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Pro-competition regulation: lessons from the telecoms sector for digital platforms

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Pro-competition regulation: lessons from the telecoms sector for digital platforms.

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(Paper for ITS2025)

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1. Introduction.

At the global level, there has been widespread discussion in recent years over how to respond to the large digital platforms, particularly the five captured in ‘words’ constructed from the first letters of each, such as GAFAM and GAMMA. The more recent focus on the regulation of artificial intelligence or AI has added to the mix. While a providing a service rather than a platform, the leading AI firms, guided by long-term profit maximisation, both rely heavily on the varied services such as the cloud provided by the platform companies and have attracted attract very large investments from them, up to and including ownership or co-ownership.

Responses to these developments based on competition law and regulation have emerged in recent years. The application of a given jurisdiction’s competition law has been an option from the start, and has been employed in a growing number of discrete cases.¹ New legislation has also been passed in some countries, allowing extensive *ex ante* regulatory intervention - though not in the USA. The most prominent home of such digital platform legislation is the European Union, with its Digital Markets Act and Digital Services Act of 2022, relating respectively to the regulation of competition and consumer protection in the specified area. These two Acts are now accompanied by an Artificial Intelligence

¹ For a summary, updated to September 2024, of actions taken in the G7 countries, see *Competition Policy in Digital Markets: the combined effect of ex ante and ex post instruments in G7 Jurisdictions*, OECD, 2024.

(AI) Act which came into force in 2024. Further legislation is in store. Some commentators have identified a so-called ‘Brussels effect’ which gives the EU legislation ‘first mover’ advantages derived from the propensity of other countries to copy the working example, or of companies to apply its requirements extra-territorially.

US courts have been active in hearing and determining competition law cases brought before them by the US Department of Justice and State Attorney Generals, or by private parties. A recent prominent example is the decision of a Federal Court in 2024 that Google has exploited a monopoly in search. Following this decision, the Department of Justice has proposed to the Court a set of possible remedies, which include breaking up Google by mandatory divestment. Two further major cases are now in train.

It is thus clear that global digital platforms are in a state of regulatory, as well as of continuing technological, flux. Competition law and regulation thus have the potential fundamentally to alter the global commercial behaviour of the majority of the world’s largest corporations by market value, which exercise a profound and probably unprecedented influence on social as well as economic life.

The goal of this paper is to address the question of remedies capable of having a major impact on digital platforms, with a focus on the two most draconian remedies available or becoming available in the European Union and the USA (the two largest jurisdictions in the Western world, each of which can profoundly affect the structure of the market in question). These are i) structural separation or breakup of a dominant platform, and ii) the imposition on such a firm of an obligation to share assets with rivals – or ‘mandatory sharing’. The particular rules of engagement in each place determine whether and where they can be deployed under competition law or sectoral regulation.

We distinguish throughout two different purposes to which these interventions can be put. The first is the protection from the abuse of market power of direct customers of the digital platform, including direct users of – for example – a social media or search platform, whether exercised by a price charged, an obligation to be exposed to advertisements, or otherwise. The second prevents the spread of dominance at the platform level to other levels in the value chain, upstream or downstream, by means such as self-preference. The terms ‘horizontal’ and ‘vertical’ effects are used to describe these two possible outcomes. The latter dimension has acquired particular salience in the case of the largest platforms, which have been particularly active in extending their reach in

many directions: so much so that the term ‘ecosystem’ is now often applied in connection with them, and recently joined the lexicon of EU competition law.

Accordingly, we seek to evaluate the above two remedies in relation to each of these outcomes. In this connection we are aware of the so-called Tinbergen rule of economic policy, according to which if you have N different objectives or targets you normally need at least N different instruments to achieve them.² Here we have identified the objectives of preventing a dominant firm both from exercising market power vis-à-vis its own direct customers, and of leveraging that power in other related markets. This means we shall almost always be looking for more than one remedy.

As a preliminary to this discussion of digital platforms, a summary is given of the past utilisation in the same two jurisdictions (EU and USA) of the same two measures (breakup and mandatory sharing) in another sector which has made a transition from monopoly to competition – the telecommunications sector.

The choice of the EU as a comparator with the US is made by virtue of its combination of weight in the global economy (13.3% of global Gross Domestic Product (calculated on a PPP basis) in 2023, compared with the US share of 15.6%) and also because of the EU’s apparent capacity to pass and implement regulatory legislation more quickly than in many other jurisdictions.

Each of these two form of pro-competition regulation has a different effect. Broadly speaking, the purpose of breakup as a stand-alone measure is to eliminate co-ownership of assets in a two or more markets, and thus leverage market power in one market in application to another. Thus in the 1981 breakup of the Bell System in US telecommunications described below, regional operators providing telecommunications service in the local market (deemed to be a persistent monopoly) were separated by breakup (and prohibited from re-entering) other markets, such as long-distance calls and customer premises

² J Tinbergen, *The Theory of Economic Policy*, 1952. The rule is usually invoked in macroeconomic contexts, suggesting (for example) that if the goals of full employment and stable prices are adopted, then the application of both fiscal and monetary policy is required at appropriate levels. Note that in this example, as in ours, it is not necessary that each instrument has an impact on one objective only. The tools can usually work together to achieve a desired combination of outcomes provided that each has a different relative set of effects on the two objectives.

equipment, deemed competitive. The aim was to prevent co-ownership of a local network with participation in other markets, thereby removing the incentive for a local network to exercise self-preference in related markets, by the simple means of preventing it from owning a business to prefer. (But note that this leaves open the question of how to control the local monopoly which has been subject to ownership separation.)

The alternative option of mandatory sharing of the dominant firm's assets is a behavioural remedy involving more continuous intrusion. The dominant firm is mandated to enter into a series of one-way or reciprocal barter or financial transactions with each of its eligible competitors; such transactions being designed to assist the latter to overcome handicaps (relative to the dominant firm) from which they would otherwise suffer, as a result, for example of impact of economies of scale or network effects. The major form of mandated sharing in telecommunications was an obligation placed on a network to allow its competitors to use its physical assets at a regulated access price. Among the activities performed by digital platforms, the parallel for a firm dominant in search might be to oblige it to share some of its search results with rivals. Or a dominant social network might be obliged to allow its users to share messages directly by interconnection with the users of smaller networks (and vice versa), thus making up for the deficit of network externalities from which those smaller networks would otherwise suffer.

The paper begins by a quick look at the role two remedies described above played from the early days of the competitive transformation in telecommunications, up to the more recent period. The operators, mostly in private ownership (including, in the EU, after recent privatisation) were subject to fairly draconian pro-competition remedies of one or both of the two kinds described above. In the US this involved the court-ordained breakup of Bell accomplished in 1984, followed by access obligations specified in the US Telecommunications Act of 1996. In the EU, ownership breakup was almost entirely unknown, but mandatory sharing by access regulation was intensively applied, and remains in very limited operation to this day.

After first summarising the experience of the telecommunications sector, we turn to the more urgent contemporary issue of how to apply similar measures to global digital markets. We first examine early competition law cases, begun in 1998, against Microsoft, in the course of which a breakup remedy was contemplated but rejected in the USA, and other remedies appeared to have little effect on Microsoft's subsequent development.

We then consider the application of our two remedies of interest in the context of digital platforms. In the EU the 2022 Digital Markets Act is fully into effect; it expressly contemplates the use of a mandated sharing remedy, in the form of interoperability obligations which can be imposed on the largest digital platforms, described in the Act as ‘gatekeepers,’ operating in the various platform activities as specified in the Act. It also provides for a breakup remedy in the face of persistent transgressions. This is in addition to various EU competition law cases which have been brought against major digital platforms.³ No equivalent legislation has been passed in the USA, but recent competition law cases against Alphabet (Google) and Meta have provoked widespread discussion of the use of the breakup remedy.

2. How breakup and mandatory sharing worked out in EU and US telecoms.

This can be dealt with summarily. While the EU telecoms sector still largely comprised state-owned monopolies, an action taken by the US Department of Justice against the still dominant US firm AT&T came to trial in 1981. Trial Judge Greene agreed with the US Government case that it was necessary to break up AT&T into a firm offering a competitive set of services, including long-distance connections and customer premises equipment, and a set of separately owned local companies, generally known as RBOCs. The divestiture was finally accomplished in 1984.⁴

Since the RBOCs were no longer co-owned with AT&T’s long-distance service, they happily offered their customers long-distance service from both AT&T and any competitor. But if the breakup did wonders for that ‘vertical’ market, the ‘horizontal’ local market remained a monopoly.⁵

³ Summarised in OECD, 2004 cited in fn. 1 above

⁴ See S Coll, *The Deal of the Century: the Breakup of AT&T*, 1988. C-Span, Professors Hausman and Noll discuss the Breakup of Bell, 2012, available at https://www.youtube.com/watch?v=f_X3Ud7ideM.

⁵ See G W Block, ‘Historical overview’, in *Handbook of Telecommunications Economics*, vol 1, 2001, pp. 44-74; C S Yoo, ‘An unsung success story: a 40 year retrospective on US communications policy’, *Telecommunications Policy*, 41, (2017), 891-903 .

This led the US Congress to pass the 1996 Telecommunications Act, the provisions of which involved mandatory sharing of the RBOCs' local networks. Prices would be set based on a specified cost standard. This, and other provisions, were challenged repeatedly in the courts. The view that such 'unbundling' discouraged investment and innovation also gained currency. Thus Stephen Breyer (an influential Supreme Court Justice, and formerly an acknowledged academic expert on regulation) had noted in an earlier 2002 judgment in relation to access regulation that a 'sharing requirement may diminish the original owner's incentive to keep up or improve the property by depriving the owner of the fruits of value-creating investment, research or labor'.⁶ The Supreme Court's later 2004 *Trinko* decision expressed concern about this effect arising if US competition law enabled an access seeker to use an incumbent's facilities.⁷ Access regulation was removed entirely shortly afterwards.

As a result, the mandatory sharing approach had limited effect. This permitted the RBOCs to enjoy considerable market power, and the associated high level of rewards, for a large number of years, before this was partially undermined by infrastructure competition, including from cable TV, mobile companies, and other technologies.

The EU story is slightly longer in the telling. As noted, the EU's progress on telecoms competition lagged that of the US by at least a decade. However by 2003, it had prepared and implemented a comprehensive model of mandatory sharing of infrastructure, subject to a fairly discretionary regulatory pricing regime. And national regulators set the prices of the various infrastructure services mandated in a manner which encouraged competitors to make their own investment. In addition, crucially, sunset clauses required the access regime and other regulated prices to be abandoned when monopoly power was shown to have disappeared. This combination turned out to be a surprisingly effective mode of 'pro-competition regulation.'⁸

The aspects of the 2003 regime can be summarized as follows:

⁶ H. Shelanski, 'Justice Breyer, Professor Kahn and Anti-trust in Regulated Industries,' *California Law Review*, vol 110, No.2, 2012.

⁷ A. I. Cavil, 'Trinko Creep,' *Promarket*, July 20, 2023

⁸ See M Cave, C Genakos and T Valletti, 'The European Framework for Regulating Telecommunications - a 25-year Appraisal', *Review of Industrial Organization*, 55, 2019, pp.47-62.

- The framework is expressly directed - in addition to benefits to end users and the promotion of the EU Single Market - to promoting competition across the full fixed and mobile value chains.
- It does so, first, by defining and examining the competitive position of a number of separate markets, doing so by adopting a prospective or forward-looking version of EU competition law's conception of dominance, which was christened 'significant market power' or SMP.
- The task of regulation is shared by the European Commission and the national regulatory authority (NRA) of each Member State.
- Some obligations (for example to interconnect with other networks) SMP, in a few Member states ripe for inquiry over their SMP status. In 2020, just two such markets were found to have.
- When SMP is found, the NRA then chooses from a set of prescribed remedies, established for retail and wholesale markets, ranging from an obligation to publish accounts, to the imposition by the NRA of an obligation to grant access at a cost-oriented regulatory price.
- Crucially, the regime is subject to sunset clauses which require the above process to be repeated every 3-5 years, via a new market analysis by the NRA, with a new finding of SMP required to apply any further remedy. This introduced a powerful deregulatory element in the regime.

The regime was subject to minor revisions in 2009, and more radically repackaged with effect from 2020 as the European Electronic Communications Code or EECC.⁹

How successful overall was the regime in promoting network competition? If in 2003, 18 markets in each EU Member State were considered ripe for inquiry over their SMP status, and most found to exhibit SMP, in 2020, in just two of these

⁹ COMMISSION RECOMMENDATION on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code {SWD(2020) 337 final}

markets (wholesale local access provided at a fixed location and wholesale local dedicated capacity) was SMP found, and that in a minority of Member States.¹⁰

However, how did the EU regime do in relation to regulation's second task – protecting fair competition in markets upstream or downstream of the infrastructure market? Did the operators of networks with SMP succumb to the incentive to favour, for example, their co-owned retailer over its rivals, for example by fixing things so that its retail customers got a better repair service than customers of competing retailers? So it proved, in some Member States. Various attempts to fix this problem by lesser forms of separation than full ownership breakup were attempted with incomplete success.¹¹

3. Regulating digital platforms in the EU and US

3.i Prelude: the early Microsoft cases in the US and EU

Before addressing recent legislation and judgments concerning remedies in cases involving digital platforms, it is useful briefly to recall competition law processes which occupied the Courts in the two jurisdictions noted above over a lengthy period beginning in 1998. Not only does Microsoft continue to be a member of GAFAM, but that earlier case involved in the US a breakup proposal, propounded by Federal District Court Judge Jeffries in June 2000.

That judgment did not survive a hearing in the US Appeal Court for the District of Columbia, and, following a change in the political leadership in the Department of Justice in the 2000 US elections, the breakup remedy was abandoned in favour of less draconian alternative remedies – leading to a lengthy subsequent debate with significant contemporary relevance over whether this was the correct decision.

¹⁰ <https://digital-strategy.e.europa.eu/en/library/definition-and-analysis-relevant-markets>

¹¹ *BEREC Guidance on functional separation under Articles 13a and 13b of the revised Access Directive and national experiences*, 2011.

The US Microsoft Case:

The period when the case was brought was one in which the Internet Tidal Wave, identified by Microsoft's chief executive, Bill Gates in 1995, was in full swing.¹² The Microsoft-related issue first investigated by the Department of Justice was the alleged tying of Microsoft's PC Windows Operating System to its browser, Internet Explorer - to the detriment of rival browsers including those of Netscape, Java and others. In May 1998, the Department of Justice (DoJ), twenty states and the District of Columbia filed two actions against Microsoft. In late 1999, the District Court issued 'findings of fact' which indicated Judge Jeffries' acceptance of the DoJ's conclusions. After a failed mediation attempt, the Judge ordered Microsoft to be broken up into two companies, an OpsCo which would carry on the 'Operating Systems Business, ' including windows, and an AppsCo, which would carry on the 'Applications Business', including everything else Microsoft did, including, software such as Internet Explorer and non-software such as MSN and Expedia. The document did not explain the expected effects in detail, nor was there a hearing on the Remedial Decree.

In June 2001, a higher court handed down a decision known as *Microsoft III* which reversed the decisions on the tying claim and the breakup order. In September 2001, the DoJ said it would not pursue the tying claim or the remedy of breaking up Microsoft. The DoJ and nine states reached a settlement with Microsoft. The remaining so-called Litigating States proceeded to a further District Court proceeding, before another judge than Jeffries, in which almost all the settlement was approved. An appeal against this decision by the single persisting state was rejected in June 2004, when the US case concluded.

The outcome was extensively debated by the US antitrust community. Here we describe two differing academic commentaries. Carl Shapiro, an expert witness for the Litigating States in the District Court, noted that *Microsoft III* (the appeal court judgment) had set out objectives for a new Remedies Decree, which Shapiro refers to collectively as 'restoring competition.' He argues that the District Court, to which the matter returned after appeal, failed to go far enough to meet this objective in considering the settlement, instead focussing on ensuring

¹² A detailed account of both US and EU Microsoft cases can be found at A I Cavil and H First, *The Microsoft Antitrust Cases: Competition Policy for the Twenty-first Century*, MIT Press 2014.

that Microsoft should be enjoined from continuing to engage in the illegal acts.¹³ Discussion of these objectives featured prominently in the Google Search case considered below.

Gavil and First, at the conclusion of their lengthy account of the Microsoft case as a whole, argue that ‘in a case such as the one in hand, which involves systemic behaviour, remedies which stop at the specifically prohibited conduct will tend to under-deter and are unlikely to spur on new competition... The structural remedy proposed in Microsoft was actually quite consistent with this pragmatic approach to restoring competition in the market and with the theory of monopoly maintenance the government plaintiffs pursued at trial.’ But they are not entirely persuaded, also writing: ‘although the theory seemed sound, the proposal was largely an economist’s construct. Microsoft had always been an integrated firm, so re-organising it in the hope of altering its incentives was a gamble that could have had severe and hard to predict consequences for the industry.’¹⁴

The EU Microsoft Case:¹⁵

In 1998, the European Commission, the executive body of the EU, opened a complaint against Microsoft, broadening the investigation in early 2000. This led to two statements of objections, the second of which alleged tying of Windows Media Player to Windows as an abuse of dominance. A third statement was added in August 2003, followed by an oral statement. In March 2004, the EC ruled that Microsoft had violated EU competition law, and fined it €605 million. A further fine for Microsoft’s lack of progress in complying with the EC’s orders was imposed in 2006.

In September 2007, the EU’s Court of First Instance rejected virtually all of Microsoft’s appeal against the EC’s March 2004 decision and largely accepted the EC’s remedies. In February 2008, the EC fined Microsoft €899 million for non-compliance. In January 2009, the EC issued a statement of objections concerning the tying of Internet Explorer to Windows, and in December of that year the EC announced a settlement with Microsoft of its browser case.

¹³ Carl Shapiro, ‘*Microsoft: A remedial failure*’, *Antitrust Law Journal*, 75, 2009, 739-772.

¹⁴ Gavil and First, *op. cit.*, pages 273-4 and 327.

¹⁵ See Gavil and First, *op. cit.*, pages 186-227 and 331-337.

In June 2012, the EU's General Court upheld more than 97% of the February 2008 fine. And in March 2013, the EC fined Microsoft an additional €561 million for failing to comply with its 2009 commitment to offer users a choice of browsers.

It is apparent in retrospect that Microsoft suffered no serious injury from these cases in terms of the competition it faced, sufficient to act as a significant deterrent of its future conduct. Its market shares were maintained, and its market capitalisation continued to grow rapidly. The company has however been pursued further in accordance with competition law in both jurisdictions, and was one of the first platforms to earn gatekeeper status in the EU under the 2022 Digital Markets Act, to which we now turn.

3.ii) The Prospects for Digital Platform Breakup and other Remedies in the USA.

The proposed use of breakup as a remedy under US competition law did not change fundamentally following the actual break-up of Bell and the abandoned breakup proposal concerning Microsoft. But the enormous and enduring success of the leading US digital platforms led to reconsideration of that option.

Thus a study published in 2023,¹⁶ but circulated earlier, of how to make search more competitive through regulation combined in its list of possible remedies examples falling in both the categories discussed here – mandated sharing and breakup. In relation to the first group the authors identified, at pp. 970-971, analogies between their proposals and those soon (at the time of writing) to be enshrined in the EU's DMA.

But the authors also proposed as an alternative to the EU's proposed behavioural remedies, that Google be required i) to divest the Android Ecosystem into an independent entity, and ii) to licence the elements of the ecosystem on an unbundled basis at a uniform per device price that is FRAND (fair, reasonable and non-discriminatory).

In other words the study proposed a considerable dose of mandated access remedies, accompanied by the option of using a breakup intervention in relation

¹⁶ P. Heidhous et al. 'More Competitive Search through Regulation,' *Yale Journal on Regulation*, 40, 2023, 915- 972.

to specific objectives. The combination was intended to limit Google's capacity to enter into contracts with other parties which would give Google an advantage over their emerging rivals,¹⁷ to prohibit self-preferencing, and also to lower the costs of entry by competitors.

The search market is interest for our purposes for a number of reasons. The first is the durability of Google's dominance in a very large number of jurisdictions, despite entry by large and well-funded competitors, such as Bing.

This attracted the attention of several competition authorities. For example, many years before the EU's DMA came into force, its competition authority took two competition law cases against Google, known as the Google Shopping case and the Android case. The former case involved allegations of self-preferencing by Google, by means of its control of the order in which its own affiliated specialised search and shopping services appeared on the search page, in combination with those of its competitors. The Commission concluded that an infringement had occurred. We revert to the outcome in terms of remedies later.

Competition law cases against Google have been brought in many jurisdictions. The OECD tally of such cases brought by G7 countries amounted to eleven, excluding actions being taken under EU Regulations; it was also calculated in 2024 that Google was the subject of no fewer than 100 anti-trust actions.¹⁸

The most prominent of these cases was brought by the Department of Justice (DoJ) in the USA. A judgment in that case was delivered by Judge Amit Mehta of the District Court of the District of Columbia in August 2024. This found that, in paying firms such as Apple and Mozilla to set Google Search as the default search engine on their web browsers, and in requiring mobile phone developers who use Google's Android operating system to pre-install Google products including Google Chrome and Search, Google had violated Section 2 of the Sherman Act with respect to constituting exclusionary conduct to maintain

¹⁷ The list also includes remedies prohibiting the dominant search engine contacting with equipment manufacturers and others to give priority to it in the availability of exclusive default positions in the choice of search provider, or other benefits.

¹⁸ See *fn. 1* above, and C Bergqvist 'Taking Stock of Google's Anti-Trust Troubles as the World Turns Against It,' *Pro-Market*, February 2024.

monopoly power.¹⁹ The next step would be to mandate remedies to restore competition. (Both the judgment and remedies would be subject to appeal.)

Citing from the earlier Microsoft judgment, the Plaintiffs in the current case (including the DoJ and numerous States), asserted that US courts, having found a violation, are empowered to prevent future violations and eradicate existing evils, and that any remedy requires a comprehensive and unitary framework to restore competition with provisions to complement and reinforce each other. And ‘a remedy for Google’s unlawful monopolization must simultaneously:

- (1) unfetter these markets for Google’s exclusionary conduct,
- (2) pry them open to competition,
- (3) deny Google the fruits of its statutory violations, and
- (4) prevent Google from monopolizing these and related markets in the future.’²⁰

On foot of this reasoning, the Plaintiffs proposed a combination of prohibitions, mandated sharing and breakup, including a requirement on Google ‘to stop third party payments which exclude rivals....; disclose data sufficient to level the scale-based playing field it has illegally slanted, including at the outset, licensed syndicated search results that provide potential competitors a chance to offer greater innovation and more effective competition; and reduce Google’s ability to control incentives across the broader ecosystem via ownership and control of products and data complementary to search.’

However, the newsworthiness of these was dominated by a proposal for a breakup of Google by the divestment of Chrome, which the judgment found had fortified Google’s dominance.

In relation to Google’s Android business, the Plaintiffs identified two options, designed to prevent Google from utilising Android in many possible ways to favour its search business. The first option is for Google to divest its Android division; the second is to adopt behavioural remedies that would ‘blunt Google’s

¹⁹ US et al. v Google LLC. Case 1:20-cv-03010-APM Document 1033 Filed 08/05/24. *Judgment*, p . 276

²⁰ US et al. v. Google LLC, Case 1:20-cv-03010-APM, Document 1184, Filed 03/02/25. *Executive Summary of Plaintiffs’ Revised Proposed Final Judgement*. Note that this document was submitted after the political control of the US Department of justice had switched from President Biden to President Trump. It embodied few changes from its predecessor.

ability to use its control of the Android ecosystem to discriminate in favour of its own search and ads business.’ If the latter option were chosen, the court might be given powers, if the remedies failed, to return to the first option.

This conclusion is supported by Professor Steven Salop, who elaborated further on the implications of the four requirements for remedies identified by the court in the Microsoft case noted above, noting that ‘the remedy must go beyond simply enjoining the anti-competitive conduct. It should include provisions to reignite the competitive process sufficiently to more quickly and surely restore effective competition.’²¹

An implication which Salop draws from this is that the remedies task of “denying Google the fruits of its statutory violations” may entail asymmetric regulation. This might – for example – prevent Google Search (but not its competitors), from purchasing the right to be the default for any or all search points on devices, independent browsers and other apps in an open-bidding process. Other restrictions could be applied to diminish Google’s market share, which would then (by assumption) have been found to be ill-gotten. It may also involve additional restrictions on even a separated Android business, thereby reducing the value of its sale by Alphabet, Google’s parent. Other independent academics have contributed on the other side of the debate.²²

It is noteworthy that the plaintiffs’ proposed set of remedies also contained some ‘mandated sharing’ elements expressly intended to burnish the prospects of competitors when they offer their search engine in opposition to Google’s.

Google’s immediate response, a foretaste of what would be forthcoming in court proceedings, is to write that ‘DoJ’s staggering proposal would hurt consumers and America’s global technological leadership,’ and to identify six ways in which it would do so. The remedies hearing were concluded in early June 2025.

In addition to the Google Search case The early months of 2025 saw two further developments in US courts which will lead to more intense discussion of breakup remedies concerning major US digital platforms.

²¹ S. Salop, *What is an Effective Remedy in the Google Case?* 2024, SSRN, available at <http://dx.doi.org/10.2139/ssrn.4948681>

²² Herbert Hovenkamp, ‘Breaking up Google would be a Big Mistake’, *New York Times*, 26/11/2024

The first is another case involving Google and its parent Alphabet. In April 2025, Judge Leonie Brinkema of the U.S. District Court for the Eastern District of Virginia delivered a ruling that Google had broken the Sherman Act by the wilful acquisition or maintenance of monopoly power in a selection the variegated processes (sometimes known as the Ad-stack) which place advertisements across the web, including on social networks and search engines.²³ The Federal Trade Commission argued that Google had a monopoly over numerous pieces of technology that are used to conduct these transactions.²⁴ It asked the court to divest some of components of the ad value chain which Google had acquired over the past two decades, and to impose other remedies too. The remedies hearing is set for September 2025. Google has also said that it will seek to overturn the unfavourable aspects of this ruling through an appeal process.²⁵

Almost simultaneously, a trial began in the District Court in the District of Columbia, presided over by Judge James Boasberg, of an action taken by the Federal Trade Commission against the social media company Meta (then known as Facebook) over its acquisitions in 2012 of Instagram and in 2014 of WhatsApp. The Government claimed that the purchases were part of a strategy to stifle competition by a ‘buy or bury’ strategy.²⁶ A natural remedy if this case were proven might be to require Meta to divest itself of Instagram or WhatsApp or both. The court’s judgment on this claim is likely to take some months to appear. If liability were found, there would follow a remedies process.

Thus, more than 20 years after the US Microsoft case was concluded without a breakup remedy, in the course of a year three cases have emerged in which two of the five largest US digital platform companies may face the threat of breakup.

²³ See USA et al. v. Google LLC Case 1:23-cv-00108-LMB-JFA Document 1410 Filed 04/17/25 *MEMORANDUM OPINION*.

²⁴ This judgment related to the so-called ‘publisher tools components,’ not the ‘advertiser tools.’ As a consequence Google’s controversial acquisition of Double Click in 2008 was not impugned.

²⁵ For an analysis of this market see A Witte and J Kramer, ‘Evaluating structural and behavioral remedies for anticompetitive conduct in the ad tech ecosystem,’ *Telecommunications policy*, 49, 2025, 102955.

²⁶ It has also been suggested separately by others that Facebook was guilty of backsliding on commitments to competition authorities made at the time of the merger to competition to keep the acquisitions separate from Facebook. See S Levy, *Facebook: the Inside Story*, 2018, p. 503; S Frenkel and C Kang, *An Ugly Truth*, 2021, p. 227.

In the Google Search case, the company has been found guilty of monopolisation by a lower court, which is now directly considering breakup options. In the Google Adstack case, the District Court has found Google to have committed two of the three acts alleged by the FTC, and a remedy process will soon begin. In the Meta case, the court hearing ended in May 2025, and the judgment will follow in due course. Breakup remedies either have figured or may figure in all three cases, if they are all proven.

3.iii) Breakup and inter-operability in the EU under the Digital Markets Act

The Digital Markets Act:

The EU's 2022 Digital Markets Act, which came into effect fully in 2024, contains provisions for both breakup and interoperability. A brief summary of the Act as it affects large digital platforms is first provided:²⁷

- The DMA introduces rules for platforms that act as 'gatekeepers' in the digital sector. These are determined by the provision of services with shared characteristics, including: economies of scale or scope; network effects, including indirect (two-sided) effects; the possibility of user lock-in and lack of multi-homing; vertical integration; and data-driven advantages. Their position gives them the power to act as private rule-makers and to function as bottlenecks between businesses and end users. It is based on annual turnover, market capitalisation, number of users and an entrenched and durable position;
- The ten chosen core platform services are: online B2C intermediation services; online search engines; online social networks; video-sharing platform services; number-independent interpersonal communications services; web browsers; virtual assistants, cloud computing services; operating services; and advertising services offered by a provider of any of the above. There is a procedure for adding more;
- A gatekeeper can be made subject to up to 22 prohibitions and obligations. The 'black' list of nine, mostly prohibitions, are supposed to be self-explanatory and

²⁷ A. de Streel and P. Alexiadis, 'The European way to regulate big tech: the EU's Digital Market Act,' in *The Legal Challenges to the 4th Industrial Revolution*, 2023.

self-executing. A ‘grey’ list of 12 may need to be specified by the Commission separately for each gatekeeper. These variously seek to achieve the objectives of transparency, the prevention of unfair leveraging, facilitating use mobility, and opening up platforms and data;

- The Commission can impose administrative fines of up to 10% of global turnover (20% for repeat offenders) on gatekeepers’ infringements of their obligations or prohibitions.
- Gatekeepers can appeal decisions made by the European Commission to the General Court of the European Union. These appeals do not suspend the gatekeeper's obligation to comply with the DMA. The appeals are limited to points of law and must be filed within a specific timeframe.

As this summary account shows, the DMA has been designed throughout for speed and effectiveness in getting through the enforcement stage, notably in *not* expressly requiring many of the stages required to bring an EU competition law case to a conclusion. Thus a bespoke economic definition of markets is not required, nor is a demonstration of dominance.²⁸ (The lack of such requirements is with much sectoral regulation.)

The DMA allows the Commission some discretion to impose a breakup, but only after a demonstration of systematic infringement of the Act. Thus if a designated gatekeeper has over the last eight years infringed certain specified obligation set out in the Act several times, demonstrated by at least three non-compliance decisions, a breakup might result. concerning any of the gatekeeper’s CPS. At the same time, the gatekeeper must have at least maintained the status required for that designation.²⁹

The role of mandated sharing, in the form of interoperability obligations, imposed by regulation, is correspondingly greater: the logic for them was set out in the so-called Vestager report (after the EC’s then Competition Commissioner) published

²⁸ See further A. Fletcher et al. ‘The effective use of economics in the EU Digital Markets Act’, *Journal of Competition Law & Economics*, 1, 2024, pp. 1-19.

²⁹ T Knapstad, ‘Breakups of Digital Gatekeepers under the Digital Markets Act: Three Strikes and You’re Out?’ *Journal of European Competition Law and Practice*, 14 (7) 2023, pp. 394-409.

in 2019.³⁰ The role of these obligations is to prevent a firm with market power from exercising that power against competitors within the same market, value chain or ecosystem.³¹ Thus a dominant social media company benefitting from economies of scale and positive network effects might refuse to allow its customers to exchange messages directly with those of a smaller social media company, thus entrenching its market power. This issue could be resolved by imposing a regulatory obligation on the firm to allow such horizontal inter-operability.

Alternatively, if that firm enjoying market power in one market is competing with other firms in another market within same value chain, the company might be subject to an obligation to interconnect vertically with customers of both types (its affiliated firm and its rivals), using an identical interface, rather than offer a worse service to customers of the rival firms.

In other words, mandating inter-operability both horizontally and vertically is a regulatory tool which reduces the use of market power and promotes equitable competition throughout the value chain. It is intended to do so in a fashion which leaves considerable free rein for variety and innovation in the design of services to meet customer needs.³²

Enforcement of the DMA.

This has, in its infancy, has taken two forms. Investigations of possible infractions have been started, but not concluded. But additional progress has been made using a procedure in the Act which allows the European Commission to specify its requirements in relation to interoperability of a gatekeeper. We consider these in turn.

³⁰ J Cremer et al., *Final Report on Competition Policy for the Digital Era*, 2019, pp.6-9, 54-72.

³¹ See especially Articles 5, 6 and 7, in Chapter III, of the Act, entitled ‘Practices of Gatekeepers that Limit Contestability and are Unfair.’

³² F Scott Morton et al., ‘Equitable Interoperability: the ‘Supertool’ of Digital Platform Governance’, *Yale Journal on Regulation*, vol 40, 1014-1055, 2023, and M Bourreau and J Kraemer. *Horizontal and Vertical Interoperability in the DMA*, CERRE, 2024.

In March 2024 the European Commission opened the following five cases against the gatekeepers named below, based on concerns about lack of effective compliance with the DMA.³³

1 & 2: Apple and Alphabet: proceedings to assess whether the measures they were taking in relation to the obligations on their app stores are in breach, in relation to the ability of app developers to ‘steer’ consumers to offers outside the app stores, free of charge.

3: Alphabet: concerns that it is preferencing its own vertical (specialised) search services such as Google Hotels over similar rival services.

*In March 2025, the Commission sent its preliminary findings to Alphabet.*³⁴

4: Apple: concerns that its design of the web browser search screen may prevent users from exercising their choice of services.

*In April 2025, Apple was fined €500 million for this infraction of the so-called anti-steering rules.*³⁵

5: Meta: concern whether its ‘pay or consent’ model for users in the EU complies with the requirement to obtain consent from users when a gatekeeper intends to combine or cross-use their personal data.

*In April 2025, Meta was fined €200 million for this infraction.*³⁶

The Commission intended to conclude these proceedings within 12 months. This was partially achieved.

The alternative *ex ante* specification process, was begun in mid-2024, requiring from Apple specification of free-of charge and effective interoperability of the hardware and software features accessed or controlled via the gatekeeper’s operating system to providers of services and of hardware, and the creation of a new dedicated process for developers to request additional effective

³³ European Commission, *Commission opens non-compliance investigations against Alphabet, Apple and Meta under the Digital Markets Act*, March 2024

³⁴ European Commission, *Commission sends preliminary findings to Alphabet under the Digital Markets Act*, March 2025

³⁵ EC, *Commission Finds Apple and Meta in Breach of the Digital Markets Act*, April 2025.

³⁶ *Ibid.*

interoperability with iPhone and iOS features. 88 responses were received by 31 August 2024, some expressing dissatisfaction with Apple's proposals, particularly that hardware interoperability was not seamless as with Apple's own hardware.

In December 2024, the Commission sent a preliminary finding both to Apple, and for wider consultation, setting out in detail the measures it proposed Apple take to deal with the issues. This suggests a proactive and serious approach in the EC to imposing interoperability on a key platform. In March 2025, the Commission adopted decisions requiring Apple to comply with the measures specified.³⁷ The whole process described above was accomplished in nine months.

More broadly, the success of the implementation of the DMA as completely new legislation hinges to a degree on a shared understanding by all participants of what is required of them. A study published by a Brussels think tank on the first anniversary of Act coming fully into force identifies a number of key requirements, ranging from greater transparency, more legal predictability, better institutional arrangements and the developments of trust among the various parties. It was based in part on in-depth interviews with people involved on all sides.³⁸

4. Conclusions and Prospects

The purpose of this paper is to contribute to the debate about what should be done control the market power of the regulation of large global digital platforms, which (using the terminology employed in the recent EU legislation, the DMA) are now often called gatekeepers. These are the largest and most commercially successful of a set of institutions, relying to a substantial degree on what have been christened two-sided platforms, because of the role which they play in intermediating between two separate types of agents. However, as the scope of activity of such companies have grown, they now operate in many more activities than intermediation, and increasingly form what are described as 'ecosystems.' The five companies at the summit of these activities have often close or in excess *of billions of global household and firm customers, and populate many of the places at the top of global company valuation lists.*

³⁷ See https://ec.europa.eu/commission/presscorner/detail/en/ip_25_816

³⁸ A de Streel et al. *DMA@1: Looking Back and Ahead*, CERRE 2025, pp.9-64.

As in the case of other groups of dominant firms in the past – notably of the utility companies which in many jurisdictions were privatised roughly 50 years – there are two possible and not exclusive responses – use of general competition law and the passage of sector-specific regulatory legislation. One or neither of these can be employed, and they are not mutually exclusive. For convenience we frame the discussion within the experience of two jurisdictions, the European Union and the USA, whose approaches now significantly differ.

In the case of platforms, both the EU and the USA relied on competition law alone for more than twenty years. There is therefore considerable evidence of its effects. In the light of that experience, the EU decided to pass sector-specific legislation in the form of the 2022 Digital Markets Act, which it is now enforcing. The evidence of its effects to date is therefore at best vestigial, but some comments can be made on its prospects. In the same recent period, the US has also demonstrated recently a strengthened inclination to take action under competition law.

We have sought to shed light on the different policy choices described above by taking account of similar choices made in the two jurisdictions with respect to the telecommunications sector.

We note that the tasks which competition law and/or regulation must fulfil in complex sectors of the economy are two-fold: first it is necessary to protect direct from exploitation the customers of a platform firm exercising market power from exploitation; additionally such a firm located in a complex value chain including upstream and/or downstream elements must be prevented from using their market power to strengthen their position in those related by self-preferencing – entering the related market via an affiliated company and showing it preferential treatment there, compared with its competitors; thereby extending its market position throughout the value chain. If, as is likely, both forms of protection are required, two different instruments or remedies will have to be deployed.

Secondly, we note that the two most drastic weapons available to competition authorities and regulators in both the sectors considered here (telecommunications and digital platforms) are breakup - requiring a company to divest itself of certain assets, and what we call ‘mandated sharing’ – requiring a dominant firm to share some assets with competitors. The divestment can involve either assets used in the market where it is dominant, or in another market. Examples of mandated sharing are given below.

As a general rule, in the cases of interventions in both telecommunications regulation in the past, and digital platforms currently, breakups have played a more prominent role in US, and mandated sharing in EU proceedings.

Thus, summarising the outcome of telecommunications study discussed, when the sector became more open to competition in the 1970/80s, the US authorities initially achieved in 1981 a breakup under competition law of the then dominant Bell system into several regional components, deemed to be persistent monopolies, and other activities such as long distance calls and customer premises equipment which were potentially competitive. The latter goal was achieved, but the measures taken by subsequent sector-specific legislation in 1996 to limit local monopoly were half-hearted and soon abandoned.

In the EU, on the other hand, there were only trivial breakups, but from 2003 a complex system of mandated sharing was introduced which allowed telecommunications competitors to rent the incumbent's assets at generally low prices. This initiated a process by which they were able quite quickly to build out their own (now fibre-based) networks – rendering the regulation no longer necessary.³⁹ On the other hand the EU arrangements to prevent self-preferencing were less successful.

In the light of the above, how do we assess at this early stage the policies adopted in the two jurisdictions to deal with digital platforms. Because in the US general competition law is employed, there is no express legislative specification of the goals and methods of intervention. But the breakup of Google Search is already at issue in 2025 court proceedings. We noted above that this may prevent self-preferencing across markets, but would not control abuse in the main (Search) market at issue. It is necessary to recognise that some 'mandated sharing' with competitors of Google Search data is also under consideration, even if its effects are unlikely to be large. In view of the increasing role of Artificial Intelligence in search, the DoJ has expressed concern at the impact on search competition of Google paying equipment manufacturers to pre-install its own search product on their devices.

A further case against Google and another against Meta are now under way. The direction of travel of competition law in this sector will become clearer as the three current cases move forward. This may, however, take many years.

³⁹ See T Shortall, 'European Success in Building Very High Capacity Networks: a Process of Trial and Error', *Utilities Law Review*, 23 (6), 219-229

Turning to the arrangements for gatekeepers under the DMA, the following features of the legislation are most relevant to the current discussion:

- firms are expressly required to ensure that they abide by its terms; thus it is ‘self-enforcing’;
- the regulator, the European Commission, has in the few cases identified in its early days been capable of reaching provisional conclusions quite quickly;
- its mode of pro-competition regulation via imposing both horizontal and vertical inter-operability potentially deals with both the key tasks identified above – controlling the exercise of power within a market, and preventing its misuse in vertically related markets;
- the specification process described above enables it to impose required inter-operability arrangement *ex ante*, as well as assess their consistency with the Act *ex post* ;
- the Act carries penalties as a proportion (up to 10% or even 20%) of the relevant company’s global turnover, which may amount to hundreds of billions of euros.
- The duration taken by the appeal process is curtailed, compared with its duration under competition law.

Of course, this leaves many questions unanswered. The first concerns the availability of adequate resources within the Commission to carry out investigations. A second is the efficiency with which the Commission utilises those resources, when faced with administering entirely novel legislation. A third is whether the appeal process is able to work quickly and effectively.

As Yoo wrote, in connection with telecoms regulation: ‘no policy, including unbundling, is universally beneficial. Instead, the better approach is to identify the circumstances in which a policy is likely to be beneficial’.⁴⁰ Similarly, Gilbert has written in connection with the separation of digital platforms, that ‘there is no simple structural solution that both preserves the incentive and ability of platforms to innovate and protects rivals from the consequences of that innovation.’⁴¹

⁴⁰ C S Yoo, ‘An unsung success story: a 40 year retrospective on US communications policy’, *Telecommunications Policy*, 41, (2017), p. 895.

⁴¹ R J Gilbert, ‘Separation: a Cure for Platform Dominance?’, *Information Economics and Policy*, 54 2021, pp. 1-15..

Our current conclusion is that, on the basis of the evidence to date, what might be called ‘the DMA experiment’ is a policy which was both worth trying and is worth sustaining. The telecommunications precedent suggests that the legal and regulatory infrastructure in the EU is capable of sustaining a complex pro-competition form of regulation based on mandated sharing, while it proved impossible to implement and was rejected in the USA.

This leads on to a final observation in application to digital platforms, which bears on the impact of what Bradford has described as the tension between the EU ‘rights-based’ and the US ‘market-based’ approaches to the regulation of digitalisation.⁴² This has led to an increasingly visible international regulatory conflict between the EU and the US government. The latter views the DMA as a Behind-the Border (BTB) trade barrier which assimilates criticism of the DMA (and other EU regulations, laws and taxes seen as directed against US firms) with other aspects of its attack on the international trade activities of the EU and other jurisdictions, leading it to tout tariffs against imports from the EU as a possible remedy. It remains to be seen what course this conflict will take, and what consequences it will have.

⁴² A Bradford, *Digital Empires*, 2023, pp. 6-11.