

# International pro-competition regulation of digital platforms: healthy experimentation or dangerous fragmentation?

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## Abstract

The increasing dominance of a small number of 'big tech' companies, across a range of critical online markets, has led to growing calls for regulation to promote more competition, and to ensure that market power is not exploited unfairly. New regulatory regimes to this end are now under development in a variety of jurisdictions. While the new German and EU regulatory regimes are the most advanced, there are detailed proposals under discussion in the UK, US, and China, while in South Korea new regulations have been introduced in relation to the specific area of app stores. This article discusses several questions arising in this context. What problem is pro-competition digital platform regulation trying to solve? Why regulation and not competition law? What are the design challenges involved in developing such regulation? What are the risks arising from diverging regulatory approaches to these global issues and how much these risks be mitigated? And what role can trade policy play?

**Keywords:** digital markets, online platforms, monopolization, regulation, trade policy

**JEL classification:** F13, L41, L51, L86

## I. Introduction

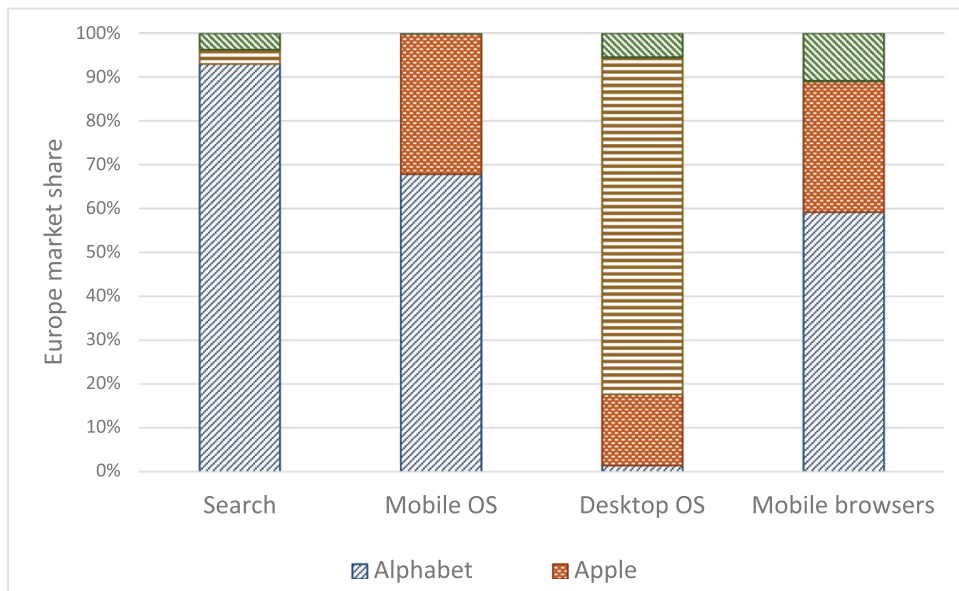
The increasing dominance of a small number of 'big tech' companies, across a range of critical online markets, has led to growing calls for regulation to promote more competition, and to ensure that market power is not exploited unfairly. New regulatory regimes to this end are now under development in a variety of jurisdictions. While the new German and EU regulatory regimes are the most advanced, there are detailed proposals under discussion in the UK, US, and China, while in South Korea new regulations have been introduced in relation to the specific area of app stores.

This article discusses several questions arising in this context. What problem is pro-competition digital platform regulation trying to solve? Why regulation and not competition law? What are the design challenges involved in developing such regulation? What are the risks arising from diverging regulatory approaches to these global issues and how much these risks be mitigated? And what role can trade policy play?

## II. What problem is pro-competition digital platform regulation trying to solve?

### (i) The existence of strong, enduring, and expanding market positions

Over the past couple of decades, as economies around the world have increasingly moved online, a small number of large digital platforms—known as 'Big Tech'—have expanded and come to dominate their respective markets.



**Figure 1:** Europe market shares in search, mobile and desktop operating systems, and mobile browsers, 2021. *Source:* Statcounter.

In February 2022, Google accounted for nearly 92 per cent of the global search market (Statcounter). The next biggest, Microsoft's Bing, took around 3 per cent.

Similarly, with 2.9 billion monthly users globally,<sup>1</sup> Meta (formerly Facebook) controls much of our social media, while Apple and Google jointly dominate the market for mobile phone and associated app stores and browsers; while with 1.87 billion monthly global users (ArticleDesk, 2022), Amazon has become the giant of e-commerce. In China and some parts of Asia, the companies involved are different (Alibaba, Tencent, Baidu) but their market dominance is similar.

The market positions of the firms involved, such as Apple, Meta, and Google, have become increasingly set in stone. These firms have also extended these positions into related activities, creating substantial cross-market ecosystems. Google, for instance, not only has a strong position in search, but also in mobile operating systems, app stores, browsers, email services, ID services, and mapping services.

Figure 1 shows 2021 average market shares in Europe in a number of critical markets: search, mobile and desktop operating systems, and mobile browsers. In each case, two players account for the vast majority of the market. Shares of social networks are not straightforward to measure, as monthly average users may be misleading. Figure 2 shows UK share of time spent on social networks. Again, this shows social media to be an effective duopoly between Meta and Google (YouTube).

Meanwhile, in business-to-consumer (B2C) e-commerce platforms, market leader Amazon had net UK sales in 2020 of \$26 billion (Statista, 2022), dwarfing its nearest competitor, eBay (\$1.7 billion; Statista (2021)).

While these figures are for Europe and the UK, the situation is broadly similar in most Western economies. For example, Table 1 shows Google's share in search by continent (and also the position in China). Moreover, these shares have become increasingly entrenched over time, with Google having held its share of global search at or above 90 per cent since at least 2009.

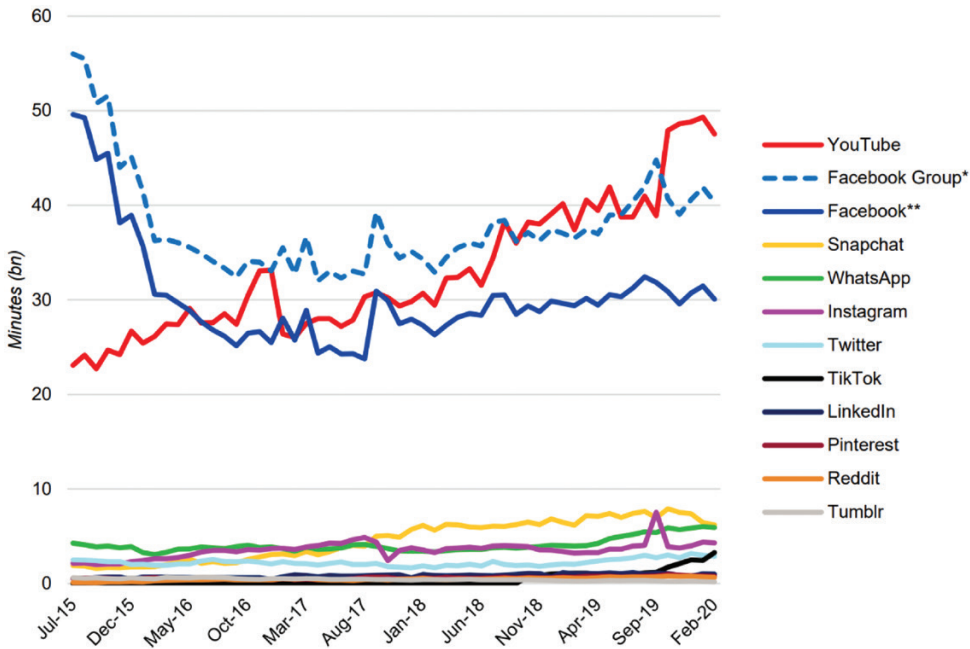
This increasing domination of many critical digital markets by a small number of firms leaves ever less space for new companies to enter and establish themselves in the market. Moreover, these platforms are a critical gateway for firms to reach potential customers. This increases the market power they hold over those business users.

## (ii) Drivers of these market positions

These high levels of concentration are partly a result of the basic economics of these platform markets.

First, the services in question exhibit huge global economies of scale and scope. They are expensive to set up but the costs of serving additional users or introducing the service to new countries are then relatively low.

<sup>1</sup> Meta Platforms, Inc. Annual Report, 3 February 2022, <https://investor.fb.com/financials/default.aspx>.



**Figure 2:** UK Share of user time spent on social media platforms, July 2015 to February 2020. *Source:* Competition and Markets Authority (CMA, 2020\*) analysis of Comscore data.

**Table 1:** Market shares (%) in search by continent (and China), 2021

Continent	Google	bing	Yahoo!	DuckDuckGo	YANDEX	Baidu	Others
Africa	96.54	2.31	0.42	0.11	0.04	0.01	0.57
Asia	91.85	1.45	1.47	0.13	1.6	2.74	0.76
Europe	92.42	3.67	1	0.59	1.52		0.8
N America	88.92	5.88	2.77	2.11	0.07	0.02	0.23
Oceania	93.67	4.24	0.86	0.95	0.03	0.03	0.22
S America	97.65	1.52	0.61	0.1	0.02		0.1
China	2.49	5.57	0.03		0.37	84.02	7.52

*Source:* Statcounter.

Second, they benefit from significant ‘network effects’. These occur whenever users value a service more when there are higher numbers of other users. A social network is a classic example: each of us is more likely to use a particular service when more of our friends are on it. But there can also be indirect network effects: the more sellers there are to choose from, the more end-users are likely to use a marketplace, while sellers are more likely to use a marketplace if it has more users.

As well as exhibiting within-platform network effects, the largest digital firms have ecosystems which incorporate a variety of different services. These ecosystems also exhibit ecosystem-wide network effects, whereby users are likely to value an entire ecosystem more, the more users and services there are on that ecosystem.

Third, data play a critical role in these digital platform markets. The main four platforms—Amazon, Apple, Meta and Google—are estimated to hold around 1.2 billion gigabytes of data between them (Mitchell, n.d.). Access to these immense amounts of user data are by-products of the service, but they are also a critical input into both the services provided and their monetization.

This can lead to important positive feedback loops. Those firms with the most customers have the most data. This allows them to enhance their product more easily, which enables them to keep the most customers. For example, Google is constantly improving its search engine by feeding data on users’ query and click activity into its

machine-learning algorithms. Its closest competitor, Bing, simply doesn't have access to sufficient 'long-tail' data to provide a comparable service, especially for more esoteric searches. Likewise, Meta and Google both use their extensive data to achieve ever more effective targeting of advertising. It is hard for others to compete without access to similar data. Data, including those collected from across different services, can also be useful in the development of new and innovative products. Those firms with the most data are thus incentivized and able to enter into new markets, which in turn fosters the creation of digital ecosystems.

Fourth, the well-known cognitive limitations of individuals can be especially important online. Many studies show how consumer choices online are strongly influenced by defaults, by rankings, and even by the colours of different options. Such online 'choice architecture' can be used by platforms to 'nudge' consumers towards particular choices, and a platform can experiment with this choice architecture to generate the outcomes it wants, which may not be in the interests of consumers.

Such online choice architecture can be abused to exploit consumers and enhance market power. In its 2018 Google Android decision ([European Commission, 2018](#)), the European Commission sanctioned Google for its requirement that smartphone manufacturers give default status to its search app, thus preserving and enhancing Google's position in search. In its 2020 market study into digital advertising, the UK Competition and Markets Authority ([CMA, 2020a](#)) found that privacy options are frequently presented to consumers in a way that steers them towards consenting to the platform's preferred outcome, which can in turn include substantially more data sharing than consumers are in fact comfortable with. In Australia, the Australian Competition and Consumer Commission (ACCC) has successfully brought action against Google for misleading customers on this front ([ACCC, 2021](#)).

These four factors—huge global economies of scale and scope, network effects including across ecosystems, data feedback loops, and the impact of online choice architecture—are important because they can lead to markets becoming highly concentrated, and the market positions of the successful firms becoming firmly embedded and also being extended across markets creating extensive ecosystems. People are unlikely to switch to a new rival to Facebook unless their friends switch too, and Facebook can design its own environment to discourage that from occurring. New entrant firms with innovative ideas cannot access the data required to 'train' their own machine-learning algorithms, while access to the same data facilitates entry into new markets by the major existing platforms. This allows the dominant platforms to succeed even if their offering is less useful or innovative than a new entrant's would be.

These factors might already be considered enough to raise competition concerns. But in addition, in cases around the world, some of the major digital platforms have been found to have breached competition law by engaging in strategic anti-competitive conduct, as is shown in [Table 2](#) below. The total sanctions paid by these firms in these cases runs to over 13 billion euros.

Meanwhile, further investigations are in progress on a global basis. For example, the US is suing Google and Meta for monopolization ([United States Department of Justice, 2020](#); [Federal Trade Commission, 2021](#)), the UK is investigating conduct associated with Apple's and Google's app stores and Amazon's and Facebook's marketplaces ([CMA, 2021a, b, 2022a, b](#)), while the EU is investigating Amazon, Apple, and Meta ([European Commission, 2020, 2021a, b](#)). There is action across the US, EU, and UK against the 'Jedi Blue' agreement on advertising between Meta and Google ([CMA, 2022c](#)). Many other cases are being taken forward in other countries.

The platforms have also engaged in substantial merger and acquisitions activity, with Google, Meta, Apple, Amazon, and Microsoft accounting for 569 mergers globally from 2010 to 2021, an average of over nine acquisitions per company per year (and not including stakes). This is shown in [Figure 3](#) below.

While many of these acquisitions will have limited competitive consequence, others are more likely to have reduced competition. For example, Meta (Facebook) now owns rival services Instagram and WhatsApp, while Google owns Waze (a direct rival in navigable mapping services) and DoubleClick (a key component of the 'adtech' chain). Such acquisitions are likely to have both consolidated the companies' positions in their core markets, often through acquiring potential competitors, and facilitated their expansion into new markets.

### (iii) Why does this matter?

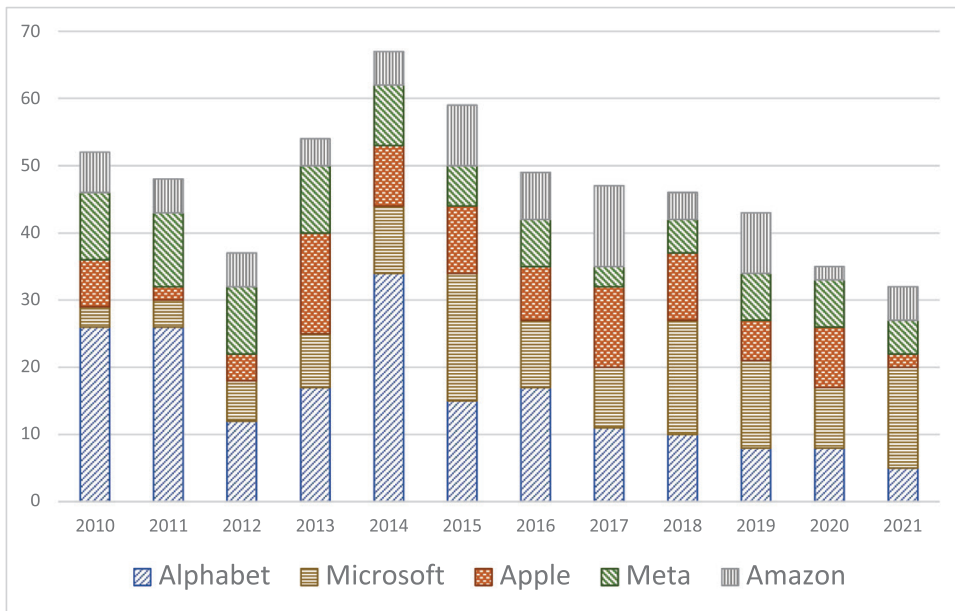
There are, of course, many positives associated with these major digital platforms. They have brought us huge innovation and valuable new services. We often receive these at a very low cost or even for free.

There are, however, some serious negatives arising—to consumers, to business users, and to innovation—and these are likely to increase over time.

First, while services may appear free, users should in fact be characterized as paying for them 'in kind', through their attention and through allowing their data to be harvested. Unlike a price-based transaction, however, many

**Table 2:** Abuse of dominance decisions against big tech companies, 2017–21

Year	Jurisdiction	Company	Conduct	Fine (€m)
2017	Europe	Amazon (e-books)	MFN clauses	Commitments
2017	Europe	Google (Shopping)	Self-preferencing	2,420
2018	Europe	Google (Android)	Paying for default	4,340
2019	Europe	Google (Adsense)	Exclusive dealing	1,490
2019	Germany	Facebook	Exploitative terms	—
2019	France	Google (Search ads)	Exploitative terms	150
2021	France	Google (Adtech)	Self-preferencing	220
2021	Italy	Google (Auto)	Refusal of access	102
2021	Italy	Amazon (Logistics)	Self-preferencing	1,128
2021	Netherlands	Apple (Dating)	Tying of payments	Up to 50
2021	South Korea	Google (Android)	Anti-forking agreements	154
2021	China	Alibaba	Exclusive dealing	2,600
2021	China	Meituan	Exclusive dealing	500
2022	UK	Google (Privacy Sandbox)	Exclusion	Commitments



**Figure 3:** Mergers and acquisitions (M&A) activity by the five largest tech companies, 2010–21. *Source:* Wikipedia lists of M&A activity, collected 28 April 2022.

users are unaware of the how much data they are giving up and are not especially engaged in the decision. As mentioned above, platforms exacerbate this situation by steering users to sign up to their default privacy options, which tend to allow more extensive collection and use of data than consumers realize or intend. This is a direct harm to privacy.

Second, while some services are provided free, price is not the only element of competition. Without effective competitive constraints, firms may be expected also to reduce the quality they offer. For example, Meta might carry out less effective content moderation (as alleged by prominent whistle-blower, Frances Haugen), while Google might place its organic search results further and further down the search engine results page, filling more of the page with its own real estate and monetizable content (Brin and Page, 1998 (Appendix A); Yin and Jefferies, 2020).

Third, there may be indirect harm to consumers arising from the treatment of business users. These platform markets are a vital gateway for businesses to reach potential customers. This gives them market power over those firms. Although many of the services are provided free to end-users, they are monetized through charges to business users, for example for advertising. Substantial market power allows the platforms to charge high fees to business users and potentially to restrict or distort competition between them. Higher costs are likely to harm consumers, since they will likely either be passed on as higher prices, or will squeeze the businesses' profits, reducing their ability to invest. Restrictions and distortions to competition may also affect the types of products and services on offer to consumers.

Fourth, there may be another indirect harm arising from the treatment of publishers. In an online environment, a publisher is any supplier of online inventory that can be used to host advertising. They fund their services at least partly through the sale of such advertising. However, the big tech platforms (in particular, Google) also act as a critical bottleneck in the sale of such inventory to advertisers. This allows them to extract a substantial share of the value chain, which in turn reduces the net advertising revenues going to publishers. This will reduce their ability to fund their service. Where this service involves the production of news content, any such cut in revenues risks harming not only consumers but potentially also effective democracy.

Fifth, although we have seen much innovation in the past, there is a significant risk that it will be more limited going forward. Potential rivals to the major platforms are at a significant competitive disadvantage in this space. Successful innovation involves much more than a good idea. In technology markets, it requires access to data (to train machine-learning algorithms), access to users, access to relevant infrastructure, and access to a fair reward if successful. For many potential innovators, the biggest digital platform firms control some or all of these crucial elements. They control key relevant data, they are often the gateway to potential users, and they can exploit their market power to extract an unfair share of any rewards from successful innovation.

The dominant platforms are also in a unique position that enables them to create rival services when they observe successful innovation by others, an issue that is worsened by relatively weak intellectual property protection in this area. Finally, their market power enables them to engage in strategic anti-competitive conduct to keep rivals out of the market or to limit their profitability.

All of these factors reduce the ability and incentives for third parties to innovate. But what about the big tech platforms themselves? After all, they have great access to all the relevant data, users, and funding needed to facilitate plenty of innovation. There is some truth to this, and there is evidence of substantial research activity in certain areas, such as self-driving cars and virtual assistants. But much innovation can be seen as an attempt to escape competition (Federico *et al.*, 2020). Where this is the case, then, just as in any running race, the incentives of a market leader to expend effort will be lower if it is too far ahead of its rivals—in other words, if its competitive advantage is too great. In simple terms, we can expect entrenched monopolists to innovate less than firms facing a serious competitive threat.

These factors are also relevant to the likelihood of current market positions being eroded, without intervention, through drastic innovation. This process, sometimes known Schumpeterian 'creative destruction', can result in apparently strong market positions being entirely supplanted by a new technology. A recent example might be the overturning of Nokia's dominant position in the mobile phone market by a new generation of smartphones. While such innovation is always possible, it is relatively less likely in a situation where the key factors required for innovation are under the proprietary control of incumbents. Certainly, it cannot be relied upon here as a reason for eschewing intervention.

### III. Why regulation?

Given the concerns outlined above, there is a growing consensus internationally that intervention is needed to create a more level playing field and to help open up platform markets to competition. But an obvious question is whether this can be achieved through a ramping up of existing competition law. Competition authorities globally may have been a little slow off the mark, but the biggest platform firms are now subject to a wide range of decisions and ongoing investigations around the world, as described above.

#### (i) The limitations of competition law

Competition law certainly has an important role to play, both in relation to the core issue of platform market power and also in relation to wider competition concerns, such as algorithmic collusion (CMA, 2021c). A significant positive aspect of competition law is that it is broadly similar across the world, and sufficiently flexible to address new competition concerns as they arise.

Merger law is also crucial. The UK CMA has recently published new ‘Merger Assessment Guidelines’ (CMA, 2021d), which are designed to signal an enhanced focus on the sorts of issues—relating to potential competition and risks to innovation—that tend to arise in mergers involving the big tech firms. There have also been proposals in both the UK and the United States<sup>2</sup> to change the merger test for the largest digital platforms (CMA, 2020b). This reflects concerns that they have been allowed to make anti-competitive acquisitions in the past, and that it can be hard for authorities to intervene in these markets, given their uncertain and dynamic nature.

Yet there are several reasons why competition law is not sufficient to address the concerns highlighted above.

First, although we do see examples of anti-competitive conduct and mergers in these markets, several of the key factors driving concentration—as outlined above—relate to the intrinsic economics of digital platform markets. It is not usually appropriate to describe the exploitation of economies of scope or network effects as strategic anti-competitive behaviour. And it is far from straightforward, if not impossible, to bring competition law cases where there is no such deliberate anti-competitive conduct.

Second, even for conduct that could be addressed through competition law, these cases typically take a long time. In November 2021, the European General Court issued its judgement<sup>3</sup> upholding the Commission’s 2017 Google Shopping decision. This was over 12 years after the Commission received the first complaint in relation to this conduct (from Foundem in 2009). With this sort of speed of intervention, it is hard for competition law to be effective in dynamic markets, which are subject to network effects and economies of scale and scope.

Third, in developing cases that are sufficiently well-evidenced to meet the high thresholds required for competition infringement decisions which are upheld on appeal, authorities tend to scope their infringement decisions relatively narrowly, and they are highly dependent on the case-specific facts. This specificity reduces the potential for the cases to have wider deterrence benefits, or for market participants to be able to deduce from them any broad ‘rules of the road’ (Hellwig, 2008). For example, in 2021 the Dutch Authority for Consumers and Markets found Apple to have breached competition law by tying dating apps into its payment system. In response, Apple has changed only its conduct in relation to dating apps, not other apps, and only in the Netherlands (Authority for Consumers and Markets, 2021).

Fourth, although the sanctions levied may seem huge, it is far from clear that the threat of such sanctions is likely to change the conduct of the biggest platform firms in practice, given the profits they stand to make and their very deep pockets to litigate cases.

Fifth, remedies in such cases tend to be highly retrospective and typically ineffective. For example, having agreed remedies with Google in relation to the Shopping case in September 2017, European Commissioner Margrethe Vestager admitted in November 2019 that ‘the proposal does not seem to be doing the trick’ (Marsden, 2020). Moreover, these remedies tend to be behavioural rather than structural, which in turn means they tend to require ongoing monitoring by the authorities, essentially anyway turning them into regulators by the backdoor.

Of course, there may also be potential to enhance competition law in the face of these concerns. It is noteworthy that the Chinese competition authority, the State Administration for Market Regulation (SAMR), has arguably found it easier to bring antitrust cases against Chinese big tech firms than its Western counterparts. Its ability to do so may have been bolstered by its 2021 Guidelines for the Platform Economy,<sup>4</sup> and the 2022 amendments to its competition law (China Briefing, 2022). The latter specifically prohibit firms from abusing a dominant market position ‘by making use of data, algorithms, technologies and platform rules’. If competition law is more easily applicable as a regulatory tool in China, there may arguably be less need in principle for formal *ex ante* regulation. Nonetheless, China too has been consulting on draft platform regulation (Brown and Korff, 2021).

In any case, it is not obvious that it is the right answer to enhance competition law generally, when the issues identified above are specific to the largest digital platforms. Germany has addressed this by introducing into its competition law a tightly targeted new power to impose rules on big tech firms that have been designated as Undertakings with Paramount Significance for Competition Across Markets (or UPSCAM) (Franck and Peitz, 2021). However, where competition law is adjusted and targeted in this way, it effectively becomes regulation anyway.

## (ii) A growing consensus for regulation

We have seen that there are serious problems arising in big tech markets (section II) and that competition law is not enough (section III). In early 2019, a series of influential expert reports, starting with the UK government-commissioned report ‘Unlocking Digital Competition’ (HM Treasury, 2019) argued for an alternative

<sup>2</sup> <https://www.congress.gov/bill/117th-congress/house-bill/3826/text>.

<sup>3</sup> <https://curia.europa.eu/juris/liste.jsf?num=T-612/17>.

<sup>4</sup> [http://english.www.gov.cn/policies/latestreleases/202102/07/content\\_WS601fe31c6d0f72576945498.html](http://english.www.gov.cn/policies/latestreleases/202102/07/content_WS601fe31c6d0f72576945498.html).

solution: *ex ante* pro-competition regulation. This would set out a clear framework for market conduct and would be pro-active in opening up digital platform markets and in creating a fairer environment for their users.

While regulation is unlikely to be a panacea, it should be a valuable complement to competition law. By setting out a clear framework upfront, it should be quicker, more holistic, able to address inherent market problems, and—through ongoing regulatory monitoring and review—better positioned to ensure that interventions are effective. Indeed, in some ways, regulation could even be better for the big tech firms themselves. A well-defined upfront set of rules should enable them to focus on what they do best, without fighting a growing conflagration of antitrust fires.

Since those early 2019 reports, we have seen a fast-growing consensus on the case for pro-competition regulation. This has in turn led to new regulatory regimes being developed in a variety of jurisdictions.

These are at varying stages of development. The new German competition law has already been enacted and the Bundeskartellamt is currently engaged in the designation process. The European Union has now finalized the wording of its proposed regulation, the Digital Markets Act (DMA), and legislation is expected by October 2022, with implementation from February 2023 and the obligations biting from early 2024. The UK government is at an advanced stage in preparing legislation and the proposed regulator—the Digital Markets Unit—is already operative in shadow form (within the CMA). In South Korea, new regulations have been introduced in relation to the specific area of app stores.

The US and China have been somewhat slower off the mark. In the US, five bipartisan bills have been prepared which would effectively impose regulation on ‘covered platforms’ (Cicilline, 2021a), the core regulation being contained in the American Innovation and Choice Online Act (Cicilline, 2021b). A sixth bill, the Open App Markets Act would provide for regulation specific to app stores.<sup>5</sup> However, it remains unclear whether these bills will be passed into legislation.

There are conflicting views in the US in relation to the EU DMA, perhaps best reflected in US Secretary of Commerce, Gina M. Raimondo, highlighting concerns that the regime will ‘disproportionately impact US-based tech firms’ (US Chamber of Commerce, 2021), quickly followed by (fellow Democrat) Senator Elizabeth Warren writing to her to expressing concern that Raimondo’s remarks were a ‘clear effort to defend these monopolists from scrutiny’ (Warren, 2021). That said, the US debate in this area is not over, and we might well expect to see legislation over the coming year or two, especially given the fast-moving nature of the EU legislation.

In China, the SAMR published draft platform ‘guidelines’ in October 2021. While these are formally guidelines, they appear to be intended to create a regulatory framework. They define different categories of online platform and apply specific regulatory rules to what they term ‘super platforms’. While these proposals appear relatively advanced, it is currently not clear when (or whether) they will be finalized.

#### IV. What are the design challenges in developing pro-competition regulation?

Although there is significant and growing international consensus on the need for pro-competition *ex ante* regulation, this is not matched by an agreed approach to regulatory design. Moreover, the design questions at stake are far from straightforward.

These are dynamic markets, which are complex both technically and economically. Their ecosystem nature means that there is a panoply of interrelated issues arising across a variety of different activities. On the one hand, this increases the risk of unintended harms arising, whereby intervention in one area can potentially harm innovation or create consumer detriment in another. On the other, it creates significant risks of ‘whack-a-mole’, whereby one problem is apparently solved, only to reappear elsewhere in a somewhat different guise.

A further complication is that this regulation is intended to complement (not substitute) antitrust. It is only worth introducing if it is substantially quicker and more administrable to apply than antitrust and can provide clear upfront ‘rules of the road’.

The big tech firms involved have been keen to emphasize that any rules need to be effective, proportional, and to avoid unintended harm. They highlight the risk that regulation is imposed which is insufficiently grounded in economic evidence, too ‘one-size-fits-all’, and too poorly designed or implemented to achieve its objectives in an effective and proportionate way.

These risks are genuine, but there are other risks too. Evidence collection takes time. Bespoke rules and allowing for defences might be more proportionate but can also create legal quagmires and absorb huge resources. Allowing parties to raise defences on efficiency grounds risks significantly weakening the ability of regulation to address the

<sup>5</sup> <https://www.congress.gov/bill/117th-congress/senate-bill/2710>



intrinsic drivers of market power described above, given that economies of scale and scope, network effects, and data feedback loops can all be described as ‘efficiencies’.

In such circumstances, the ‘best’ may be the enemy of the ‘good’, and ‘first best’ regulation is likely to be an impossible pipe dream. The best we can realistically hope for will be ‘second best’ regulation. It needs to be recognized, though, that this is inherently bound to generate both false positives and false negatives on occasion.

Below, we discuss the overarching regulatory design questions in this area, highlighting the pros and cons of various approaches, albeit without opining on the ‘optimal’ regulatory design. The key questions relate to the objectives of regulation, the scope of regulation, the regulatory approach, and some key types of intervention that are likely to be valuable in this area.

We also highlight the differences of approach between the EU, US, and UK proposed regimes in these regards, with additional references to the Chinese proposals. It should of course be noted that only the EU regime has been finalized, with the UK, US, and Chinese proposals still subject to potential revision.

### (i) Objectives of regulation

First, it is useful to identify clear objectives for regulation, against which effectiveness and proportionality of rules can be assessed.

It could be argued that the primary objective should be to promote innovation, since innovation is the most important driver of economic welfare over time. However, innovation is not a straightforward objective to include in legislation. Impact on innovation can be very hard to prove evidentially, which in turn risks making regulation based on this objective ineffective. Indeed, the regulated firms may argue that innovation is best served by limiting competition, a claim that is unlikely to be true (as discussed below), but may be hard to disprove categorically in a given situation.

An alternative is to focus on the more measurable proxy objective of competition. Of course, the relationship between competition and innovation is not entirely straightforward. It is well-understood that there can be an inverted U-shaped relationship between competition and innovation, with too much competition potentially hampering innovation (Aghion *et al.*, 2005). However, a careful reading of the relevant literature exposes that this relationship is observed when many markets with differing inherent characteristics are analysed on a cross-sectional basis. It says nothing about the relationship between competition and innovation within a given market (Federico *et al.*, 2020).

In the specific context of big tech, the entire basis for regulation is that too little competition is leading to too little innovation. If that premise is accepted, then clearly more competition should be good for innovation. In practice, the proposed UK legislation (CMA, 2020b) includes both concepts. The UK Digital Markets Unit would ‘further the interests of consumers and citizens in digital markets, by promoting competition and innovation’.

The objective of competition can usefully be further decomposed. The UK CMA (which hosts the shadow regulator) has been explicit that there is a need to both:

- (a) take action to address the sources of regulated firms’ market power, with a view to reducing barriers to competition or otherwise opening up markets to greater competition; and
- (b) address harms to competition and consumers that may result from their current market power.

This distinction fits well with the two stated objectives of the EU DMA. The first objective of ‘contestability’ is aligned with the concept of opening up the parties’ core markets. The use of this term (in place of competition) is arguably intended to emphasize the importance of enabling potential competition as well as promoting actual competition. The second objective of ‘fairness’ is not especially well defined in the Act but fits well with the idea of addressing the harms arising from existing market power. Such harms can include effects in related markets, such as terms which restrict or distort competition between business users.

### (ii) Scope of regulation

Second, it is important to keep the scope of regulation tight, to include only those big tech firms that provided the rationale for its existence. If the regulation applies too extensively, or if its application is unclear, then this could have inadvertent and disproportional impacts on the conduct of firms which are not the key focus. It could even act to dampen their innovation and their ability to act as a competitive constraint on those big tech firms which are the focus.

An important first step in achieving this is to include a pre-designation process, so that all firms are clear whether they are covered by the regulation. This contrasts with competition law, which prohibits abuse by dominant firms, but under which firms are never quite sure if they fulfil the criteria for dominance until faced with an actual case. The UK, EU, and US proposals all include some form of pre-designation.

The key second step is to specify designation criteria. There is broad consensus that any regulation should capture the five largest technology platforms (Amazon, Apple, Meta, Google, and Microsoft), but there is more debate about the next tier of digital firms (for example, Booking.com, Air BnB, and Salesforce). Are these latter firms more likely to be the source of competition problems—thus justifying inclusion—or the source of much-needed competition?

There are concerns that ill-defined designation criteria risk including firms that do not justify inclusion, or even unintentionally include firms that offer rather different sorts of digital platforms, such as Mastercard, Visa, and the London Stock Exchange, among others.

The US proposals address this concern very simply by relying on strict quantitative criteria, specifically \$600 billion in annual sales or market capitalization, and at least 50 million active US users each month or 100,000 active US businesses. This approach effectively narrows down designation to the five major big tech firms.

The UK proposals are, by contrast, almost entirely qualitative (albeit there would also be a minimum revenue threshold to limit the risk of over-reach). The assessment of whether firms have ‘strategic market status’ would be based on whether a firm has substantial, entrenched market power in at least one digital activity, providing the firm with a strategic position. These qualitative criteria have the benefit of being well-aligned with the rationale for designation, but there is some concern that it could prove difficult and resource-intensive to demonstrate the existence of entrenched market power.

Designation of ‘gatekeepers’ under the EU DMA lies somewhere between the US and UK. They first specify ten core platform services that the regulation will cover, such as online search engines or online social networking services. There is then a quantitative shortcut to designation, whereby firms will be presumed to fulfil the criteria where they are active in providing specified core platform services, a market capitalization of at least 75 billion euro (or EU turnover of 7.5 billion euro) and at least 45 million monthly end-users and 10,000 annual business users in the EU.

However, the process allows for some flexibility. This presumption is in principle rebuttable, based on qualitative criteria, potentially allowing firms to escape designation even if they meet the quantitative thresholds. There is also flexibility within the DMA to include additional platforms and services, even if they do not meet the quantitative criteria (albeit it seems unlikely that this will be an early priority).

While the EU architecture for designation in theory provides an attractive balance of quantitative presumptions and qualitative flexibility, it is noteworthy that the quantitative thresholds are expected to capture many more firms than the five big tech firms, and perhaps as many as 15 firms in total. Since the regulation was not primarily designed with all these firms in mind, this scope is arguably overly wide.

Finally, the Chinese proposed criteria for designating ‘super platforms’ also employ a combination of qualitative and quantitative criteria. Platforms will be designated if they have at least 500 million active users in China, a market value of at least 100 billion people’s dollars, at least two forms of platform business, and a strong ability to restrict business users’ ability to reach consumers.

### (iii) Regulatory approach

Third, it is important to think about the overarching regulatory approach. The key issues to address are:

- how flexible and bespoke the regulation should be in terms of setting obligations on regulated firms; and
- how open it should be to exceptions, on the basis of defences made by parties as to why particular conduct should be allowed, on the basis of intervention either being disproportionate or having adverse consequences.

These issues are core to how well the regulation ensures proportionality and effectiveness and avoids unintended harm. In making these critical choices, though, it is important to recognize that there is an inherent trade-off, as discussed above, between providing for flexibility and proportionality, on the one hand, and ensuring administrability and effectiveness on the other.

#### How flexible and bespoke to be?

In terms of flexibility, a key question is the extent to which obligations should be pre-defined in the legislation. The EU, US, and Chinese proposals all involve setting out specific obligations upfront. These range from relatively precise rules, such as a requirement not to use data received from business users to compete against them, to more overarching requirements relating to non-discrimination and interoperability.

Under the UK proposal, by contrast, the legislation would include only fairly high-level objectives, with rules to be developed by the Digital Markets Unit for each platform during the designation process. This approach enables these rules to be bespoke, reflecting each platform's particular market position and business model. This has the benefit of allowing rules to be well targeted to particular concerns arising in relation to specific platforms and services. It also allows for greater flexibility over time.

There are, however, trade-offs. Some believe that the UK approach gives overly expansive powers to the UK regulator, while others are concerned that it will lead to extensive litigation around the evidence base for the rules, and thus that the regulator will struggle to introduce them within the intended timeframes. What it may allow, however, is the regulator more easily to develop its approach over time, as it gains experience and expertise.

The EU, US, and Chinese proposals have the benefit of providing more clarity upfront and limiting the scope of the regulation. A particular motivation in all three seems to have been to (at least partly) limit the resources required within the regulator by encouraging both 'self-execution' of the obligations by firms and private enforcement via the court system. It is noteworthy that the EU regulation places a requirement on firms to demonstrate their compliance in a report to the Commission, while the Chinese proposals require them to have their compliance audited by an independent third party. By contrast, the UK proposals provide for a greater role for the regulator, arguably facilitating a more participative and flexible regulatory approach.

The EU DMA does include—for a subset of the obligations—a 'specification' process under which the parties can engage with the Commission on what measures are proportionate to achieving the obligations. It also includes the ability to refine and add obligations over time, following market investigation, which may be useful in ensuring that the regulation is kept up to date.

Nonetheless, there is a risk, under the EU, US, and Chinese approaches, that the rules are overly prescriptive, insufficiently bespoke to be proportionate, and even insufficiently flexible to deal with issues that may arise over time as the markets and our understanding of them develop further, and at risk of being gamed by firms (despite the presence in the EU legislation of anti-circumvention rules).

Questions have in particular been raised as to whether complex provisions relating to data portability, data access, and interoperability are well suited to upfront obligations, as is proposed by the EU (CERRE, 2021). While specific provisions of this sort can be immensely valuable in opening up markets, this needs to be done in a careful and targeted way if it is to be effective. For rivals to be able to use such data to create new services, the data need to be provided on a consistent basis and directly transferable to third parties (with consumer consent). There is a risk that the obligations as currently framed in the EU legislation are too wide-ranging and imprecise to be effective.

The US and UK proposals instead address data portability and interoperability requirements rather differently from the remainder of the regulatory rules. The UK proposes a separate power to impose these as bespoke pro-competitive interventions, and they are the subject of a separate bill in the United States.<sup>6</sup>

### How open to be to exceptions?

The sorts of rules envisaged within these regulatory regimes give rise to an array of potential unintended side effects. These include harms to privacy and data protection; system integrity and security; consumer protection; user pricing; quality of user experience; competition; and even innovation. While the parties will have an incentive to overstate these risks, it cannot be denied that they can exist.

It is possible to mitigate such risks in two broad ways: through some sort of exception that is generally applicable; or through specific exceptions that relate to specific requirements.

The proposed UK framework has been designed to be relatively open to arguments for exception. The draft language of the specific principles incorporates several caveats, and exemption can more generally be given where this is necessary or objectively justified in terms of efficiencies, innovation, or other competition benefits.

This approach should help to protect against harmful consequences from the regulation but risks making its implementation and enforcement harder. To address such concerns, it is clarified that any exemption would be at the discretion of the Digital Markets Unit, and the UK is proposing a weaker appeal standard (Judicial Review) than is in place for competition law cases ('Full Merits' Review) as well as strict timelines for action (which should in turn reduce the expectations of the appeal courts as to the evidential basis required for intervention).

The EU DMA is stronger in that it does not allow any explicit role for firms to mount a general 'efficiency defence' or 'objective justification' for breaching an obligation. The only general bases on which an obligation may be suspended or exempted are public health, public security, or endangering the economic viability of the relevant service in the EU.

<sup>6</sup> <https://www.congress.gov/bill/116th-congress/senate-bill/2658>.

That said, there is a general requirement under EU law that provisions be proportionate to their objectives, which might provide a route for legal challenge by firms, and the aforementioned ‘specification’ process also incorporates a proportionality assessment that may help to address such concerns. Moreover, the specific obligations also incorporate a number of exceptions. For example, the interoperability provisions of Article 6(7) allow exception for any measures that are necessary and proportionate to system integrity.

The Chinese proposals take a broadly similar approach. There are some caveats within the specific requirements, such that conduct is only proscribed if there is no valid or legitimate reason for it. There are also limited general exceptions for public interest and national security and the application of other laws and regulations.

At the furthest extreme, the US proposal includes very few options for exception. In principle, a platform can be exempted from a given rule, but only if it can demonstrate that this would not harm the competitive process, or that it is required to enable compliance with (or prevent a violation of) the law or to protect user privacy. This is likely to be a high bar.

Overall, the US approach could be seen as giving very substantial weight to administrability, perhaps motivated by the US context where firms tend to be highly litigious and where the Courts have historically shown firms substantial deference. By contrast, the UK has given greater priority to getting the right answer, while nonetheless including measures that are designed to enhance administrability. The EU and Chinese approaches lie somewhere in the middle.

#### (iv) Categories of intervention

A detailed analysis of interventions that might be imposed under pro-competitive digital regulation is beyond the scope of this article. There are many detailed design choices to be made. [Table 3](#) sets out the core categories of intervention that are under consideration.

Each of the US, EU, and UK proposals include most (if not all) of these categories. Several are covered by the Chinese proposals, too. However, despite that apparent convergence, there is significant divergence in terms of the precise obligations and powers proposed. As a simple example, the US and Chinese proposals include a very broad requirement of non-discrimination, whereas the EU proposals include a broad non-discrimination requirement of this sort only in relation to app stores, search engines, and social networks. Beyond that, the EU focus is on self-preferencing (a specific form of discrimination) within rankings.

There is a link between the overarching regulatory framework (as discussed above) and the types of intervention that can optimally be imposed. Where there is less flexibility, it is arguably appropriate to keep rules more minimalistic to limit risks of unintended harm. With more flexibility to ensure proportionality, stronger targeted requirements can potentially be imposed.

This arguably fits with what we see in practice. While the proposed UK legislation will not set out precise rules, the CMA has recently (in two market studies) set out its initial thinking on the sorts of rules that might be imposed in practice. While there is extensive overlap with the obligations that will be imposed under the EU DMA, the CMA proposals include additional targeted firm-specific proposals, supporting the view that a well-evidenced bespoke regulation can require more of firms while still ensuring proportionality.

Finally, it should be noted that competition law will still apply to these regulated firms. As such, it is arguably not necessary for regulation to address all competition concerns relating to digital platforms, but rather to provide a basic pro-competitive framework. Beyond this, competition law can be used to prevent specific instances of anti-competitive conduct.

## V. The risk of diverging approaches to regulation

The above discussion shows that, while there is substantial consensus on the rationale for pro-competition regulation of big tech firms, there are significant divergences between the EU, US, UK, and Chinese proposals in practice. Moreover, these are just the four jurisdictions (alongside Germany) that are most advanced in specifying their regulatory frameworks. We should not be surprised to see further jurisdictions around the world developing their own variants of pro-competition regulation for big tech, with many countries currently watching developments in the EU—where the legislation is progressing fastest—with a keen interest.

This gives rise to a substantial risk. If regulation is developed separately across multiple jurisdictions, each may take a divergent approach to its regulatory design in relation to objectives, scope, regulatory approach, and specific obligations imposed. The resulting lack of regulatory coherence internationally could have serious consequences, especially where the same firms are active across jurisdictions (as for the EU, UK, and US).

**Table 3:** Categories of intervention

Intervention	Purpose
Ban on self-preferencing	To address the concern that firms with strong positions in a core market are then preferencing their own activities in related markets and so giving themselves an unfair competitive advantage.
Ban on parity clauses	To address conditions imposed by platforms on business users that prevent business users from offering better terms on rival platforms, which in turn limits the ability of these rival platforms to compete.
Requirement for data portability	Effective real-time free data portability has substantial potential to facilitate both user switching and user multi-homing, both of which should enhance competition.
Interoperability requirements	These are designed to open up ecosystems that have previously been closed ('walled gardens') by enabling third parties to provide services that interoperate effectively with these ecosystems.
Fair terms for business users	Requirements here can include anything from FRAND (fair, reasonable, and non-discriminatory) access terms (for example to an app store) to requiring that business users are given relevant data about their customers and their performance to enable them to make effective business decisions.
End-user choice requirements	These address the concern that end-users are steered into accepting options that are in the interests of the platform but not necessarily in the interests of either end-users or competition. They can include options such as transparency requirements, the provision of 'choice boxes', or the ability to uninstall unwanted apps.
Ban on certain forms of data use	These address conduct such as platforms using their access to data from third parties to compete against them and sharing data across activities within an ecosystem.
Separation powers	Where conduct-based interventions are insufficient to open up markets to competition, structural or functional separation may be required.
Merger-related interventions	These address the risk that M&A activity can be an important factor in limited competition. Measures considered here include enhanced information requirements in relation to mergers by regulated firms to changing the standard for opposing such mergers.

In this section, we consider some of the factors limiting regulatory coherence, and the consequential risk to market outcomes, before highlighting some possible mitigations.

### (i) Factors limiting regulatory coherence

There are several factors that might be expected to drive jurisdictions to take divergent approaches to regulatory design in this area.

First, as we have seen above, there can be several regulatory solutions to the same core problem. None of these design choices is necessarily right or wrong *per se*. So, if individual jurisdictions choose independently without regard to legislative choices made elsewhere, it should not be surprising to find different jurisdictions choosing different options. However, while each choice might seem entirely reasonable when viewed independently, they may create an inconsistent framework when considered together.

Second, jurisdictions may have very different legal, political, and cultural perspectives on regulation generally. For example, there is strong cultural resistance within the US to giving power to regulators, due to long-standing concerns about both regulatory failure and regulatory capture. This resistance is so strong that the US proposals are unlikely to involve creating a regulatory body. The existing antitrust authorities (the Federal Trade Commission and Department of Justice) would have a limited role in providing guidance and overseeing standards-setting, but the core intention is that the legislation would be enforced via private action in the courts. This position is very different to that in the UK and EU, where substantial regulatory functions are in the process of being set up.

Third, there may be political factors at play in designing regulation, beyond the economic factors emphasized so far. For example, it is noteworthy in the EU, in the face of allegations that its regulation was disproportionately targeted at US firms and therefore smacked of protectionism, that it has adopted relatively loose criteria for designation which may well capture EU firms such as Booking.com. It is not obvious that there is any real rationale for extending the regulation to such firms beyond a political desire not to appear protectionist. By contrast, the US proposals only capture the top five US firms.

While the UK was already planning its own regulation prior to the development of the EU Digital Market Act, it would of course be open to the UK simply to replicate the EU legislation. Following EU withdrawal, however, there is little political appetite for such copycat legislation and a strong desire for the UK to ‘take back control’, here in the form of developing its own bespoke regulation. While this is a UK-specific issue, there may also be specific political pressures in other jurisdictions, too, to add local ‘tweaks’ to regulatory design developed elsewhere. This could result from a desire to address particular local issues, or merely to demonstrate sovereignty.

Fourth, there are clearly interlinkages between pro-competition digital platform regulation and other areas of legislation, such as those relating to data protection, e-commerce, consumer protection, and intellectual property (IP) protection. Since these may themselves differ across jurisdictions, this may trigger differences in digital platform regulation, too.

For example, a notable difference between the EU and US proposals is that the EU includes an obligation that any designated search engine should make its query and click data available to rivals. This obligation is based on evidence, including as presented in the UK CMA’s market study into online platforms and digital advertising (CMA, 2020a), that such data are invaluable to any firm seeking to create an effective search engine to rival Google’s own (and recall that Google accounts for over 90 per cent of all global search). Despite this, the US proposals include no such provision, perhaps reflecting the fact that the US takes a very strong stance on IP protection and may see this sort of requirement as in conflict with such protections (on the assumption that such data could provide valuable information about Google’s search algorithm).

Fifth, there may be differences that arise merely from the differential timing of the various regulatory initiatives. Of the three regimes discussed above, it seems highly likely that the EU regime will be in place first. Other regimes will be increasingly able to learn from the successes and failures of that regime when introducing their own legislation.

The markets themselves may well change over time, too, as will our understanding of them, and later regulations will be in a position to take these developments into account. It is notable that during the final EU negotiations, the scope of legislation was widened to include browsers and virtual assistants. Had the legislation been finalized a year earlier, it is plausible that these additional services would not have been included. A year later, and who knows what else might have been added? As it was, there was substantial debate as to whether to include internet-connected TVs, although these have been excluded for now.

Finally, and less positively, the parties themselves may improve their lobbying capability over time. In relation to the EU legislation, they were arguably a little slow off the mark. However, in the final year of its development (2020–21), four of the big tech firms were among the seven heaviest spenders on Brussels lobbyists, spending a staggering 20 million euros, as shown in Table 4 below. Indeed, some commentators believe that the rush by legislators to get the DMA enacted was partly motivated by a fear that this lobbying activity might start to have a greater impact over time. There is a significant risk that later regulation, in other jurisdictions, may be lobbied more effectively.

## (ii) Implications for market outcomes of a lack of regulatory coherence

Some of the factors limiting regulatory coherence described above are entirely legitimate. As such, full coherence may not be possible or even desirable.

Moreover, it can sometimes be possible for regimes that are designed somewhat differently nonetheless to function well in tandem with one another. Legislation relating to mergers is a good example. Global mergers are assessed under a variety of subtly varying regimes across the world. Yet in most cases (albeit not always), jurisdictions will reach similar determinations or, if they are different, this is explicable by local market circumstances. By

**Table 4:** Corporate lobbying in Europe by top four big tech companies, 2020–21

Name	No. meetings	Registered lobbyists	Lobbying budget (€m)
Google	249	21	5.75
Facebook Ireland Ltd	141	3	5.5
Microsoft	144	15	5.25
Apple	60	9	3.5

Source: Transparency International.

analogy, while the EU, UK, and US's proposed approaches to digital platform regulation are rather different in their overarching design, they may still be sufficiently coherent to work together effectively.

However, to the extent that there is a serious lack of coherence, this creates significant risks in terms of implications for market outcomes, including for price, service quality, or innovation. These risks will be more serious where the rules are not simply different but actually in conflict.

First, even if regulations are simply different, this could lead to firms designing their products differently in different territories.

Consider, for example, the possible regulatory responses that might emerge to address concerns about App Store market power. Suppose that one jurisdiction requires that third-party app stores be allowed; while another requires the same but also that consumers should be able to choose the third-party app store as their default; while another requires that apps be readily downloadable via a browser (side-loading); while another requires that such side-loading come with the potential for automatic updating; while another requires the operating system to have clear processes for ensuring data security and system integrity and to offer those services on fair terms; while another requires mobile app stores to offer FRAND terms to apps; while yet another sets a maximum fee rate for app purchases.

In the face of this wide selection of requirements, each of which may be properly evidenced and motivated on an individual basis, a mobile phone operator will be forced to decide whether to address all requirements globally, or whether to adopt different solutions across jurisdictions. In this context, it is noteworthy that Apple's reaction to regulation of its app store in South Korea has so far been to make the required changes in that jurisdiction only.

If firms choose to adopt divergent approaches across jurisdictions in this way, this means that users in one jurisdiction will not gain the benefits of interventions in other jurisdictions. This could have a variety of ramifications, both economic and political. For example, it may mean that regulation is less effective in driving contestability and innovation than is hoped. New entrants and smaller players, seeking to access users through these platforms, would then have to negotiate a complex web of platform rules, with different opportunities and challenges across jurisdictions. This could easily act to limit such innovative entry. Moreover, if it is only the bigger, more well-resourced jurisdictions in which users gain the benefits of fairer platforms that are more conducive to innovation, then this could become a serious trade issue, as it could place additional barriers in the way of innovative entry from smaller, poorer jurisdictions. Contestability and innovation could equally be hampered if differential regulations limit cross-border trade.

If firms adopt divergent solutions across jurisdictions, this is also likely to raise costs. Recall here that we are primarily discussing firms that are active globally (other than in China), typically with very similar products and services across countries. Their global presence allows them to benefit from the strong economies of scale and scope, network effects, and data feedback loops discussed above. If they design their services differently across jurisdictions, they may well lose some of the benefits of these various efficiencies, and thus face higher costs.

While any increase in costs will to some extent be borne by the companies themselves, a proportion is also likely to be passed on to their users. Moreover, reduced margins may affect the firms' incentives to provide high-quality services or to innovate. In either case, consumers will lose out.

Second, and irrespective of any differences in platform design, differential regulation may create substantial compliance costs for the regulated firms, with internal checks being required in relation to several different regulatory regimes. There is also a risk that the firms face multiple (and possibly duplicative) enforcement cases across jurisdictions. These may generate high penalties, further raising costs. They may cause the firms to spend excessive time 'fire-fighting' and losing their focus on providing high-quality services and innovating. The firms may also be disinclined to innovate if they fear it may create compliance risks.

Third, additional issues can arise when regulations have effects outside their primary jurisdiction. In the context of EU regulation having extra-territorial effects, Anu Bradford has termed this 'the Brussels Effect' (Bradford, 2020).

Such extra-territorial impact can occur for a variety of reasons. It may simply be the most efficient option for a firm to make any changes globally, especially if the firm expects other jurisdictions to follow suit and introduce the same regulation themselves. Indeed, the firms may consider that they would bear too much reputational or political risk if users in some jurisdictions felt they were not receiving as good a deal as users elsewhere.

Alternatively, it may be intrinsic to the product that it must be designed in the same way across jurisdictions. For example, consider a messenger service (such as WhatsApp) that links users who sit in different jurisdictions. The EU DMA will require designated messenger services to make themselves interoperable with rivals. It is hard to conceptualize a situation under which such interoperability is not also introduced in the other jurisdictions where the designated messenger service is active, at least for communications between EU end-users on regulated services

and non-EU users on rival services. The only alternative would seem to be for the service to exit the EU totally or to reduce the functionality of the service by banning messaging across the EU border.

Where the regulations do have such extra-territorial impact, this can potentially have a benefit in terms of reducing regulatory fragmentation. However, where regulations are inconsistent across jurisdictions, the combination of this with their having extra-territorial impact can create serious complexity for firms, potentially even imposing requirements that are in conflict. A simple example might be regulations that impose interoperability provisions utilizing different standards (or alternatively requiring that standards be set in different fora). Facing such mutually inconsistent requirements, the firm may determine that it is easiest simply to terminate that element of their service. This would not typically be a good outcome.

### (iii) Potential mitigations

Since regulatory divergence may well be detrimental for both big tech firms and their users, their interests could be aligned in terms of seeking to reduce or eliminate such divergence. There are a variety of ways in which this might be achieved.

The first, and most obvious, would be for jurisdictions to simply replicate the regulation already adopted by another jurisdiction, rather than create their own. This has been broadly the experience in competition law, where most legislation in many smaller jurisdictions effectively mimics either US or EU law.

Second, regulatory fragmentation may be mitigated by jurisdictions engaging closely to gain a shared understanding of the pros and cons of different regulatory options. This is already happening, with extensive discussions ongoing between jurisdictions, including under the aegis of organizations such as the OECD or the International Competition Network (<https://www.internationalcompetitionnetwork.org/>).

Such cross-jurisdictional engagement and learning may be facilitated by the sequential nature of the regulations being introduced. For example, the EU DMA is expected to take effect well before similar regulations proposed elsewhere. While formally applying only within the EU, it is likely to influence platforms' conduct globally in practice. Other jurisdictions will be able to learn from the EU experience and identify refinements or additional requirements as appropriate. These in turn may be expected to feed into future revisions of the EU DMA. We may also expect similar processes of sequential evaluation, reviewing and revising of legislation to occur over time across other jurisdictions too.

Indeed, there may be some potential for strategic regulatory experimentation to develop an enhanced understanding of what works. However, if such sequential learning is to be effective, this may require an explicit focus on enabling *ex post* impact studies. Such analysis could be funded by the regulator itself. Alternatively, academia may step up to the role, especially if the regulator is able to require the collection and sharing of relevant data or information.

A third route to effective regulatory alignment would be for jurisdictions without regulatory powers to draw on competition law to leverage from those that do have such powers, to achieve some of the same outcomes. For example, competition authorities could initiate competition enforcement investigations in relation to concerns which have been addressed through regulation in other jurisdictions. In this situation, firms may be relatively likely to offer commitments that effectively replicate the regulation elsewhere in order to close the case. This is more likely to occur where the firms accept that the regulation is broadly sensible, where they otherwise face high fines for breaching competition law, and where they fear that the jurisdiction may otherwise introduce regulation of its own.

The firms themselves could also proactively seek a global regulatory solution through the creative use of competition law. For example, the UK CMA is currently overseeing Google's development of its Privacy Sandbox replacement for third-party tracking cookies (CMA, 2022d). Google has committed not to roll out its solution until it has satisfied the CMA in relation to the competition concerns arising. Google has explicitly stated that its intention is then to apply the agreed solution on a global basis. While the CMA has no formal way of committing other authorities globally to accept this solution, the hope is that the CMA's scrutiny will ensure a final design that meets their requirements, too. Effectively, the CMA has become the global regulator for Google's Privacy Sandbox.

Fourth, for effective regulatory coherence, coordinated enforcement across jurisdictions may also be valuable, if it is feasible. This can be a good way of increasing the total resources that are targeted at investigating a particular issue beyond those which any individual authority could muster. Different authorities can also bring different skills and experience to the investigation.

Another benefit of international coordination on enforcement is that the need to demonstrate proportionality is likely to be an element of most regulations. It may be harder to justify the proportionality of any given intervention on a national basis, but easier to justify it on a trans-national basis. Suppose, for example, that there are concerns that Google is placing undue obstacles in the way of third-party app stores seeking to gain access to Android



devices. In the face of action by the UK regulator only, Google might reasonably be able to claim that it would be disproportionate to require it to change its systems for the UK only. However, if it were to face joint action from regulators across many jurisdictions, this proportionality argument would hold less water.

Finally, it may be possible to achieve alignment on specific issues, even if there is not wider alignment. For example, cross-jurisdictional agreement on, or oversight of, standards for data portability and interoperability could be valuable in ameliorating the risk of firms facing conflicting requirements in this space.

## VI. What role can trade policy play?

Given the significant risks associated with a lack of regulatory coherence, and despite the potential mitigations described above, there is a natural question as to whether trade policy can be expected to either help or hinder such coherence.

Of course, from a purely economic perspective, the ideal solution would arguably be a single powerful regulator at a global level, given the global nature of the firms involved and the competition problems arising. However, this is not likely to happen. Not only are countries unlikely to wish to give up sovereignty in this important area, but they are also unlikely to be able to agree on appropriate regulation. For example, we might expect the US to be inherently less interventionist in its outlook in this area than the EU, partly given its greater scepticism around regulation *per se* but also because of it (broadly) being US firms in scope.

As such, the best realistic outcome is likely to be the development of effective, coherent, and coordinated digital regulation across jurisdictions, as discussed above. This could be either facilitated or compromised through trade agreements.

### (i) A positive role for trade policy

Trade policy has the potential to generate a variety of positive effects.

First, it could potentially play a role in helping to ensure that regulations are as similar as possible across jurisdictions. This is bound to be challenging, given both the desire of nation states to preserve sovereignty and the lack of international consensus on what such regulation should look like.

However, it may not be impossible. Smaller jurisdictions will tend to be in a far weaker bargaining position *vis-à-vis* the big tech platforms than are their larger counterparts. At worst, the platforms may even be in a position to credibly threaten to exit from the territory. As such, smaller jurisdictions may have an incentive to align their law to that of larger jurisdictions, both to demonstrate themselves as being reasonable, and to benefit from the legal precedents of the larger jurisdiction. At the same time, larger jurisdictions may gain from their rules having a wider geographical scope. Those firms which rely on these regulatory rules to compete effectively with the big tech platforms will thereby have a larger market to serve.

With such positive incentives for regulatory alignment on both sides, there may be potential for trade agreements to play a role in formalizing this. It is worth noting that past trade agreements have greatly enhanced international alignment in relation to several areas of law, including competition and consumer law. Even if there is not full regulatory alignment, there could be ‘modular’ alignment, whereby specific legal modules are identical across jurisdictions (Riley and Ness, 2022).

Second, as discussed above, even without formal alignment, a key mitigation to regulatory divergence is expected to be extensive engagement and communication between countries in relation to these digital platform markets and the competition issues arising, as well as their regulatory initiatives and experience.

These sorts of conversations are already occurring within the OECD. The G7 may also have a role here. There have already been G7 Presidency statements in 2019 (G7, 2019) and 2021<sup>7</sup> setting out the importance of a coherent international approach to competition law in digital markets, and in 2021, the G7 published a compendium of approaches taken internationally in this area (CMA, 2021e). It would be a natural step for the G7 to introduce a focus on pro-competition *ex ante* digital platform regulation. More broadly, the World Trade Organization has commenced negotiations on an international trade framework for e-commerce (WTO, 2021).

Third, trade policy may facilitate coordinated enforcement. Given that specific digital regulation is not yet in place, such coordination is clearly not yet possible. However, when designing regulation across jurisdictions, it would be valuable to think carefully about how this might best be enabled going forward. For example, formal information gateways can be critical for effective coordination. Thought might also usefully be given to whether

<sup>7</sup> <https://www.gov.uk/government/publications/uk-g7-presidency-statement-digital-and-tech/uk-g7-presidency-statement-digital-and-tech>.

there could be potential for different national authorities to bring ‘joint’ enforcement actions, in the way that multiple US States can do under the US court system.

Under competition law, not only do free trade agreements typically require parties to have competition law regimes, but also substantial work has been done via trade policy more generally to enable coordinated enforcement action, including through bilateral Memoranda of Understanding as well as through formal trade agreements. As an example of the potential benefits of such arrangements, it is noteworthy that the US, EU, and UK are working closely in their investigation of the ‘Jedi Blue’ agreement between Meta and Google, with the UK and EU even announcing their action on the same day ([Mailonline, 2022](#)). This potentially provides a blueprint for what could be achieved with digital platform regulation.

Of course, there is likely to be a (potentially extended) period during which some jurisdictions are applying *ex ante* regulation to digital platforms, while others are continuing to rely on competition law to address the same concerns. During this period, it will also be important that digital regulators and competition authorities can coordinate effectively, in the same way as pure competition authorities can today. Where regulatory powers are given to competition authorities, to be employed alongside their existing competition powers, there may even be potential for these authorities to utilize the existing competition coordination networks for their regulatory work, albeit the precise wording of legal gateways may require revision.

## (ii) The potential for harmful trade policy

Although trade policy has great potential to enhance regulatory coherence, some aspects of trade policy could hamper the effectiveness of digital platform regulation. In this context, it should be noted that trade negotiations have historically tended to push towards less regulation rather than more, with the objective of opening up trade effectively given priority over other policy areas.

As regards digital platforms, the constraints in currently existing trade agreements arguably have bigger implications for data protection regulation and the regulation of online harms than they do for pro-competition regulation. For example:

- In relation to data protection regulation, the 2020 UK–Japan trade deal ([Foreign, Commonwealth, and Development Office, 2020](#)), the CPTPP (Comprehensive and Progressive Agreement for Trans-Pacific Partnership; [House of Commons, 2021](#)), and the USMCA (US–Mexico–Canada trade agreement) all have clauses that commit the signatories to protect personal information. This is a good thing in itself, and vital for allowing free data flows across countries. However, the agreements also commit the parties to ensuring that this legislation imposes the minimum restriction possible. While harmonization around data protection regulations is clearly valuable, the requirement that restrictions be minimized may be harmful since it risks driving down data protection standards.<sup>8</sup>
- In relation to online harms regulation, the key issue is Section 230 of the Communications Decency Act in the US. This protects internet service providers, including digital platforms, from liability for content shared by third parties, and there is a growing consensus that platforms need to take more responsibility for the content and conduct of their users. There is currently much debate about Section 230 within the US, but there is less recognition that this provision is baked into the USMCA (at Article 19.17), thus imposing the same rule on the US’s trading partners under that agreement (Mexico and Canada). While there may be potential to retain protection from liability for platforms on the condition that they engage in due diligence, as is done under the EU Digital Services Act ([European Commission \(n.d.\)](#)), there is clearly a risk that treaty signatories may be limited in their ability to implement regulation that establishes clearer accountability for platforms to address serious online harms.<sup>9</sup>

However, in both of these areas there may also be implications for pro-competition digital platform regulation. We know, for example, that there can be important and complex interrelationships between privacy and competition. Such considerations are under review by the UK CMA in relation to Google’s Privacy Sandbox and are intrinsic

<sup>8</sup> Indeed, based on its own high standards under General Data Protection Regulation (GDPR), the EU was unwilling to sign up to a similar clause in the proposed (and now abandoned) Trans-Pacific Partnership agreement. Moreover, the EU–US ‘Privacy Shield’ data protection agreement was recently struck down by the [European Court of Justice \(2020\)](#) as giving EU citizens insufficient protection. A new ‘Trans-Atlantic Data Privacy Framework’ has now been agreed to replace it, albeit the precise wording is not yet public ([European Commission, 2022](#)). It is to be hoped that this new agreement will address the concerns around privacy protection for the EU and US; it does nothing for other jurisdictions (including the UK).

<sup>9</sup> We note that neither the CPTPP nor the UK/Japan trade agreement include an analogous clause.

to the DMA obligations that open up access to platform data. Regulators arguably need to be free to make such trade-offs carefully, without the constraint of cumbersome trade agreement restrictions.

Another area of potential concern relates to algorithms. These are critical to the effective functioning of many digital platforms. While algorithms can be powerful forces for good, they can also have negative consequences. While concerns primarily revolve around unfair discrimination and serious online harms (including to public safety and democracy), they can also have important competition effects. The algorithms within recommender systems determine which firms make sales, and changes in these algorithms can enhance or destroy their profitability. Likewise, advertising algorithms effectively determine which firms pay how much for targeting which consumers. In the EU, the Platform To Business Regulation requires platforms to set out the key criteria on which they base their rankings, in order to better enable business users to understand the ‘rules of the game’ and thereby create a more level playing field.

However, such algorithms contain important trade secrets, and protecting that IP will tend, all else equal, to enhance incentives for innovation. Based on this thinking, the USMCA (Art 19.16) states clearly that no party to the agreement shall require access to source code ‘or to an algorithm expressed in that source code’ in its territory.

To monitor and enforce existing and future regulation in relation to these harms, it is vital that public authorities are able to access the relevant algorithms, their underlying design documents, and to engage in A/B testing of the algorithms. This is recognized by the USMCA, and an exception is made for disclosures to regulators and judicial bodies.

However, the USMCA does not allow for the imposition of remedies by public authorities that would require the sharing of, or access to, source code or algorithms. This is potentially a serious constraint on the remedies available to public enforcers and regulators of signatory countries. The UK–Japan deal, which otherwise uses almost identical language to the USMCA, appends a further exception for such remedies (Article 8.73), but it is not clear that this will become the standard for future trade deals.

There are also good arguments for certain other transparency measures. Individuals who fear they have been discriminated against by automated decisions should have a right to explanation and redress. Academics should be free to scrape data on algorithmic outcomes without fear of reprisal since this activity provides a valuable check on bad behaviour by platforms. Any national regulations designed to achieve these objectives do not necessarily require full access to source code, but they could be perceived as requiring implicit access to the associated algorithms. As such, there is a risk that any such measures would be seen to be in breach of the USMCA provision.

This issue has clearly been recognized within recent trade negotiations to some extent. In contrast to the USMCA, the CPTPP has an ‘appropriate balance’ clause which equates to a fair-use exception. The UK–Japan agreement includes some overarching general public policy exceptions. Nonetheless, it is not clear that these exceptions are sufficient, nor that they will be assured in any future trade deals.

A final area of potential concern relates to the ‘Investor-State Dispute Settlement’ clauses that appear in the USMCA, CPTPP, and CETA (Canada–Europe Trade Agreement), albeit not the recent UK–Japan agreement. There is potential for such clauses to be used by firms to challenge regulation. For example, Uber sought a challenge on this basis against the Colombian government, following its finding that Uber represented unfair competition and should thus be banned (Reuters, 2020). We are unlikely to discover whether this challenge would have worked in practice, since it has presumably been dropped following Uber’s successful entry into the Colombian market. However, there is clearly some potential for such clauses to be used in this way to limit business regulation, and perhaps even the pro-competition regulation of digital platforms.

## VII. Conclusions

There are moves afoot to introduce new *ex ante* regulatory regimes for digital platforms across some of the largest jurisdictions globally, including the EU, US, UK, and China. This article discusses several questions arising in the context of such regulation.

First, what problem is pro-competition digital platform regulation trying to solve? We have seen that a small number of digital platform giants have very high shares in several critical markets, including search, social media, smartphone operating systems, and mobile browsers. They are also active across a range of different activities, creating large digital ecosystems. These market outcomes reflect the huge global economies of scale and scope in the sector, as well as network effects, the critical importance of data and on-line choice architecture. Strategic anti-competitive conduct and mergers and acquisition activity have also played a role. Consumers are harmed by these market structures, both directly (through reduced privacy and quality) and indirectly (through higher prices to business users, reduced revenues for publishers to invest in news content, and through reduced innovation).

Second, why regulation and not competition law? Competition law suffers from several critical limitations. Some of the key economic concerns are unrelated to the sort of strategic anticompetitive conduct that is easily dealt with by competition authorities. Moreover, investigations tend to be too slow and narrow, and remedy powers too weak, for competition authorities to be effective in creating the overarching market framework that is needed in this sector. While regulation is not a panacea, it has a better chance of achieving real and lasting change.

Third, what are the design challenges involved in developing such regulation? We have seen how the UK, EU, US and Chinese regulatory proposals all take slightly different approaches on a number of key issues, from the scope and objectives of regulation, to the overarching regulatory approach and the specific categories of requirement. Such regulation is incapable of achieving ‘first best’ outcomes. Instead, we discuss the pros and cons of different aspects of each approach, without opining on which is the best overall.

Fourth, what are the risks arising from divergent regulatory approaches to these global issues and how much these risks be mitigated? We start by highlighting that different approaches need not in fact be incoherent. However, if they are, we discuss a variety of potential risks arising, including higher prices and reduced innovation. There is a plea for greater alignment of regulations, for greater global discussion of the issues, and for coordinated enforcement across jurisdictions.

Finally, what role can trade policy play? Trade policy has the potential to enable greater regulatory alignment, knowledge sharing and coordinated enforcement. However, it also gives rise to risks, for example unduly limiting the powers of regulation to address digital platform issues.

This is a fast-moving field. Regulation was first recommended in March 2019 and the EU legislation looks likely to enter into statute by the end of 2022. For such a wide-reaching market intervention, this is remarkably quick. At the same time, we know that digital platform markets can tip quickly toward being highly concentrated, and thereafter those market positions can become entrenched. As such, rapid action was arguably necessary.

However, while the EU is the first mover, we might expect many other jurisdictions to follow. To ensure that the overall global regulatory system is as effective and proportionate as possible, on a global basis, it will be critical that such regulations are as coherent and coordinated as they can be.

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