	EXAMPLES
Social Networks	Advertiser	User	Facebook LinkedIn Instagram
Direct Network Effects			
Indirect Network Effects			
Online Advertisement	Advertiser	User	Google DoubleClick AppNexus
Direct Network Effects			
Indirect Network Effects			

Table 2: Network effects in two-sided non-transaction markets. Red indicates high network effects; blue indicates low network effects. Source (both tables): “European Commission’s report on “The Competitive Landscape of Online Platforms” <https://ec.europa.eu/jrc/sites/jrcsh/files/jrc106299.pdf>.

In comments reported by Axios following the decision, Makan Delrahim, the Department of Justice’s top antitrust official, said that this was also his interpretation of Amex:^{xxxvi}

Responding to a question from Axios, Delrahim said he didn't think the ruling would make it harder to go after Facebook and Google over competition concerns "for a couple of reasons." First, he said, each case is specific to the facts. Second, the ruling doesn't treat all two-sided marketplaces alike. While it might help protect Uber and Airbnb, which directly connect two parties, Delrahim said he wasn't sure that Google and Facebook would see their businesses similarly affected. (emphasis added)

Where the DOJ sees a clear standard, others see murkiness. In a separate Axios report, Lina Khan said:^{xxxvii}

“I think instances where you have targeted advertisements funding another business that you’re providing to a user, I think those types of cases would risk falling into the type of category that (Justice Clarence) Thomas tries to create,” she said of his reference to newspapers... Khan, who argues for more vigorous antitrust enforcement, said she worried Thomas’ ruling creates a murky standard where companies will argue they fall into

[Amex’s category] to avoid antitrust enforcers. (emphasis added)

But Khan might be in the minority in this worry. Ben Thompson concurs with the DOJ in his article at Stratechery:^{xxxviii}

[The one-sided treatment] certainly seems to apply to ad-based business models generally, suggesting that Google and Facebook would remain susceptible to an antitrust complaint that only considered the advertising side of the market (I have long considered this the most viable route for such a lawsuit to succeed). (emphasis added)

But even if the standard proves to be murky, the advertising giants might still be in trouble because, for almost all of their users, their services are free. Unlike in the credit card market where card issuers can essentially charge a negative price by offering rewards such as cash back and airline miles, the tech platforms currently have a *de facto* price floor of zero on the user side of the market. If they want to impose higher costs on advertisers without drawing the ire of antitrust regulators, this opinion implies they will need to find a way to transfer a lot of those benefits to the other side of the market.

As Ryan Hagemann, senior director for policy at the Niskanen Center, pointed out in a recent research brief, regulators in Germany are already

trying to make the argument that platforms like Facebook are “price gouging” their users by abusing their market power “to coerce users into consenting to relinquish more of their data than they would in a competitive market.”^{xxxiv} This collection of data, therefore, ends up being the “equivalent of ‘charging’ users a price (in the form of a greater quantity of, or more extensive access to, their data) above what they might otherwise pay to access Facebook’s services.”^{xxxv} This new angle of attack shows that two-sided market analysis is not the end of antitrust law but merely a new framework for evaluating claims against the tech giants.

CONCLUSION

The debate over the power that Big Tech wields will not be over soon. Many people, on both sides of the ideological spectrum,^{xxxvi} have legitimate concerns about these companies’ size and influence. Likewise, the size of the credit card industry in the United States relative to Europe and its distributional effects should rightly make us question the costs of this oligopoly.^{xxxvii}

But nothing in this analysis rules out using agency regulatory power to directly control credit card swipe fees or legislative power to pass policies addressing inequality in the machinery of our economic system. The *Amex* ruling does not upend the landscape for empirically-informed antitrust analysis, and its implications for technology platforms are not nearly as straightforward as many neo-Brandeisians believe. The decision has been a red herring for the antitrust revisionists and they should heed this warning: This isn’t the disaster you’re looking for.

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- ⁱ Michael Quinion, “The Lure of the Red Herring,” World Wide Words, 25 Oct. 2008, <http://www.worldwidewords.org/articles/herring.htm>.
- ⁱⁱ *Ohio v. American Express Co.*, 585 U.S. ___ (2018)
- ⁱⁱⁱ Lina Khan, Twitter post, 25 June 2018, 7:22 am, <https://twitter.com/linamkhan/status/1011253366268325889>.
- ^{iv} Randy Picker, “With Amex Ruling, Modern IO Theory Makes Important Inroads with SCOTUS,” ProMarket blog, 28 June 2018, <https://promarket.org/amex-ruling-modern-io-theory-makes-important-inroads-scotus/>.
- ^v *United States of America et. al. v. American Express Co. et. al.*, No. 1:2010cv04496 - Document 619 (E.D.N.Y. 2015).
- ^{vi} *United States v. American Express Co.*, No. 15-1672 (2d Cir. 2016)
- ^{vii} *U.S.A. et. al. v. American Express Co. et. al.*, (E.D.N.Y. 2015), 41, 54.
- ^{viii} Tim Wu, “The Supreme Court Devastates Antitrust Law,” *The New York Times*, 26 June 2018, <https://www.nytimes.com/2018/06/26/opinion/supreme-court-american-express.html?smtyp=cur&smid=tw-nytopinion>.
- ^{ix} Department of Justice and Federal Trade Commission, “Horizontal Merger Guidelines,” 19 Aug. 2010 <http://bit.ly/2KCE8er>.
- ^x *Ohio v. American Express Co.*, 585 U.S. ___ (2018)
- ^{xi} *U.S.A. et. al. v. American Express Co. et. al.* (E.D.N.Y. 2015).
- ^{xii} *Ohio v. American Express Co.*, 585 U.S. ___ (2018)
- ^{xiii} Joshua Wright, Twitter post, 26 June 2018, 11:56 AM, <https://twitter.com/ProfWrightGMU/status/1011684710076989441>.
- ^{xiv} Gus Hurwitz, Twitter post, 25 June 2018, 8:22 AM, <https://twitter.com/GusHurwitz/status/1011268359353257985>.
- ^{xv} Lina Khan, “Amazon’s Antitrust Paradox,” *Yale Law Journal* 126, no. 3 (January 2017); Luigi Zingales, “Towards a Political Theory of the Firm,” National Bureau of Economic Research Working Paper No. 23593 (July 2017).
- ^{xvi} *Ohio v. American Express Co.*, 585 U.S. ___ (2018)
- ^{xvii} *U.S.A. et. al. v. American Express Co. et. al.* (E.D.N.Y. 2015), 112.
- ^{xviii} *U.S.A. et. al. v. American Express Co. et. al.* (E.D.N.Y. 2015).
- ^{xix} Scott Sumner, “Never reason from a price change,” *The Money Illusion*, 18 May 2010, <http://www.themoneyillusion.com/never-reason-from-a-price-change/>.
- ^{xx} Author’s calculations from Bloomberg data.
- ^{xxi} Lina Khan, “The Supreme Court Case That Could Give Tech Giants More Power,” *The New York Times*, 2 Mar. 2018, <https://www.nytimes.com/2018/03/02/opinion/the-supreme-court-case-that-could-give-tech-giants-more-power.html>.
- ^{xxii} Barry Lynn, “The Amex ruling cements the domination of big companies,” *Financial Times*, 27 June 2018, <https://www.ft.com/content/459797ea-79e2-11e8-af48-190d103e32a4>.
- ^{xxiii} Ben Thompson, “South Dakota v. Wayfair, and Amazon; Wayfair’s Unintended Consequences; Ohio v. American Express, and Tech,” *Stratechery*, 29 June 2018, <https://stratechery.com/2018/south-dakota-v-wayfair-and-amazon-wayfairs-unintended-consequences-ohio-v-american-express-and-tech/>.
- ^{xxiv} David Dayen, “An Extremely Consequential Supreme Court Decision Slipped Under the Radar,” *The Intercept*, 27 June 2018, <https://theintercept.com/2018/06/27/american-express-supreme-court-ruling/>.
- ^{xxv} *Ohio v. American Express Co.*, 585 U.S. ___ (2018)
- ^{xxvi} *United States v. American Express Co.*, (2d Cir. 2016)
- ^{xxvii} *Ohio v. American Express Co.*, 585 U.S. ___ (2018)
- ^{xxviii} *Ohio v. American Express Co.*, 585 U.S. ___ (2018)
- ^{xxix} Will Rinehart, “Did The Supreme Court Get The Market Definition Correct In The Amex Case?” *The Technology Liberation Front*, 6 July 2018, <https://techliberation.com/2018/07/06/did-the-amex-case-get-the-market-definition-correct/>.
- ^{xxx} Tim Wu, *The Attention Merchants: The Epic Scramble to Get Inside Our Heads* (New York: Knopf, 2016).
- ^{xxxi} Ina Fried and David McCabe, “DOJ antitrust official: Supreme Court ruling won’t shield Big Tech,” *Axios*, 26 June 2018, <https://www.axios.com/makan-delrahim-in-aspen-1530038874-a289adra-012b-4ccb-9cb7-69658ee78c33.html>.
- ^{xxxii} David McCabe, “The Supreme Court decision Silicon Valley is reading,” *Axios*, 26 June 2018, <https://www.axios.com/american-express-decision-silicon-valley-tech-1529962290-5a9f8d88-cfc6-41b4-9319-e448aeb3395a.html>.
- ^{xxxiii} Thompson, “South Dakota v. Wayfair.”

^{xxxiv} Ryan Hagemann, *Data Price Gouging: A Stalking Horse for a Neo-Brandeisian Antitrust Doctrine?* Research Brief (Niskanen Center, 8 May 2018), https://niskanencenter.org/wp-content/uploads/2018/05/Brief-Data-Price-Gouging_-A-Stalking-Horse-for-a-Neo-Brandeisian-Antitrust-Doctrine_.pdf.

^{xxxv} *Ibid.*, 3.

^{xxxvi} U.S. Senate Commerce, Science and Transportation Committee, “Federal Trade Commission Nominees Confirmation Hearing” (14 Feb. 2018), <https://www.c-span.org/video/?440971-1/federal-trade-commission-nominees-testify-confirmation-hearing>; Elizabeth Warren, “Reigniting Competition in the American Economy,” Keynote Remarks at New America Foundation’s Open Markets Program Event, 29 June 2016, https://www.warren.senate.gov/files/documents/2016-6-29_Warren_Antitrust_Speech.pdf.

^{xxxvii} Tim Wu, “The Supreme Court Devastates Antitrust Law,” *The New York Times*, 26 June 2018, <https://www.nytimes.com/2018/06/26/opinion/supreme-court-american-express.html?smtyp=cur&smid=tw-nytopinion>; Aaron Klein, “Why the Supreme Court’s decision in *Ohio v. AmEx* will fatten the wealthy’s wallet (at the expense of the middle class),” The Brookings Institution, 25 June 2018, <https://www.brookings.edu/research/ohio-v-amex/>.