

George J. Stigler Center for the Study of the Economy and the State
The University of Chicago Booth School of Business

Stigler Committee on Digital Platforms
Policy Brief

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Stigler Committee on Digital Platforms: *Policy Brief*Luigi Zingales¹Filippo Maria Lancieri²

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I. INTRODUCTION

One of the key defining factors of the past decade is the rise of Digital Platforms (DPs), such as Google, Facebook, Amazon, Apple. As more and more of our economy and society moved online, these companies ascended from non-existent or nearly bankrupt in the early 2000s to join Microsoft as global behemoths, exceeding (as of August 2019) more than 4 trillion dollars in market capitalization.

This meteoric rise is not surprising. These companies invented new products and services that revolutionized the way we work, study, travel, communicate, shop, and even date. In the process, they created trillions of dollars in consumer surplus. Nonetheless, recognizing the enormous gains brought about by these companies to date does not equate to saying that: (i) these gains will endure, especially if markets are no longer competitive; and (ii) there is no room for welfare gains by reducing some of the downsides brought about by them. Cars dramatically improved our way of life. Nonetheless, they also introduced new risks which demanded new laws and regulations. Traffic lights and roundabouts have not destroyed the benefits of cars, but they have dramatically reduced their negative impact on society.

Whether it is the novelty of their product or the consumer surplus they created (or both), so far these companies have largely avoided any regulation. In the past few years, however, as the number of scandals involving DPs increased, concerns about their unchecked power started to emerge. These concerns were not limited to economic aspects (are these companies moving to prevent any competition?) or privacy (are we in an age of surveillance capitalism?). They include the impact DPs have on our political arena and democratic values: Are they helping promote hate and/or are they a threat to the working of our democratic system?

As these important discussions multiplied, so did the proposals to intervene. Abroad, these proposals were the result of government-appointed committees—from the EU to the UK or Australia. In the United States—where no government committee was formed—the proposals were reactions to the perceived threat posed by DPs, with little to no analysis of the underlying root problems, let alone a link between market failures and remedies.

To fill this void, the George J. Stigler Center at the University of Chicago Booth School of Business decided to organize an independent Committee on Digital Platforms. The Committee

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brought together a group of more than 30 highly qualified, independent academics and policymakers³ from different disciplines to think holistically about how DPs impact: (i) the economy, (ii) privacy and data security, (iii) the news media industry, (iv) the functioning of our democracy.

For over a year, the members of each subcommittee dedicated a significant amount of time to develop a set of cohesive, independent studies on how DPs impact modern society. Draft versions of each subcommittee's white paper were featured at the Stigler Center's 2019 Antitrust and Competition Conference, which brought together more than 130 highly regarded academics and policy experts to discuss these topics.⁴ At the conference, each white paper received detailed feedback by two independent commentators representing different points of view, along with more general feedback from the audience. Overall, the studies presented herein represent the most comprehensive independent analysis of Digital Platforms to date.

This *Policy Brief*, aimed at a non-specialized audience, summarizes the main concerns identified by these studies and provides a viable path forward to address the identified concerns.⁵ It tries to do so in the least intrusive way possible. Section II presents the novel concerns raised by DPs. Section III describes the various policy solutions. Section IV concludes.

II. SOURCES OF CONCERNS

The term “Digital Platform” lacks a consistent definition—different companies may be characterized as a platform in different environments. For example, Google, Facebook, Amazon, Apple, and Microsoft raise different concerns regarding how their “bottleneck power” impacts the markets in which they operate.⁶ Considerations on market power involve all five companies mentioned above. By contrast, considerations about the news media or democracy are more specific to companies such as Google and Facebook and—to a lesser extent—Twitter. For this reason, the focus of our analysis in this Brief will be primarily Google and Facebook.

II.1 MARKET STRUCTURE/ANTITRUST

Digital Platforms tend to monopolies: The markets where DPs operate exhibit several economic features that, while not novel per se, appear together for the first time and push these markets towards monopolization by a single company. These features are: i) strong network effects (the more people use a product, the more appealing this product becomes for other users); ii) strong economies of scale and scope (the cost of producing more or of expanding in other sectors decreases with company's size); iii) marginal costs close to zero (the cost of servicing

³ See <https://research.chicagobooth.edu/stigler/events/single-events/antitrust-competition-conference/digital-platforms-committee>.

⁴ See the agenda for the 2019 ANTITRUST AND COMPETITION CONFERENCE - DIGITAL PLATFORMS, MARKETS, AND DEMOCRACY: A PATH FORWARD, available at <https://research.chicagobooth.edu/stigler/events/single-events/antitrust-competition-conference>

⁵ For example, most of our reference footnotes are to accessible articles in the main press. The reports all have multiple technical references for more specialized audiences.

⁶ Or their power to funnel user attention. Bottleneck power arises when “consumers primarily single-home and rely upon a single service provider.” For example, most sites depend on Google to receive traffic—hence saying that Google is a bottleneck in internet traffic.

another consumer is close to zero); (iv) high and increasing returns to the use of data (the more data you control, the better your product); and v) low distribution costs that allow for a global reach. This confluence of features means that these markets are prone to tipping; that is, they reach a point where the market will naturally tend towards a single, very dominant player (also known as “winner takes all markets”). An entrant will most likely be unable to overcome the barriers to entry represented by scale economies and data control, as they are difficult to achieve in a quick, cost-effective manner.

When free is not necessarily good for consumers: DPs defend themselves by saying that, since most consumers do not pay for their services, how can they be hurt? This statement is incorrect in many ways. First, there is nothing special about a zero price—if the business is so successful, consumers could be charged a negative price to use Google (think of miles awarded for credit card use).⁷ Second, house buyers do not pay for their real estate broker out of their pocket, but that does not mean they do not pay for the service nor that they cannot be hurt by high real estate brokers’ commissions. Two-sided platforms, like real estate brokers, often charge more on one side to subsidize the other. In equilibrium, a higher real estate fee will be reflected in higher house prices, which will hurt buyers. The same is true for DPs like Facebook and Google. Second, only the monetary price consumers pay is zero. Consumers pay in kind, by transferring their data. Finally, market power may manifest itself through lower quality, lower privacy protection, less creation of new business/entry, less variety of political viewpoints, and, importantly, less investments in innovation. For example, a recent paper demonstrates how Facebook became much more aggressive in data collection after it faced less competition from MySpace.⁸

Market power in ads can lead to monopolization in other markets: DPs can increase the prices paid by advertisers, many of them small businesses, diverting more and more income to platforms. Have you ever noticed how Amazon buys the ads for the search “Amazon” on Google despite it being the first organic result? This shows how much power Google has even over gigantic corporations. Through their power in the ads market, DPs can also block entry of potential competitors. For example, Facebook banned cryptocurrency ads on its platform just a year before announcing its entry in the crypto space with Libra.

Consumer harm is greatest when market power is combined with behavioral biases: Consumers tend to stick with default options. If forced to choose, they opt for the most salient alternative. Highlighting an option in red or putting it in the first position nudges consumers in that direction. Google recognizes the power of defaults and pays Apple an estimated 12 billion dollars per year to be the default search engine on the iPhone.⁹ Manipulations are common even in brick-and-mortar shops, yet they are especially harmful when i) the manipulator knows a lot about the potential customers; and ii) there are limited (or no) alternatives, as is the case for most DPs. Framing, nudges, and default options can direct consumers to choices they regret. In

⁷ Indeed, Microsoft Rewards pays for searches using Bing, and a very small search engine plants trees the more someone searches. The fact that both companies cannot obtain market share from Google even in this context shows how high entry barriers are in search markets. See <https://www.microsoft.com/en-us/rewards> and <https://info.ecosia.org/what>.

⁸ See Dina Srinivasan, “The Antitrust Case Against Facebook: A Monopolist’s Journey Towards Pervasive Surveillance in Spite of Consumers’ Preference for Privacy,” *Berkeley Business Law Journal* 16, no. 1 (2019): 39.

⁹ See <https://fortune.com/2018/09/29/google-apple-safari-search-engine/>.

addition, there is increasing evidence that many online products are designed to be as addictive as possible, or to keep consumers “hooked” on the platform to increase sales without consideration to well-being.¹⁰ The combination of addiction and monopoly is probably the worst possible.

If there is a lot of smoke, there is probably fire: Many online markets present extremely high profit margins and no new relevant entry, a sign of significant barriers to entry. Furthermore, DPs bought hundreds of companies over the past years, most without any form of scrutiny by regulators. Finally, there is evidence that venture capitalists are reluctant to fund businesses in sectors that compete directly with DPs. Venture capitalists label this phenomenon “kill zones.” When combined with the structural characteristics presented above, there is sufficient evidence to justify an in-depth investigation on these companies, as those started by the Federal Trade Commission, the Department of Justice, and the European Commission. This is particularly true because, as discussed more below, DPs refuse to provide independent researchers with the data necessary to understand whether their behavior is indeed harmful. It is paradoxical that companies refuse access to the data necessary for in-depth, independent studies and then use the lack of in-depth, independent studies as evidence of lack of harm.¹¹

II.2 NEWS MEDIA

Concentration in the news media market is a problem for democracy: The news market is unlike most others. News has some aspects of a public good. In addition, a vibrant, free, and plural media industry is necessary for a true democracy. Thus, in studying the impact of DPs on the media industry, we cannot restrict ourselves to standard economic measures like consumer welfare, but rather we need to think in terms of *citizen welfare*: how democracy functioning is impacted.

Digital platforms disintermediate newspapers and monopolize news markets: DPs are quickly controlling news distribution. Facebook is now the second largest news provider in terms of attention share in the United States. In the UK, Facebook is third, Google is fifth, and Twitter is tenth. By curating the news viewers receive, DPs have effectively appropriated the role that newspaper editors used to have in influencing readers’ attention. This poses a concentration issue, as thousands of different viewpoints have now been replaced by a duopoly. These concerns are exacerbated by three additional problematic features. First, the editing is aimed at maximizing a viewer’s time on the platform, with little attention to quality of content. Second, this news editing is personalized, potentially promoting a fragmentation of citizens into separate news bubbles, jeopardizing the ability of different political groups to talk to each other. Last but

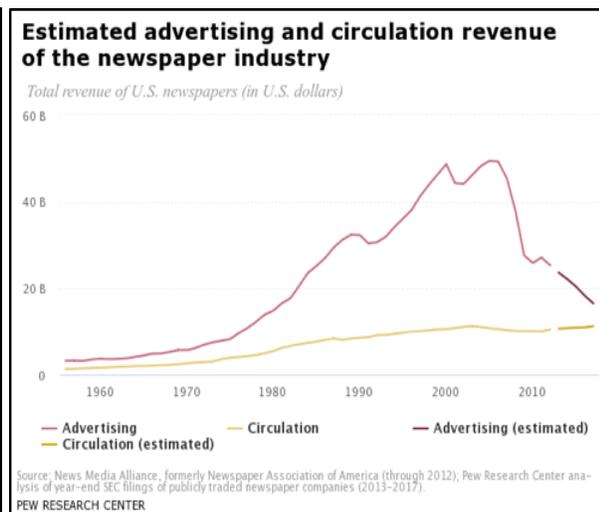
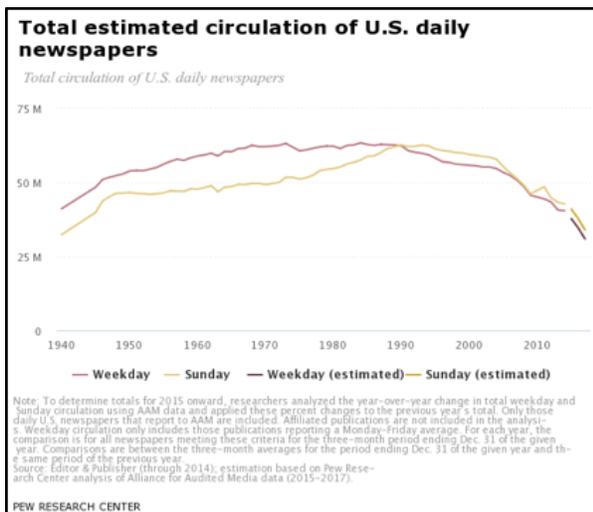
¹⁰ See Adam Alter, *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked* (Penguin, 2017).

¹¹ For example, there is prima facie evidence of an increase of fatal car accidents after the introduction of car sharing services in a city. Uber and Lyft hold the data to disprove they are responsible for this increase, but so far they have not allowed any independent inquiry on the topic, nor did they produce evidence to the contrary. Given their interest in doing so, at some point we need to start thinking about inverting the burden of proof: Prima facie evidence of responsibility that cannot be further scrutinized because the companies refuse to share the data that would prove or disprove the claims should be considered strong evidence they are responsible. See <https://promarket.org/uber-kill-real-cost-ride-sharing/> citing John Manuel Barrios, Yael V. Hochberg, and Hanyi Yi, “The Cost of Convenience: Ridesharing and Traffic Fatalities,” *Available at SSRN 3361227*, 2019.

not least, Google voting stock is controlled by two individuals, Sergey Brin and Larry Page; Facebook by one, Mark Zuckerberg. Thus, three people have total control over the personalized, obscure news feeds of billions of human beings.

Digital Platforms have weak incentives to prioritize quality content and limit false information: These companies have weak economic and legal incentives to promote quality journalism.¹² First, journalism itself is a small part of the total content distributed by these platforms. While the data is not made public—again a problem in itself—estimates indicate that, despite its name, news is only a small fraction of Facebook News Feed.¹³ Second, the goal of all these DPs is to maximize engagement, often through extreme or divisive content, as recognized by Facebook itself.¹⁴ Unlike other media, however, DPs do not have any legal liability for promoting this content, thanks to Section 230 of the Communications Decency Act. This immunity, combined with the limited competition these platforms face, means that DPs have very weak incentives to promote quality content or to limit the spread of false or divisive information.

Digital Platforms are devastating the newspaper industry: Newspapers are a collateral damage of the digital platform revolution. Craigslist destroyed the lucrative newspaper classified ads, and Google and Facebook dramatically reduced the revenues newspapers could get from traditional advertising. Local newspapers have been hit particularly hard: At least 1800 newspapers closed in the United States since 2004, leaving more than 50% of US counties without a daily local paper. Every technological revolution destroys pre-existing business models. Creative destruction is the essence of a vibrant economy. In this respect, there is nothing new and nothing worrisome about this process. Yet, a vibrant, free, and plural media industry is necessary for a true democracy. The newspapers of yesteryear played an essential function in a democratic system. How can we make sure this function is still performed by somebody (not necessarily yesteryear newspapers)?



¹² For a more detailed account of how the ad-tech creates a race to the bottom in terms of disinformation, see <https://go.shr.lc/2YyDr8U>.

¹³ See, for example, <http://bit.ly/2zluSE9>.

¹⁴ See <https://www.facebook.com/notes/mark-zuckerberg/a-blueprint-for-content-governance-and-enforcement/10156443129621634/>.

The growing gap in investigative journalism: Ever since the muckraking magazines arose at the beginning of the 20th century, printed media has supported investigative journalism. Investigative journalism requires significant long-term investments, whose return cannot be easily appropriated by the investor, since the news report can be repeated by other sources. In oligopolistic markets, newspapers were able to finance some investigative reporting with their profits and were able to capture some of its benefits via enhanced reputation. The reduction in the number and the profitability of newspapers has severely curtailed the funds dedicated to this activity. Thus far, not-for-profit investigative reporting outlets, like Pro-Publica, have not fully covered the shortage.

The dearth of local news: The problem of lack of investigative reporting is particularly severe at the local level. *The New York Times* and the *Washington Post* have the resources to pursue national stories, but local corruption in Topeka, Kansas, or Montgomery, Alabama, is hardly of national interest. As a result, accountability at the local level may suffer. Consistent with this fear, a recent paper shows that the closure of a local newspaper increases the long-term borrowing cost of a municipality, interpreted as a sign of the inefficiencies produced by lack of accountability. Closures of local newspapers also tend to diminish both the amount of information voters have in local elections and voter turnout. Thus, there is a concern that local democracy might die in the darkness.

II.3 PRIVACY AND DATA PROTECTION

Market incentives alone will not solve privacy and data security problems: Firms that collect and process private information do not internalize the harms associated with consumer privacy and security breaches. Nor do they internalize negative externalities, or potential misuses of data that impact people who are not their own consumers.¹⁵ Notice and choice, or asking consumers to click “I accept” in extremely long terms-of-service, places solely on consumers the burden to anticipate all the downsides of their online activities. Consumers are ill-equipped to do so—they lack the time, knowledge, and capacity. This problem is only getting worse as firms become ever-more skilled in developing interfaces that manipulate choice.

This is not just a theoretical concern. Companies from small to sophisticated lack basic data protection features: Facebook stored hundreds of millions of passwords in plain text files in 2019.¹⁶ Over-reliance on industry self-regulation and “notice-and-choice” mechanisms, sparse state and federal laws with different obligations, and the lack of a regulator with a clear mandate and enforcement powers is not the correct path for a country embracing digitization like the United States. The best examples are the recent FTC enforcement actions. The settlement with Facebook—the strongest enforcement in data protection ever—does little to prevent Facebook from collecting as much data as possible and freely using these data in any way it deems appropriate.¹⁷ Facebook’s stocks even went up at the announcement of the settlement, as most

¹⁵ See, for example, a report describing how DNA tests done by a family historian unveiled that an uncle had an extra-marital daughter without the uncle submitting any information. <https://www.wsj.com/articles/dna-testing-creates-wrenching-dilemmas-for-the-family-historian-11563595261>.

¹⁶ See <https://www.theverge.com/2019/3/21/18275837/facebook-plain-text-password-storage-hundreds-millions-users>.

¹⁷ See <https://www.wired.com/story/off-facebook-activity-privacy/>

commentators saw the FTC punishment as just a slap on Facebook’s wrist.¹⁸ The FTC fine against Google—charged for baiting children with targeted ads that violated their privacy—was even milder. It was less than the profits Google earned with the sanctioned practice. Furthermore, the only significant behavioral change Google committed to was to abide by a Federal Law it should have been abiding by in the first place.

Dark patterns are a particularly powerful, largely ignored, problem and they mostly impact poor and uneducated consumers: Dark patterns are “user interfaces that make it difficult for users to express their actual preferences or that manipulate users into taking actions that do not comport with their preferences or expectations.” Companies can pre-select choices, highlight or hide buttons, or constantly nag consumers in order to push them to make decisions against their preferences or expectations.¹⁹ While using interfaces or promotions that help sell a product is not illegal, doing so in an extremely manipulative way can be, as these companies are strongly manipulating vulnerable consumers into buying products and services (or watching another cat video) they ultimately do not want. Simple manipulation of user interfaces can increase acceptance rates of a data protection plan by 228% without companies facing significant consumer backlash.²⁰ While dark patterns work across the board, the effects are particularly pronounced with less-educated, vulnerable users.

Dark patterns are particularly pervasive when combined with market power: Extreme dark patterns—the ones that truly annoy consumers but can increase acceptance rates by 371%—lead to a consumer backlash against the companies employing them. Thus, consumers punish the most abusive companies. The problem is that, as seen above, many markets where DPs operate are prone to monopolization. The lack of meaningful competitors enables these companies to use very aggressive persuasion strategies. For example, studies have shown a strong link between constant notifications and extreme anxiety, in particular on teenagers.²¹ Nonetheless, if iOS users try to turn off all WhatsApp notifications, they will be constantly bombarded by a screen commanding them to turn the notifications back on—there is no option to simply state: “*I do not wish to receive WhatsApp notifications, thank you.*”²² As WhatsApp is now the primary means of communication in many countries,²³ users cannot simply abandon WhatsApp either.



¹⁸ See <https://www.theverge.com/2019/7/12/20692524/facebook-five-billion-ftc-fine-embarrassing-joke>.

¹⁹ See <https://www.wsj.com/articles/how-tech-giants-get-you-to-click-this-and-not-that-11559315900>.

²⁰ See Jamie Luguri and Lior Strahilevitz, “Shining a Light on Dark Patterns,” *University of Chicago Coase-Sandor Institute for Law & Economics Research Paper No. 879*, August 2019, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3431205 for a more detailed analysis.

²¹ See <https://www.latimes.com/nation/la-na-smartphones-causing-student-anxiety-20190607-story.html> and <https://www.nytimes.com/2019/05/20/well/family/is-digital-addiction-a-real-threat-to-kids.html>.

²² As of August 2019.

²³ Even for businesses, see <https://www.zdnet.com/article/whatsapp-is-the-main-digital-channel-for-brazilian-smes/>.

Dark patterns will probably only get worse: Even companies with comparatively little consumer information can design user interfaces that benefit them.²⁴ Sophisticated companies such as DPs collect an enormous amount of personal data. They have outsized powers to design interfaces in very manipulative ways with little to no oversight by regulators. For example, internet companies, focused only on increasing engagement to sell advertising, constantly promote interfaces that make users addicted to their products.²⁵

We need to talk about internet addiction and the combination with market power: Internet addiction is an extremely important topic that deserves much more attention than it is currently receiving. As one report puts it, “Strategies such as offering addictive content at moments when consumers lack self-control increase time spent on the platform and profitable ad sales even as the platform lowers the quality of content. These tactics increase the welfare costs of market power.” DPs are in a zero-sum race for our attention and using the most pervasive tactics to ensure they win. Since most societies regulate addictive products—drugs, alcohol, tobacco, and gambling—to protect the consumers, it is time we discuss how to regulate DPs with the same goal in mind.

II.4 POLITICS

Social media companies are responsible for mass democratization of speech: Social media are rightly heralded as democratizing platforms that have greatly increased the voice of excluded members of different societies. Social media companies such as Facebook and Twitter played key roles in helping organize the Arab Spring revolutions, the Black Lives Matter movement in the United States, and, currently, the democracy protesters in Hong Kong.

Social media is different from other information technologies: The advent of many information technologies caused revolutions in political governance: The printing press, radio, and TV have profoundly transformed our democratic governance and accountability. Yet, social media’s unprecedented scale, ease of anonymity, and capacity to by-pass traditional gatekeepers may be unique. When combined with DPs’ tendency to monopolization, it can become problematic because it removes the accountability afforded by competition. As the report states, “in the end, the technology with the most potential to reshape modern political institutions and outcomes falls under the control of just a few firms, who themselves are enormously powerful political actors.”

Digital platforms are uniquely powerful political actors: Google and Facebook may be the most powerful political agents of our time. They congregate five key characteristics that normally enable the capture of politicians and that hinder effective democratic oversight:

- i. **Money:** They have immense economic power, allowing them to effectively lobby politicians and regulators. As the five most valuable publicly listed corporations in the world and with combined cash reserves of hundreds of billions of dollars, DPs are widely using this economic power to influence politics. According to [opensecrets.org](https://www.opensecrets.org),

²⁴ The Wired Magazine describes how they increase subscriptions by 9% by asking people to “place order” instead of “start subscription.” See <https://www.wired.com/story/wired-paywall-one-year-later/>.

²⁵ See, <https://www.youtube.com/watch?v=NUMa0QkPzns> for an explanation of design choices aimed to be addictive; and <https://ledger.humanetech.com> for a list of peer-reviewed studies presenting negative impacts of consumer-facing mobile tech.

Alphabet (Google), Amazon, and Facebook were the second, sixth, and ninth largest spenders on direct lobbying among US corporations in 2018.²⁶ In this aspect, DPs are like oil or tobacco companies in the resources they can mobilize in their defense.

- ii. **Media:** Their increasingly powerful role as a media outlet not only allows DPs to shape public discourse and to define how politicians can reach their constituents; more importantly, it allows platforms to claim both Section 230 immunity and first amendment exemptions to ward off any regulations that try to control their actions. In this aspect, DPs are similar to very powerful newspapers.
- iii. **Complexity:** Their sheer size, complexity, and absolute opacity complicates the development of effective regulatory tools, as platforms can always use information asymmetries to by-pass regulations without much awareness. Complexity also diminishes the potential talent pool for governments and incentivizes revolving doors, complicating oversight even further. In this aspect, DPs are similar to large banks in their ability to potentially dodge the most powerful regulators.
- iv. **Connectivity:** Their connectivity and membership allows DPs to engage their user base to challenge any political initiative that disadvantages them (think of Uber drivers' protests). In this aspect, DPs have "membership powers" similar to the National Rifle Association or to the American Association of Retired Persons in their ability to directly mobilize voters in their defense.
- v. **National Champions:** Finally, DPs constantly play the "national interest" card whenever their own interests are threatened.²⁷ In this way, DPs are similar to the steel and airplane industry, which demand preferential treatment for their strategic role.

In sum, Google and Facebook have the power of ExxonMobil, the *New York Times*, JPMorgan Chase, the NRA, and Boeing combined. Furthermore, all this combined power rests in the hands of just three people.

Digital platforms are incredibly opaque—this is a problem in itself: Finally, the lack of transparency is something that has to be stressed again, as it also impacts our political arena. If we do not know whether social media has overall positive or negative effects on our polity, we have to blame the DPs themselves. All the data they generate is proprietary and they deny outside, independent researchers access to almost all of it. In doing so, they also prevent our societies from comprehending their true impacts. For example, conservatives are constantly accusing Google and Facebook of bias, something the companies deny. Only Google and Facebook have the data that would allow an independent researcher to prove or disprove the conservatives' claim, *and* they block access to this data. Thus, we have to rely on their word. Are we sure that Elizabeth Warren's posts on Facebook receive equal distribution when compared to other candidates? This is a major problem, pervasive in all areas analyzed by the reports, and one that must be immediately addressed.

²⁶ See <https://www.opensecrets.org/lobby/top.php?indexType=s&showYear=2018>.

²⁷ See President Trump threatening to tax French wine in response to a tax targeting US DPs, or President Trump also trying to protect Apple from the tariff spat with China because "Apple is a great American company," at <https://reut.rs/2ZgqIMg> and <https://cnb.cx/2TUY7pR>.

SUMMARY: This concentration of economic, media, data, and political power is potentially dangerous for our democracies. Our summary of the main concerns around DPs demonstrates why all the attention they are receiving is justified. Indeed, the conversation has barely started on some of the most worrisome topics, such as dark patterns and manipulation, addiction, or the platforms' incredible political power. To make matters worse, as more of our lives move online, the more commanding these companies will become. We are currently placing the ability to shape our democracies into the hands of a couple of unaccountable individuals. It is clear that something has to be done.

III. POSSIBLE SOLUTIONS

The four subcommittees were charged with proposing an array of possible solutions in each of their specific interest areas. Some of these solutions were mutually exclusive, and sometimes different committees arrived at different conclusions. Thus, we are left with the difficult task to prioritize the various solutions and integrate them into a coherent whole.²⁸ For sake of brevity, we make no claim of being comprehensive. For a complete picture, we refer the interested reader to the four [reports](#).

1. Forcing Interoperability

The cause of most of the problems described above is the lack of meaningful competition in many key digital markets. A major cause of this lack of competition is the presence of very sizable network externalities: that is, I want to be on the social media where my friends are. Network externalities as a potential barrier to entry are not a new phenomenon: It plagued the early phone industry. To eliminate this problem, the United States forced interoperability among the various phone companies—AT&T is obliged to connect calls started by T-Mobile consumers. The same should be done with social media. Mandating not only an open but also a common Application Program Interface (API) would allow different messaging systems to connect to one another. In so doing, a common API guarantees interoperability and eliminates the network externalities that drive the winner-take-all nature of the social media market. Facebook, for example, used all its power to kill potential interoperability solutions in order to gain market power. In 2008, it even used Federal Criminal Law to successfully attack a young startup called Power Ventures that was trying to connect different social media platforms.²⁹ The Open Banking Directive in the UK and the Brazilian Good Payer's Credit Act are good examples of cases where tailored interventions on data disclosure and open standards are increasing competition.³⁰

²⁸ In doing so, we inevitably introduce our own views and biases. Thus, neither the participants of each committee nor the chairs necessarily agree with our conclusions.

²⁹ See <https://www.eff.org/cases/facebook-v-power-ventures> and <https://www.eff.org/deeplinks/2018/07/facing-facebook-data-portability-and-interoperability-are-anti-monopoly-medicine>.

³⁰ See <https://www.openbanking.org.uk/customers/what-is-open-banking/> and <https://iapp.org/news/a/new-changes-to-brazilian-good-payers-act-includes-automatic-registration-into-database/>.

2. A More Aggressive Antitrust

Changing Merger Guidelines for Digital Platforms: DPs acquired hundreds of companies over the past years, most without facing any scrutiny from antitrust regulators. In traditional markets, the cost of delaying an intervention might be limited. In a market with strong tendencies toward monopolization, a mistake in the approval of a merger can condemn an industry to a monopoly. If you add the political power of these monopolies, the mistake could become irreversible. Therefore, we need to change the threshold for merger review in markets where DPs operate, basing it on transaction value or some other criteria that allows regulators to scrutinize transactions between DPs and startups—simply focusing on turnover is not enough. In addition, when an acquisition involves a dominant platform, authorities should shift the burden of proof, requiring the company to prove that the acquisition will not harm competition.³¹

Strengthening antitrust enforcement: Traditional antitrust tools are not applicable in multi-sided markets, where one side pays zero prices. If Uber were to prohibit its drivers from working for Lyft, it would make it much harder for Lyft to compete. Similarly, when Uber offers a loyalty discount, it makes it more difficult for its customers to switch to Lyft. Exclusive dealings and loyalty discounts, which are common in most markets, deserve much closer antitrust scrutiny in DP markets because these markets have a natural tendency to monopolization: Many practices that are benign in other markets could easily become the straw that breaks the camel’s back in DP markets.

3. Reducing the Power of Data

DPs use their control over specific types of data to increase their market power and, more importantly, their political power. There is a desperate need to better understand how DPs are impacting our political environment. This understanding is greatly impeded by the fact that independent academics and regulators do not have access to all DPs’ data, nor do they have the possibility of doing tests on the various ways that different interfaces may impact behavior. The effects of Dark Patterns discussed above are startling. Platforms have been doing similar A/B testing for years and know much more about the effectiveness of these practices. Even more worrisome, DPs hire hand-picked academics to undertake the studies they want, selectively releasing them to the public. This double selection severely distorts the evidence available in the public domain. Either access is opened up broadly, or the burden of proof should be inverted: Qualitative or imperfect evidence of harm, when combined with deliberate and severe data restrictions, should be considered *prima facie* evidence of harm.³²

³¹ Importantly, Saikrishna Kamepalli, Raghuram Rajan, and Luigi Zingales, “Kill Zone” (n.d.), shows that acquisition by incumbents may be problematic when markets present network externalities and switching costs. Expecting that new social media would be acquired by the incumbent, which will incorporate all the new desirable features, customers will be reluctant to switch to new entrants, even when these are technologically superior. This reluctance will severely reduce the market price at which these new entrants will be acquired, discouraging new entry, as the paper seems to find empirically.

³² See Luigi Zingales, “Preventing Economists Capture,” in *Preventing Regulatory Capture: Special Interest Influence and How to Limit It* (Cambridge University Press, 2013).

The FTC should be empowered to implement a data access mandate: Congress should empower the FTC to: (i) have access to DPs’ internal databases and studies, (ii) perform their own independent research on how platforms impact different areas of our society, and (iii) moderate independent researchers’ access to these databases. The FTC is a well-established agency that is accustomed to conducting in-depth investigations and whose Bureau of Economics and Office of Technology Research is amongst the better staffed in the country.

Different types of openness for different types of data: Data openness does not mean a total disregard for privacy protection. While re-identification is a serious problem,³³ the openness of larger databases enables anonymization techniques that, while not perfect, are important steps in the right direction. There are promising computational technologies—like differential privacy and secure multiparty computation—that can help in this dimension. More importantly, one must acknowledge that different types of data may allow different openness rules for different purposes. For example, regulators should have ample access to DPs’ internal databases. They can also intermediate the access for third parties who respect privacy considerations, such as outside, independent researchers. Regulators can then ensure that a small but significant anonymized sample is made available for a larger use, depending on the trade-off between re-identification risks and the gains from openness. In some cases, it will be up to elected officials to settle the trade-off between privacy protection and competition, as done in Brazil in the Good Payer’s Credit Act, where the data sharing was mandated by law.

Longer-term—the creation of a Digital Authority: The strongest indication emerging from the four reports is the importance of having a single powerful regulator capable of overseeing all aspects of DPs. DPs generate several concerns across different fields, all linked to the power of data. To address these concerns in a holistic way, there needs to be a single regulator able to impose open standards, to mandate portability of and accessibility to data, to monitor the use of dark patterns and the risks of addiction, and to complement the FTC and the DoJ in merger reviews. Countries like the UK are considering the set-up of a Digital Markets Unit. The United States and other nations should follow their example.³⁴

The Dangers of a Digital Authority: As George Stigler would readily point out, a new Digital Authority runs the risk of being captured by industry, becoming a new barrier to entry rather than a promoter of competition. This risk can be minimized, albeit not eliminated, by a careful institutional design. This is one reason why we envision—at least initially—to have the Digital Authority as a subdivision of the FTC, an across-industry authority with a better-than-average record of avoiding capture. Most importantly, the Digital Authority will have to be very transparent in all its activities. The Reports discuss a range of different institutional design mechanisms that can be explored to protect the Digital Authority from capture.

³³ See Luc Rocher, Julien M. Hendrickx, and Yves-Alexandre de Montjoye, “Estimating the Success of Re-Identifications in Incomplete Datasets Using Generative Models,” *Nature Communications* 10, no. 1 (July 23, 2019): 3069, <https://doi.org/10.1038/s41467-019-10933-3>.

³⁴ See <https://www.gov.uk/government/speeches/pm-speech-opening-london-tech-week-10-june-2019>.

4. Reducing the Political Power of Digital Platforms

Disclosure obligations: As mentioned above, DPs are formidable political machines. The Honest Ads Act, which extends traditional campaign disclosure obligations to the internet, seems the first obvious step in limiting this excessive political power. The second, and probably most important, is to understand how these companies are acting as political agents. To comprehend the political role DPs play, some new disclosure obligations should be in place:

- i. **Non-neutrality:** Platforms should disclose when they voluntarily adopt non-neutral policies for content. For example, if platforms are deliberately demoting content related to specific topics, they should make clear what types of content they are demoting and why. Failure to disclose this information should result in fines or sanctions.
- ii. **Relationship with politicians:** Platforms should disclose when they provide specific support or technical assistance to political parties, candidates, or interest advocacy groups, outlining what type of support has been provided and the outcome of this support. For example, during the 2016 elections, Facebook and Twitter embedded some of their own employees in the campaign teams of the various candidates.³⁵ It is not clear to what extent this is still a practice. There should be full transparency on those efforts, including whether candidates are charged equal prices, receive equal treatment, are granted equal distribution of their contents, etc. In particular, electoral regulators must ensure that candidates who are criticizing companies like Facebook and Google receive equal treatment to candidates who support them.
- iii. **Academic funding:** Platforms should disclose their direct funding to academia and their relationship with academics. This disclosure should include DPs charitable arms and the donations of key individuals, so as to prevent easy gaming of the requirements.³⁶

These are initial recommendations that must be reviewed in 3 years: Overall, the combined disclosure recommendations will go a long way in allowing us as a society to better understand the real positive and negative impacts of DPs. Once we know more, these obligations should be reviewed to both allow for flexibility if they are unnecessary or for more stringent requirements if additional concerns appear.

5. Pro-Consumer Default Rules

The current “notice and consent” system on the type of information that can be collected or shared does not effectively protect individual privacy. At the same time, top-down regulation, which allows bureaucrats to impose their will on how markets should behave, can be overly rigid. An alternative can be the adoption of “consumertarian default rules”; that is, default rules on data protection that follow the preferences of a majority of US consumers. Such defaults should be based on “the results of well-designed, scientifically rigorous studies that elicit

³⁵ See <https://www.reuters.com/article/us-facebook-election-usa/facebook-to-drop-on-site-support-for-political-campaigns-idUSKCN1M101Q>.

³⁶ A good example is the controversy around the New America Foundation, when Eric Schmidt forced the think-tank to stop criticizing Google. See <https://www.nytimes.com/2017/08/30/us/politics/eric-schmidt-google-new-america.html>.

consumer preferences, opt-out costs, and knowledge of the rules and alternatives, as well as ignorance and biases of such rules' potential costs and benefits." These default rules should also be revisited periodically to account for updates in consumers' preferences due to technological changes or better education.

Default rules only work if dark patterns are addressed: The growing use of dark patterns implies that the default rules should be "sticky," that is, there should be stringent constraints on waiving the default in favor of a less data protective setting. Click-through or simple pop-up boxes do not satisfy the waiver. When it comes to data externalities,³⁷ however, sticky defaults might not be enough. There is a need to design top-down regulations to limit the overall amount of data collected and shared.

Who Monitors the Defaults? The consumertarian approach is very appealing, but it has one potential weakness: Who would be responsible for defining/monitoring these default rules? Competition and experimentation in this area are important, as they can allow the testing of different approaches. For example, some states may wish to delegate this responsibility to regulators. Others may privilege courts. An interesting alternative may be for some authorities to establish a safe harbor for companies that pre-commit in advance to the result of product-specific studies, which must be periodically rerun. If a company fails to qualify for the safe harbor, it is exposed to additional legal liability in litigation if a plaintiff can prove that the default fails the consumertarian standard. Finally, federal regulations should be a floor—states should be free to establish different, more protective requirements as they deem appropriate.

6. Changing Section 230:

Section 230 of the Communications Decency Act was conceived for early internet providers. These companies did not edit content and thus were not liable for it, as phone companies were not liable for the content of the phone calls they transmitted.³⁸ However, many social media platforms, like Facebook and YouTube, actively recommend content and monetize it. If YouTube's auto-play keeps leading people to extreme views or deeply deceptive content, as independent research and YouTube itself seem to indicate,³⁹ and YouTube is monetizing this specific content with ads, YouTube should be considered responsible for biases of its own algorithms, just as banks are responsible for discriminatory bias in algorithmic lending. In this respect, Section 230 is a major subsidy to DPs, favoring them in their competition with traditional media companies.

Connecting promotion and liability: When social media actively promote content and make money out of the promoted content, we think they should be subjected to the same editorial responsibility as newspapers. By contrast, if they limit themselves to solely transmitting information, with no editing or promotion, like WhatsApp, then they should be treated like

³⁷ See Omri Ben-Shahar, "Data Pollution," *University of Chicago Coase-Sandor Institute for Law & Economics Research Paper No. 854*, August 2018, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3191231.

³⁸ Even for phone companies this is starting to change, as shown by the new regulations preventing robocalls. See <https://www.wsj.com/articles/large-telecoms-state-enforcers-make-pact-to-combat-robocalls-11566489602>

³⁹ See <https://www.nytimes.com/2019/08/11/world/americas/youtube-brazil.html> and <https://www.theverge.com/2019/1/25/18197301/youtube-algorithm-conspiracy-theories-misinformation>.

phone companies and be exempted from content liability. Such a system would go a long way in levelling the playing field between DPs and traditional media.

7. Preserving Diversity in News Provision

Prevent further media concentration: Media markets are concentrating fast. To preserve diversity in news sources, the FTC and the DoJ should incorporate media plurality as a key metric in merger reviews, as done in the UK. Media plurality would be measured as the share of the attention devoted by consumers to different media sources.

Need for experimentation: The potential reduction in political accountability due to the demise of local newspapers is a serious issue. Yet, some of the potential solutions (like government subsidies to existing newspapers) might cause bigger distortions than the ones they are meant to fix. For this reason, we advocate a two-pronged approach. On the one hand, there is the need for more empirical research to assess the actual welfare costs produced by lack of political accountability. On the other hand, various alternative solutions to generate political accountability should be experimented on a small scale: from prize money for the best investigative reporting pieces to the voucher system for newspapers proposed by the News Media Report, and from prizes for local whistleblowers to a system of random federal auditing of local governments, as done in Brazil.⁴⁰ This is a major topic—concentration in local news is real and growing.⁴¹ We need pilot projects and experimentation now so we can scale-up the most successful interventions.

8. If all else fails ...

The winner-take-all characteristics of many digital markets suggest that even if all the proposed policies are implemented, in some markets we would still find ourselves in a world of few companies (sometimes just one) with outsized market and political power. This is particularly true in the search provider market, where there are increasing returns to scale and thus it is efficient to have a single search provider.

The imposition of fiduciary duties on these companies is an interesting alternative: Monopoly is worrisome in general, but it is particularly problematic in the case of companies that also enjoy great political power. Even Milton Friedman (1962), a father of the idea that a board's sole responsibility is to maximize profits, recognizes that this duty should apply only in competitive markets. In monopolies, the maximization of profits can lead to severe distortions. For this reason, Hart and Zingales (2019) propose the imposition of an additional fiduciary duty on the boards of monopolies: a fiduciary duty towards society.⁴² Policymakers should seriously

⁴⁰ See Eric Avis, Claudio Ferraz, and Frederico Finan, "Do Government Audits Reduce Corruption? Estimating the Impacts of Exposing Corrupt Politicians," *Journal of Political Economy* 126, no. 5 (2018): 1912–64. , as representative of a growing literature on the topic.

⁴¹ See, <https://www.newyorker.com/magazine/2018/10/22/the-growth-of-sinclairs-conservative-media-empire>. Of course, the problem is not that Sinclair is conservative. The problem is that monopolies in media suppress dissent and lead to uniformity. They should be prevented regardless of whether they are liberal or conservative.

⁴² One might argue that a company like Google or Facebook would never tweak its algorithms to adversely impact its political adversaries out of concern for its reputation. If reputation is indeed sufficient to make monopolies

consider imposing such obligations on DPs like Google, which operate in markets that are or tend to become natural monopolies.

IV. CONCLUSION

DPs have produced trillions of dollars of consumer surplus, but they have also raised novel policy challenges. These challenges are not confined to the economic sphere, but touch multiple disciplines. To try and address these challenges, the Stigler Center has gathered more than 30 leading academics across multiple disciplines to conduct a year-long analysis on the nature of the problems posed by DPs and their potential solutions. The full product of this effort can be found [here](#). This Policy Brief summarizes the key findings for a non-technical audience and assembles a coherent set of policy proposals.

Some will regard our proposals as too timid, while others as too radical: We regard them as the minimum response to address the new challenges raised by DPs. As the Digital Revolution is advancing, the political system is called to manage the effects of this revolution on society. Without a public debate, the policy response risks being dominated by the interests of the DPs themselves. The independent nature of this report makes it the ideal starting point for such debate, which we hope will be intense and fruitful.

behave in the interest of society as a whole, then this proposal is, at worst, redundant. Yet, it could be used as an insurance policy to prevent bad behavior when concern for reputation falls short.