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A Policymaker's Guide to Digital Antitrust Regulation

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Rather than adopt the European Union's model for regulating competition, policymakers considering how to govern digital markets should carefully evaluate whether digital antitrust regulation is justified and consider whether concerns about anticompetitive behavior can be addressed with less intrusive and more cost-effective tools.

KEY TAKEAWAYS

- The European Union's Digital Markets Act has inspired an array of similar proposals for ex ante antitrust regulation around the world, including in Brazil, India, the United Kingdom, South Korea, and Japan.
- Policymakers can be tempted to implement a digital antitrust regulation (DAR) to address any one of several economic, political, and moral concerns that, upon examination, may prove to be unfounded.
- While digital markets are not immune to anticompetitive outcomes, a DAR should only be adopted if there is real market failure and if its adoption would improve the status quo relative to nonregulation.
- DARs are likely to encounter difficulties with ensuring that regulators have both the necessary abilities to enhance consumer welfare as well as sufficient incentives for them to serve the public interest.
- Jurisdictions should evaluate whether alternatives to a DAR, such as enforcing or amending their ex post competition laws, are more effective and less costly ways to address competition concerns in digital markets.

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INTRODUCTION

Countries around the world are increasingly exploring and adopting digital antitrust regulations (DARs) modeled after the European Union's Digital Markets Act (DMA).[1] The DMA has reshaped EU competition policy by introducing ex ante regulation into digital markets after over 15 years of ex post investigations and enforcement actions against large American technology firms, now designated as "gatekeepers" under the DMA. To justify ex ante regulation, which gives enforcers the power to restrict specific behaviors before they occur, European policymakers argue that the traditional ex post or case-by-case approach of competition law enforcement is insufficient to address allegedly systemic anticompetitive conduct in digital markets.[2]

We do not agree. While the particular goals of DARs often vary by jurisdiction, they typically involve economic concerns about the dynamic nature of digital markets or large firms wielding significant market power that they can use to exploit consumers or marginalize competitors.[3] Political justifications for DARs are also common, such as the need to follow international enforcement trends or defend "digital sovereignty."[4] However, as discussed in this report, not only are the proffered economic rationales regularly belied by the reality of how digital markets operate, but especially given a second Trump administration, a DAR that targets U.S. tech firms may very well result in adverse political consequences that far outweigh any perceived benefits.

Of course, perhaps the central reason put forward for DARs globally is the promotion of "fairness," whether for consumers or small businesses. In fact, the word "fair" receives great emphasis in both the title and the text of the DMA. Of course, these types of fairness concerns—and in particular the protection of small competitors—are central to the ordoliberal or social market economy philosophy that has long animated European competition policy, despite contributing adversely to the innovation, consumer welfare, and productivity growth that should be the raison d'être of competition policy.[5]

This report provides a guidebook for policymakers who are evaluating whether a DAR is a prudent approach to policing digital markets. It examines the typical justifications offered for DARs, the different types of DARs that have been proposed around the world, the general economic problems associated with regulation that a DAR must overcome—and which are particularly

acute in digital markets—as well as the trade-offs that DARs embody between maximizing the ability for regulators to improve economic welfare and at the same time minimizing the incentives for a DAR to serve ends other than the public interest.

The report proceeds in five sections:

- The first section examines six putative rationales for implementing a DAR.
- The second section provides an overview of select existing and proposed DARs around the world.
- The third section discusses the general economic problems associated with a DAR.
- The fourth section identifies the economic tradeoffs that limit a DAR's effectiveness.
- The final section outlines a roadmap for policymakers who are considering how to address concerns about possible anticompetitive behavior in digital markets.

The core justifications for a DAR are generally inadequate to provide a strong prima facie basis for regulation. Indeed, not only are many countries pursuing alternatives to ex ante antitrust regulation, but also the EU's DMA represents just one of several types of DARs. Furthermore, the standard problems with regulation, such as chilling procompetitive behavior and regulatory capture, are especially serious in digital markets but nonetheless are issues a DAR must overcome if it is to improve the status quo. However, the various types of DAR regimes face trade-offs that are likely to undermine the capacity for regulators to improve consumer welfare. At bottom, policymakers should consider enforcing or amending existing ex post competition laws to address concerns about anticompetitive behavior in digital markets before pursuing a DAR.

WHY REGULATE DIGITAL MARKETS?

This section examines the key reasons why policymakers may pursue a DAR, with a focus on several common economic, social, and political justifications. From an economic perspective, concerns range from a fundamental unease about the mechanics of digital markets to concrete allegations about market failure. Social and moral arguments are typically centered around promoting fairness for consumers, small businesses, or both. Politically, DARs are often seen as a vehicle to promote digital sovereignty and strengthen national competitiveness, as well as reflective of an international best practice that countries should follow.

Argument #1: Digital Markets Are Different

Proponents of DARs regularly contend that digital markets differ substantially from traditional markets, necessitating special oversight and regulation. For example, they claim that network effects, whereby the value of a digital platform increases as more people use it, create a "winner-takes-all" environment whereby first movers capture the market.[6] These network effects, in turn, serve as barriers to entry that protect the platform's market power, limit the ability for rivals to meaningfully compete, and allow for the exploitation of consumers who are effectively "locked in" to the platform.[7]

This line of reasoning grossly oversimplifies how digital markets work. First, technological change driving economies of scale is nothing new—the digital revolution is but a chapter in an ongoing process of Schumpeterian "creative destruction" that began with the Industrial Revolution.[8] In fact, many long-established industries exhibit characteristics of multisided markets, including

traditional media, payment networks, and retail.[9] Moreover, it's just not true that digital markets invariably tip toward dominance, as demonstrated by the prevalence of multihoming.[10] Consider, for example, how advertisers split budgets across Google, Meta, and TikTok, or how consumers engage with both Uber and Lyft for ride-sharing services.[11] Finally, even in cases where a digital firm may achieve a degree of market power, it is very often not the first mover. For example, neither Google, Amazon, nor Meta were first movers in their respective search, e-commerce, or social media markets, but rather leapfrogged existing incumbents with a better product that consumers preferred, which empowered them to overcome network entry barriers.

Argument #2: Digital Markets Are Failing

Even if digital markets are not seen as inherently suspect, supporters of DARs typically argue that they are failing nevertheless. They point to factors such as consistently high concentration in markets such as search, mobile operating systems, and other sectors as evidence of a stalled digital ecosystem dominated by a handful of powerful firms that face little competition.[12] They argue that this market power is usually protected not just by network barriers to entry, but also by an array of allegedly anticompetitive behavior that ex post competition laws are ill suited to solve, in part because enforcement is said to take too long to address competitive harms in fast-moving digital markets.[13]

True market failure requires more than just the existence of market power protected by network barriers to entry. There needs to be evidence of sustained harm to market performance.

These arguments typically suffer from a narrow and static view of the relevant market. Digital firms regularly compete with one another broadly—for example, for consumer attention or "eyeballs"—and through dynamic competition to win in next-generation markets.[14] Furthermore, true market failure requires more than just the existence of market power protected by network barriers to entry. There needs to be evidence of sustained harm to market performance in the form of high prices, reduced output, or diminished innovation—none of which may in fact be present.[15] And, while it is certainly possible that digital markets could fail, as a global phenomenon, it is rare: Whereas in most emerging economies digital markets remain nascent and ex post correctives untried, in advanced economies, digital markets are generally thriving. Indeed, ongoing disruptive innovation in the form of artificial intelligence (AI) is currently creating competition across numerous digital markets, which belies the notion of a failing digital ecosystem. For example, Google Search faces increasing pressure from AI-driven competitors that are already significantly altering how users find information (e.g., OpenAI's ChatGPT), as well as from more longstanding competitors that are utilizing the new AI technologies to improve their market position (e.g., Microsoft's integration of AI into Bing).[16]

Argument #3: Consumers Need Protection

In addition to these economic arguments for regulation, advocates of DARs often present moral and social rationales grounded in achieving "fairness" for consumers.[17] Indeed, the DMA emphasizes fairness as a core principle, referencing the term approximately 90 times, including around 60 mentions just in the preamble alone.[18] While the meaning of "fairness" can vary significantly between jurisdictions, DAR advocates commonly invoke the idea that consumers are being unfairly exploited by digital platforms. For example, the EU presents the DMA as necessary to protect consumers from exploitative behavior, arguing that increased regulation ensures

greater transparency, control over personal data, and restrictions on potentially harmful practices.[19]

These types of fairness-based justifications for digital regulation are usually problematic. First, in general, "fairness" is a vague and subjective concept, making it a poor lodestar for enacting clear and consistent regulation.[20] Indeed, even the German Monopoly Commission has pointed out that "fairness" can prove "unclear in economic terms" and admits of multiple interpretations.[21] Second, accusations of consumer exploitation neglect the common sense reality that digital platforms such as Google Search, YouTube, and Facebook overwhelmingly benefit users with previously unprecedented access to information, entertainment, and communication tools at no monetary cost. Finally, even where exploitation may exist, noncompetition frameworks can offer superior solutions to a DAR. For example, the EU's General Data Protection Regulation (GDPR) already provides stringent privacy protections that include consent requirements, processing limitations, and strong enforcement mechanisms.[22]

Accusations of consumer exploitation neglect the reality that digital platforms overwhelmingly benefit users by offering what are very often free services.

Argument #4: Small and Medium-Sized Business Need Protection

Fairness-based justifications for DARs are also regularly framed in terms of creating a level playing field for small and medium-sized businesses. For example, the DMA emphasizes the importance of "contestability" as a way to enable smaller firms to compete more effectively against entrenched incumbents and prohibits a broad swath of behavior that may harm competitors, such as self-preferencing, even if not consumers or competition.[23] Indeed, using a DAR to help small businesses compete and ensure effective competition is consistent with the ordoliberal and social market economy model that has long played a fundamental role in shaping EU competition policy.[24]

Concerns about protecting small firms are misplaced in the context of digital markets defined by dynamic innovation competition. As Joseph Schumpeter recognized decades ago, large and even dominant firms often have the best incentives to innovate and are leapfrogged by other firms with newer and superior products that bestow market power.[25] Schumpeter's insights have withstood the test of time: Numerous studies across many economies around the world continue to confirm that the relationship between market structure and innovation often takes the form of an inverted-U, wherein markets characterized by many firms are less innovative than markets with a few firms, and markets with a few firms exhibit more innovation than those characterized by monopoly.[26] In short, size can be very beneficial when it comes to driving digital innovation competition. Moreover, practices such as self-preferencing, while they may harm competitors, overwhelmingly benefit consumers. For example, whenever Google prioritizes Google Maps over Yelp in its search results, it does so because Google Maps is deeply integrated into its ecosystem and delivers a high-quality experience to get users the answers they seek as seamlessly as possible.

Argument #5: Strengthen Digital Sovereignty

Policymakers also regularly frame DARs as essential for strengthening "digital sovereignty," or the desire to reduce reliance on foreign platforms and support national competitiveness. For example, the DMA is explicitly understood as part of the EU's broader Digital Single Market strategy.[27] Indeed, as of this report's writing, five of the seven designated gatekeepers are American, and all of the public conduct investigations are against these firms. In fact, Andreas Schwab (European People's Party, Germany), the European Parliament's rapporteur for the DMA, has effectively admitted that the DMA should target dominant U.S. firms rather than smaller European ones.[28] Unsurprisingly, some of these smaller European firms have acknowledged that the DMA is working to improve their position against their U.S. rivals.[29]

This sort of antitrust protectionism is flawed for at least two reasons. First, it overlooks that Europe's core economic problem, as framed by the landmark Draghi Report, is not American tech giants, but rather Europe's failure to build its own tech leaders.[30] Indeed, using DARs to target American firms—some of which invest more in research and development (R&D) than several G7 economies—will only diminish their incentives to make investments in that economy.[31] Second, the digital sovereignty approach risks harmful retaliation from the United States, with the second Trump administration already signaling a willingness to impose tariffs, initiate World Trade Organization (WTO) disputes, and take other measures against jurisdictions enacting protectionist digital policies.[32] This risk is particularly serious with respect to DARs, which the Trump administration has already warned can constitute unfair exploitation against American firms.[33] In fact, even during the Biden administration, South Korea's Platform Competition Promotion Act (PCPA) triggered a backlash in Congress, with lawmakers proposing legislation that would require the U.S. Trade Representative to investigate whether South Korea's regulations unfairly impacted American tech companies—and if so, take retaliatory action.[34]

The second Trump administration has already signaled a willingness to impose tariffs, initiate WTO disputes, and take other measures against jurisdictions enacting protectionist digital policies.

Argument #6: Everybody's Doing It?

Finally, some policymakers argue that the DMA has effectively become a global best practice for how to address competition issues in digital markets, as evidenced by similar efforts around the world, including jurisdictions such as Argentina, Australia, Brazil, Chile, Japan, Kenya, India, South Korea, Thailand, Turkey, the United Kingdom, and Uzbekistan.[35] This phenomenon, often termed the "Brussels Effect," is without question a testament to the EU's ability to shape international regulatory trends.[36] To be sure, this sort of European soft power is not new in competition policy: Of the many jurisdictions that have adopted a competition regime over the past four decades, most have opted for an EU-, rather than U.S.-, inspired model.[37]

However, although it is true that several jurisdictions are already following the EU down the path of ex ante digital antitrust regulation, it is anything but a universal trend, and there are other approaches for countries to consider. For example, jurisdictions such as the United States and Taiwan have chosen to rely on enforcing existing competition laws rather than introduce sweeping new regulations.[38] Meanwhile, other nations, such as Canada, are focused on adapting their ex post competition law framework to better address digital and other challenges.[39] At bottom, while the Brussels Effect is real, each country can and should, in a way that takes into

account its own unique economic, social, and political circumstances, determine for itself whether a DAR is the best approach for governing digital markets.

AN OVERVIEW OF DARS WORLDWIDE

While multiple countries have followed the EU and enacted, or are seriously considering enacting, ex ante antitrust regulation, DAR regimes vary significantly by jurisdiction. First, whereas some DARs appear to target large foreign (i.e., American) firms, others capture a significant number of domestic players. Second, while some models put forward general rules that apply uniformly across digital markets, others call for developing industry- or company-specific codes of conduct. Third, although DARs usually rely on per se rules, which classify specific behaviors as automatically anticompetitive, others consider the procompetitive benefits that may result from the conduct. (See table 1.)

The European Union's Digital Markets Act

As the first DAR globally, the EU's DMA entered into force in November 2022, with the European Commission beginning enforcement in March 2024 when obligations for targeted companies took effect.[40] The DMA designates these gatekeepers based on quantitative thresholds and, specifically, annual EU turnover above €7.5 billion in each of the past three years or market capitalization exceeding €75 billion over the past year, and the provision of services to over 45 million monthly active users and 10,000 business users in the EU in each of the past three years.[41] In practice, these thresholds serve to target major foreign platforms, and in particular the U.S. tech giants Google, Apple, Meta, Microsoft, and Amazon, most of which are already facing investigations and potential fines for alleged noncompliance. As of this writing, only one European platform, Booking.com, has been designated as a gatekeeper, and no investigations into the company have been announced.[42]

The DMA sets forward a series of rules that apply equally to these gatekeepers across a broad array of digital products and services. Specifically, the DMA imposes per se bans on practices that include self-preferencing, so-called "data misappropriation," failure to ensure interoperability, and cross-platform data combination without explicit user consent.[43] And, as per se bans that automatically condemn this behavior, the DMA's rules do not allow gatekeepers to defend their practices by offering such procompetitive justifications as, for example, that self-preferencing allows Google to integrate its Search and Maps products in a way that improves the user experience.

Japan's Smartphone Software Competition Promotion Act

Set to take effect in December 2025, the Smartphone Software Competition Promotion Act (SSCP) is Japan's approach to ex ante digital regulation.[44] As a report by Japan's Secretariat of the Headquarters for Digital Market Competition makes clear, the SSCP seeks to bring about "a fair and equitable competition environment."[45] Indeed, both economic and fairness-based objectives appear to motivate the SSCP, which aims to promote free and fair competition by both eliminating artificial competitive advantages held by certain digital firms and preventing harm to businesses relying on their services.[46]

Unlike the DMA, which applies broadly to digital space, the SSCP is focused on a single industry: mobile. Still, like the DMA, the SSCP is targeted at American companies—namely, Apple and Google, which are alleged to have dominant market positions in providing operating

systems, app stores, and other digital services essential to Japan's smartphone ecosystem.[47] Also like the DMA, the SSCP appears to rely heavily on per se rules and bans practices such as restricting third-party app stores, self-preferencing, and data misappropriation. To be sure, although the SSCP does seem to allow for limited cybersecurity exemptions, it largely precludes firms from offering traditional procompetitive justifications for their conduct.[48]

Brazil's Bill 2768/2022

Presented in October 2022 to Brazil's federal legislature, Bill 2768/2022 is a DAR regime that, much like the EU's DMA and Japan's SSCP, appears to reflect a blend of economic and social rationales such as enhancing competition and promoting fairness.[49] Indeed, Bill 2768/2022 is extremely broad, and invokes a litany of principles including widening social participation in matters of public interest, reducing regional and social inequality, combating the abuse of economic power, protecting consumers, and promoting free competition.[50]

Like the EU's DMA, but unlike Japan's SSCP, Bill 2768/2022 is a regulatory framework that applies the same rules across various digital markets. Moreover, and here like the DMA and SSCP, these rules take the form of per se bans of practices that include self-preferencing and refusals to deal—all without any clear mechanism for companies to present procompetitive justifications for their conduct.[51] However, unlike both the DMA and SSCP, Bill 2768/2022 is likely to cover a wide range of firms, including many Brazilian companies, due to low revenue thresholds of BRL 70 million in annual gross revenue (approximately $11.5 million).[52] Indeed, some estimates suggest that at least 187 digital service and e-commerce companies would fall under the bill's scope.[53]

India's Digital Competition Bill

First published in March 2024, India's proposed Digital Competition Bill (DCB) reflects yet another variation on the DAR theme. Similar to the other DARs, the DCB aims to establish an ex ante regulatory framework to ostensibly promote fair competition and curb perceived anticompetitive practices in India's growing digital economy. Indeed, the DCB reflects the culmination of a broad government-commissioned study on India's competition laws, which concludes that a new ex ante regime could supplement the existing ex post model embodied in the country's Competition Act.[54] Specifically, the study notes that because "digital markets are dynamic in nature, timely intervention is necessary to prevent anti-competitive conduct."[55]

Like the three preceding DAR regimes, the DCB is defined by per se prohibitions of practices such as self-preferencing, bundling, and data misappropriation.[56] However, unlike the DMA and Japan's SSCP, but similar to Brazil's Bill 2768/2022, the Indian bill's concept of "systematically significant digital enterprises" (SSDEs) is expected to encompass a number of domestic digital platforms. Moreover, and now unlike Brazil's Bill 2768/2022 and the EU's DMA, but like Japan's SSCP, the DCB would adopt a tailored approach. That is, the DCB would require the creation of company-specific codes of conduct, as opposed to general prohibitions that apply equally to designed firms across multiple digital markets.[57]

The United Kingdom's Digital Markets, Competition, and Consumers Act

The United Kingdom's Digital Markets, Competition, and Consumers Act (DMCCA), which came into force this past January, constitutes an additional variety of DAR. The DMCCA followed long-running worries with the United Kingdom's digital markets beginning with the 2019 Furman

Report, which called for the United Kingdom to implement a "clear set of rules to limit anti-competitive actions by the most significant digital platforms while also reducing structural barriers that currently hinder effective competition."[58] As such, the DMCCA reflects motivations similar to those underpinning other DARs, with the United Kingdom's Competition and Markets Authority (CMA) making clear its desire to "unlock opportunities for enhanced innovation, investment, and growth across the U.K. tech sector [and] enable people and businesses across the UK … to get a fair deal."[59]

The DMCCA targets firms with "strategic market status" (SMS), defined as "substantial and entrenched market power" and a "strategic role within digital ecosystems."[60] It also includes a relatively high quantitative threshold of £25 billion in global turnover or £1 billion in U.K. turnover.[61] As such, like the DMA and SSCP, the DMCCA appears likely to primarily target U.S. firms, with Google being the first company to be investigated as having SMS.[62] Moreover, and again like Japan's SSCP and also India's DCB, the DMCCA opts for a tailored approach, and in particular company-specific obligations to be developed by the CMA. However, and importantly, unlike all the other DARs previously discussed, the DMCCA does not adopt per se bans, and instead explicitly allows companies to present procompetitive justifications for their behavior.[63]

South Korea's Platform Competition Promotion Act

South Korea's proposed PCPA represents a further model for ex ante antitrust regulation.[64] Like the DMA and Brazil's Bill 2768/2022, it is a regime that would apply its rules generally to designated companies across a number of digital markets. However, rather than target primarily foreign firms, the PCPA would also likely apply to important domestic platforms such as Kakao and Naver.[65] And, similar to the United Kingdom's DMCC, the PCPA appears to allow covered firms to present procompetitive rationales for the practices identified by the bill as anticompetitive, which include self-preferencing, bundling, and most-favored-nation clauses.

Notably, South Korea is also considering the Partial Amendment Bill, which offers an alternative to the ex ante PCPA proposal.[66] Specifically, the Partial Amendment Bill aims to strengthen South Korea's existing ex post competition enforcement under the Monopoly Regulation and Fair Trade Act. While it thus attempts to work within a traditional ex post competition law framework and address anticompetitive behavior retroactively, the Partial Amendment Bill does introduce specific thresholds to designate the "dominant online platform operators" that are subject to the new rules.[67] As such, the modified ex post regime is effectively a tech-specific antitrust law, which reflects a significant departure from the generalist nature of typical ex post competition law enforcement.

Table 1: Categorization of global DAR models

DAR Regimes	Breadth of Application	Scope of Rules	Legal Standard
EU's DMA (adopted)	Targets U.S. firms	General	Per se
Japan's SSCP (adopted)	Targets U.S. firms	Industry-specific (mobile)	Per se
Brazil's Bill 2768/2022 (not adopted)	Domestic and foreign firms	General	Per se

DAR Regimes	Breadth of Application	Scope of Rules	Legal Standard
India's DCB (not adopted)	Domestic and foreign firms	Company-specific	Per se
UK's DMCCA (adopted)	Likely targets U.S. firms	Company-specific	Procompetitive benefits considered
South Korea's PCPA (not adopted)	Domestic and foreign firms	General	Procompetitive benefits considered

COMMON PROBLEMS WITH DIGITAL ANTITRUST REGULATIONS

Even if there is a prima facie basis for implementing a DAR in response to market failure or some pressing social or political malady, this is merely a necessary, but not sufficient, condition for implementing ex ante antitrust regulation. To be worthwhile, a DAR must also be likely to improve the status quo relative to nonregulation and thus overcome two core problems that often doom regulatory schemes. Specifically, regulators can face not only a limited ability to improve economic outcomes, but also incentive problems that risk regulation harming, rather than helping, the public interest. Indeed, these two sets of issues erect formidable obstacles to welfare-enhancing regulation and are particularly difficult to surmount in digital markets.

Knowledge Problems

If regulators had perfect knowledge about how economic activity should be organized, there would be little need for any kind of market. The reality, however, is very different. Indeed, as the economist F.A. Hayek explained, the relevant knowledge about consumer preferences, production processes, and technology can be dispersed among market participants, often in a tacit form.[68] Indeed, it is markets themselves—through the price mechanism, competition, and exchange—that generate the knowledge needed to discover how resources should be best employed, and which may come about in an unintended and spontaneous way.[69] In other words, competition is itself the way that key economic information is discovered over time in the market, rather than constructed by state planners. As such, regulation can paradoxically negate the very forces that provide the knowledge that is needed to regulate effectively.[70]

This calculation problem can be especially difficult to solve in digital markets, wherein competitive processes are dynamic and rapidly evolving, and economic knowledge continuously advances with every click and digital transaction. In short, the faster the market is moving, the harder it is for regulators to get it right. Indeed, even for Schumpeter—who disagreed with Hayek about the knowledge problem as a theoretical matter—it was clear that, in practice, state management of the dynamic and often fraught process of creative destruction to, for example, force it to conform with a decentralized model of "fair" or "effective" competition is a nonstarter.[71] Moreover, innovation is itself typically the key driver of competition in digital markets, which can create another de facto knowledge barrier: Even if regulators can figure out short-run welfare-maximizing outcomes, economics has struggled to develop a valid theory for assessing the trade-off between short-run static competition and the dynamic innovation competition that defines digital markets.[72]

Inefficiencies and Welfare Losses

Even if the knowledge problem were manageable, regulation can still result in inefficiencies. When regulators force a deviation from competitive outcomes—by, for example, restricting entry—a welfare loss can result due to a reduction in economically beneficial activity.[73] In this way, regulation can act like a tax and reduce the amount of output produced and chill welfare-enhancing behaviors. Whether through regulating prices or other types of regulatory regimes, the economic costs from these welfare losses risk outweighing any benefits achieved through the regulation, resulting in suboptimal outcomes relative to the pre-regulatory status quo.

These welfare losses can be enormous in digital markets, where the volume and value of digital services are huge and even at times unseen. As the Information Technology and Innovation Foundation (ITIF) has previously explained, from 2007 to 2011, the consumer surplus gained from free digital services was worth $106 billion, corresponding to about 0.74 percent of gross domestic product.[74] Indeed, a study by Brynjolfsson, Collis, and Eggers finds that "Facebook alone contributed about $225 billion worth of uncounted value for consumers."[75] Moreover, there are already documented examples of how the DMA is resulting in suboptimal economic outcomes that harm consumers, such as, in complying with the DMA, Google's disintegration of Maps with its Search service resulting in the unintended consequences of poorer user experience and reduced traffic to small businesses such as hotels and restaurants.[76]

There are already documented examples of how the DMA is resulting in suboptimal outcomes that harm consumers.

Compliance Costs

Regulatory welfare losses can be exacerbated by the compliance and related costs imposed by regulation on firms that ultimately get passed on to consumers in one form or another. What's more, studies continue to confirm the long-held view that greater regulatory requirements can help solidify the status of larger firms, which have an advantage over smaller competitors in complying with burdensome regulations.[77] Moreover, there is also an opportunity cost associated with these compliance costs: namely, the steering of important resources toward dealing with the regulation rather than more efficient and pro-consumer behavior.[78] That is, while compliance costs can be substantial, the value that is lost from the activity to which these resources could have been put can be even more damaging to society.

These costs of regulation are likely to be especially high in digital industries, wherein markets are not just complex and highly technical, making compliance very costly, and wherein policymakers should seek to promote dynamism—not add new entry barriers. Furthermore, much of society's most skilled and valuable resources are employed in digital industries, which, along with the immense value brought by digital services, can further exacerbate the potential opportunity costs of regulation. Indeed, these compliance and opportunity costs of regulation are proving to be substantial in the context of DARs. For example, in its first DMA compliance report, Meta noted that it had already spent 590,000 work hours across 11,000 skilled employees to make compliance changes—a colossal amount of resources that could otherwise have been engaged in more productive behavior.[79]

Capture by Industry Players

Even if regulators can get it right, they won't necessarily do so. In a seminal article, George Stigler articulated how regulation can be promulgated principally for the benefit of industry, rather than the public.[80] Put simply, incumbent firms have incentives to enlist the government's aid in shoring up their market positions. And, even when regulation is adopted for the public benefit and against the wishes of incumbent firms, these incentives for "regulatory capture" do not disappear but may come to fruition with respect to how the regulation is ultimately enforced. Indeed, in a competition between the public and industry to use regulation for their benefit, the latter is often more likely to triumph due to smaller numbers and the potential for large, concentrated benefits.[81]

DARs are ripe for regulatory capture. This is due in large part to the disruptive and Schumpeterian nature of digital competition in which, as discussed, firms compete for the market by developing innovations that can render incumbents effectively obsolete. These extremely high stakes will increase the incentives for incumbent digital firms to use regulation to protect the economic status quo. Moreover, consistent with these Schumpeterian dynamics, digital markets are often characterized by a few large firms, which reduces the transaction costs they face when organizing to co-opt regulation, making it easier for them to engage in successful capture relative to a market that comprises many players.

DARs are ripe for regulatory capture. This is due in part to the disruptive nature of digital competition wherein firms compete for the market by developing new innovations that can render incumbents effectively obsolete.

Regulatory Dependence on Industry

There are other ways the incentives necessary for effective regulation can be distorted. Indeed, regulators themselves may be former or prospective industry players passing through a revolving door, such that their views have either long been shaped by their private experience or perhaps animated by the expectation of a future position working in the private sector.[82] Alternatively, but relatedly, regulation can be subject to a sort of mind capture, whereby the government becomes heavily dependent on industry expertise when attempting to craft and enforce sound economic rules. In other words, to determine the best way to improve market outcomes, regulators may substantially rely on information and analysis from the regulated firms or industry experts who are closely connected with industry.

These problems are likely to be aggravated in the context of a DAR. Because digital markets are typically fast moving and technically complex, regulators can become highly dependent on industry to get the right perspective on how digital markets work and might be improved through regulation. Moreover, a revolving door between government and industry is already not uncommon in the high-tech ecosystem, and the high rents paid to top employees in these industries will be a strong incentive for regulators to seek work in the private sector after—or as a precursor to—a term of government service. Put simply, for one reason or another, even well-intentioned regulators may find it hard to engage in truly independent and objective analysis untainted by industry perspectives.

Regulatory Abuse and Revenue Extraction

The incentives of regulators are not necessarily aligned with the public interest. For example, in Stigler's analysis, regulators can provide industry with a guiding hand in steering regulation due to the benefits regulators can receive in return.[83] In fact, even regulation that is not yet enacted may be a way to prompt industry to spend more time and resources on lobbying or otherwise engaging with policymakers, if not also ultimately a means for simply extracting revenues for the good of the state entrenched political elites—as opposed to the general public.[84] Importantly, this theory of revenue extraction also suggests that, as some jurisdictions demonstrate the ability to extract rents from industry, others will follow suit and propose similar new policies.[85]

These concerns about regulatory abuse and revenue extraction are especially serious in the context of digital markets wherein, consistent with the dynamics of Schumpeterian competition, firms often enjoy very high rents. And of course, for over a decade, competition policy has been used to generate massive monetary judgments against American tech firms. For example, the EU has fined Apple approximately €15 billion for competition law violations, with fines under the DMA potentially reaching as high as €38 billion.[86] Indeed, the increasing number of "fast followers" that are considering implementing a DAR corroborates concerns about DARs being used as a tool for revenue extraction.

The incentives of regulators are not necessarily aligned with the public interest.

DARS PRESENT DIFFICULT TRADE-OFFS

For a DAR to be justified, it should be likely to improve the status quo and thus adequately overcome the problems concerning a lack of the needed abilities and incentives to engage in welfare-enhancing regulation. However, while the nature of DARs can, as described in Part III of this report, vary significantly depending on a number of factors, regardless of the specific permutation that a given DAR adopts, DARs are unlikely to improve the status quo. This is because inherent trade-offs exist between, on the one hand, ensuring that regulators have a sufficient ability to improve economic outcomes and, on the other hand, properly aligning incentives with serving the public interest.

Industry- and Company-Specific Rules Are Ripe for Capture

As discussed, a fundamental problem facing regulators that is especially hard to overcome in digital industries is regulators having insufficient knowledge to implement policies that improve, rather than hinder, economic welfare. To address this issue, a DAR regime might opt for industry- and company-specific rules such as those contemplated by Japan's SSCP or the United Kingdom's DMCCA. The rationale for doing so is, at one level, simple: By more narrowly tailoring digital regulations to a particular industry or company, the amount of knowledge and expertise that regulators need to formulate efficiency-enhancing rules is reduced, which increases the likelihood that they will be able to improve the status quo.

However, although these sorts of industry- and company-specific rules may help to correct a lack of regulatory knowledge, at the same time, they tend to exacerbate concerns about regulatory capture, wherein firms may seek to use a DAR to pick winners and losers and entrench or even enhance their market position. And, the more tailored the DAR, the more likely this capture and

discriminatory treatment will be: Regulators could impose digital rules that are highly burdensome to one disfavored company or industry, while designing a more favorable regulatory framework for the firms that have engaged in successful capture.

Generally Applicable Rules Are Disconnected From Market Realities

To avoid the regulatory capture problem, a DAR might seek to eschew industry- or company-specific rules and instead rely on a more general framework. Indeed, by adopting rules that apply uniformly regardless of the industry or firm, problems with regulatory capture could be lessened, at least to a degree. That is, a broader DAR regime such as the DMA, whose rules encompass a large number of industries and firms, would apply to each designated firm equally—at least in principle. This general application could also create more competition for regulatory influence, such that the power for any one firm or group to engage in capture should be reduced.

And yet, in attempting to prevent capture by opting for more generally applicable digital antitrust regulation, knowledge problems reappear. Specifically, a regulatory regime such as the DMA, whose strictures apply across a range of digital industries, puts a huge epistemic burden on regulators to craft rules that will work across markets that invariably exhibit critical differences. For example, even if banning might be advisable in one digital market, it might not make sense in another market where the digital products being tied are used—unlike in the first market, in roughly fixed proportions—or as a competitive strategy by a smaller firm to compete with a large rival. As such, a wide-ranging DAR is bound to insufficiently take into account the specific circumstances that make each industry or firm unique, and which thus create a recipe for a regulation disconnected from market realities that results in suboptimal economic outcomes.

A regulatory regime such as the DMA, whose strictures apply across a range of digital industries, puts a huge epistemic burden on regulators to craft rules that will work across markets that invariably exhibit critical differences.

More-Flexible Frameworks Create Industry Dependence

As noted, another core problem with regulation involves the stifling of welfare-enhancing behavior. Indeed, as the DMA is already making clear, this presents a real and foreseeable consequence of ex ante digital antitrust regulation. To avoid having a DAR result in a deluge of "false positives" or Type II errors that harm consumers, regimes such as the United Kingdom's DMCCA and South Korea's PCPA create an opportunity for firms to present procompetitive justifications for their conduct. In so doing, a DAR can at least in theory significantly reduce the risk of chilling procompetitive and pro-consumer behavior—even within the context of a DAR.

Notwithstanding these benefits, this effort to limit the economic fallout from a DAR may also come at a cost. Specifically, and as previously detailed, in addition to the classic case of regulatory capture, incentives can also be distorted when regulators become overly dependent on industry by virtue of "mind capture" or a "revolving door," which allows industry to more furtively mold regulation into their interests. This result is more likely in the case of a DAR that in lieu of per se bans contemplates regulators weighing anticompetitive harms and procompetitive benefits to determine the overall net effect of a business practice. Indeed, such an analysis will invariably require regulators to consult closely with both the digital firms they are regulating as well as

outside experts affiliated with them to achieve the commercial and technical understandings necessary to properly assess the behavior's overall effect on consumer welfare.

Per Se Rules Stifle Pro-consumer Behavior

To avoid this sort of dependence on industry, a DAR regime could instead implement simple per se rules of illegality that do not contemplate regulators engaging in a more detailed analysis of whether a digital firm's procompetitive justification is sufficient to escape illegality. Through per se rules, a DAR thus becomes much more easily administrable and less reliant on technical industry expertise—conduct is unlawful in itself, without any need to consider procompetitive benefits or overall anticompetitive effects. What's more, per se rules may also reduce the risk of capture by creating less wiggle room for enforcement in a way that limits the opportunity for regulatory abuses of discretion such as picking winners and losers.

Of course, in trying to restrain the ability of industry to leverage its informational advantages, per se bans are likely to come at an economic cost, especially in digital markets. Indeed, all the vertical or exclusionary behaviors typically prohibited by DARs are in general very often welfare enhancing and substantially beneficial for consumers. For example, a total prohibition of self-preferencing—a ubiquitous and usually highly procompetitive business practice in the digital economy—even for firms that have market power, would capture the limited instances when consumers are made worse off, but only at the expense of a substantial number of false positives, bringing about welfare losses that may very well far exceed any benefits associated with preventing harmful self-preferencing and increased administrability.[87]

Designing a DAR so that it targets large American tech firms opens the door to the abuse of regulation for protectionist purposes and revenue extraction from foreign firms.

Targeting U.S. Firms Will Have Consequences

As discussed, a third key problem that can prevent regulation from improving the status quo involves compliance and other costs that are imposed on smaller firms in a way that cements the power of existing incumbents. To get around this, a DAR regime might seek to limit its application to primarily—if not wholly—large U.S. tech giants and exempt the smaller domestic players that the DAR regime may be intended to support. In other words, while the costs of regulation would be disproportionately borne by large U.S. firms, smaller domestic firms could continue to compete freely and remain unburdened by the costs and restrictions imposed by the regulation—including by, for example, engaging in self-preferencing to promote an innovative new product.

However, designing a DAR so that it targets large American tech firms opens the door to the abuse of regulation for protectionist purposes and revenue extraction. And, as already mentioned, it is increasingly less likely that the costs of such behavior will remain externalized on large U.S. tech firms. Indeed, given the Trump administration's vow to take action against the abuse of digital regulation against America's tech giants, this approach may soon result in unintended adverse consequences that far outweigh any economic benefits the DAR has to offer. These consequences can take the form not just of decreased investment by U.S. firms—which can be particularly harmful to emerging economies—but also retaliatory political actions by the U.S. government that could include unfair trade investigations or even tariffs.[88]

Broadly Applicable DARs Stifle Homegrown Dynamism

To avoid the blowback from digital protectionism, a DAR might instead develop designation requirements that do not primarily target large American tech firms because they also encompass a significant number of smaller domestic players. So designed, a DAR would be more likely to create a level playing field among foreign and domestic digital competitors and avoid the appearance of using a DAR as a stick against the United States and its leading digital businesses. In so doing, a DAR regime could be seen as a truly compartmentalized regulatory scheme that does not spill over into areas such as trade and foreign affairs, thereby avoiding retaliatory actions that could easily result in economic harms that dwarf any marginal benefits from the DAR in terms of improving the competitiveness of domestic digital firms.

While the desire to formulate a DAR regime that does not target American firms should be a priority for any jurisdiction that is looking to implement a DAR in a way that does not provoke the ire of the Trump administration, doing so will, as intimated above, come at an economic cost. That is, applying a DAR broadly may very well impose restrictions and costs on smaller, homegrown digital companies which limit their ability to compete against large U.S. rivals. This could lead to DAR regime that, rather than spur growth in a country's digital markets, has the opposite result of stifling dynamism and in all likelihood benefiting larger foreign players that are better able to absorb the burdens imposed by the regulation.

RECOMMENDATIONS FOR JURISDICTIONS CONSIDERING DIGITAL ANTITRUST REGULATION

Step 1: Assess the Need for Digital Regulation

Before adopting a DAR, policymakers should look for clear evidence of market failure, which requires more than showing that a digital market is characterized by network effects and constituted by one or a few firms with high shares. True market failure entails persistently high prices, reduced output, or a lack of innovation—all phenomena that are, in actuality, very atypical in digital markets around the world.

Step 2: Enforce Existing Competition Laws First

Even if some market failure or systemic anticompetitive behavior is believed to exist in digital markets, the reflex should not be to implement ex ante antitrust regulation. Rather, policymakers should first look to enforce their existing competition laws, which almost invariably provide jurisdictions with a more ready and less intrusive way to address the potentially exclusionary practices (e.g., self-preferencing, tying, etc.) that a DAR would address.

Step 3: Refine Ex Post Enforcement Tools

If policymakers do not believe their jurisdiction's existing competition laws are sufficient to police anticompetitive behavior, they should consider how their ex post antitrust tools can be adjusted to better empower enforcement, such as through new presumptions of harm or streamlining investigatory processes.

Step 4: Look to Existing Regulatory Regimes

To the extent that regulatory action is necessary, before going down the path of a DAR, policymakers may find that existing regulatory regimes in other areas, such as privacy, can address many of the concerns that motivate DARs, especially surrounding consumer fairness.

Step 5: Narrowly Tailor Regulation

If a DAR is to be adopted, it should be targeted at those specific digital markets where market failures require a regulatory correction. Regulation that attempts to encompass digital activity in any general way is bound to be unworkable and overbroad in a world in which digital businesses increasingly permeate all aspects of the economy.

Step 6: Avoid Heavy-Handed Remedies

When applying a DAR to address perceived anticompetitive conduct, remedies should also be narrowly tailored to address the harm at issue by preventing the offending practices and deterring future violations. Regulation that seeks to create competition where it does not exist, impose punitive monetary penalties as a form of de facto disgorgement, or break up firms are likely to result in harm that greatly offsets any benefits.

CONCLUSION

Amidst the various economic rationales that have been put forward in support of DARs, the reality is that the advanced economies that are considering them are witnessing the next generation of general purpose digital innovation with AI, whereas emerging economies are typically characterized by dynamic and growing digital markets—neither of which is consistent with the sort of market failure that justifies ex ante regulation. In addition, fairness-based justifications for a DAR are not only vague and almost invariably subjective in practice but also likely to chill the competition and innovation policymakers should want to promote. Furthermore, while many jurisdictions may see a DAR as a political necessity to curb the power of American tech giants, regulatory actions targeting U.S. tech firms are increasingly likely to be met with a strong response that may very well result in costs that trump any benefits sought through a DAR. And, while DARs may appear to some as an international best practice, in truth, the DMA is anything but a gold standard, and ex ante regimes vary considerably.

As this report shows, the various types of DARs do nonetheless seem to have one thing in common: an inherent difficulty in ensuring that the necessary incentives and abilities exist for a DAR to actually improve the status quo. That is, whereas some DAR models may bestow regulators some ability to improve outcomes, at the same time, they create an environment ripe for steering regulation away from the public interest. Conversely, whereas other DAR approaches may have a much-reduced risk of capture, regulators can find themselves with little likelihood of actually improving the status quo. As such, rather than adopt a DAR, policymakers should prioritize enforcing—and, if necessary, modifying—their existing ex post competition laws to address concerns about anticompetitive behavior in digital markets.

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