Regulating Business Ecosystems: Is this a new paradigm for competition law?

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"The ACCC is considering whether Australia's current competition and consumer protection laws, including merger laws, are sufficient to address the competition and consumer harms identified in relation to digital platform services or whether change is needed."

ACCC, Digital Platform Services Inquiry – Discussion Paper 5, February 2022

1 Introduction[3]

2022 is a magical world of modern technology. However, such magic also has many shades of moral light and dark. Today, the glowing glass screen of a smartphone enables us to access the entire library of all human knowledge. We can order any imaginable good or service from anywhere in the world; literally at our fingertips. However, propaganda and disinformation can spread more easily to radicalise those easily influenced. We can also see the devastation and suffering inflicted by war in real time – and unimaginable, unspeakable horrors.

In my presentation to this Competition Law Conference in 2015, I explored the evolution of competition law in high technology industries.[4] I highlighted how software was 'eating the world' in the words of legendary Silicon Valley venture capitalist Marc Andreessen. I considered how modern competition law was addressing complex questions of dynamic efficiency, innovation markets and cross-border e-commerce in a world reliant on digital software platforms.

In 2015, I argued that Australian competition law struck an appropriate balance between preserving competition and promoting innovation. However, I proposed continued scrutiny of high technology markets by Australian regulators. I pointed to the future challenges in regulating digital platforms. Those historic observations were prescient.

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3 Due to the many roles and clients of Norton Rose Fulbright globally, this paper deliberately avoids expressing any views. However, any views that may happen to be expressed in this paper (express or implied) are the personal views of the authors and may not reflect the views of Norton Rose Fulbright or any of its clients (including the ACCC).

4 A copy of the paper is available on the website of the Department of Treasury of the Commonwealth of Australia at: https://treasury.gov.au/sites/default/files/2019-03/C2015-017_Taylor_Martyn.pdf

Now, at this Competition Law Conference in 2022, Chris Hodgekiss has asked me to revisit those historic conclusions and to stocktake recent developments. I give my huge thanks to Andrew Pattinson for assisting me to write this paper. All credit is his. All errors are mine.

Given the ACCC has kindly written my entire conference paper for me in the form of the Digital Platforms Services Discussion Paper of February 2022 (!!), I'm intending to approach the subject from a slightly different perspective. I will look at one specific facet of this multi-dimensional, highly dynamic and morally emotive subject.

Specifically, I will consider the regulation of digital business ecosystems built on software platforms, or '*digital ecosystems*'. Some commentators have argued that digital ecosystems create a new paradigm for competition law and a new approach is required. However, I'm cynical of calls for radical reform. To me, we have a *deja vu* scenario but with some unique nuances arising from the combined economic features of software, data and communication networks.

Anyhow, I will borrow from a time-honoured nursery tale of Goldilocks and the Three Bears. You, as the audience, are Goldilocks. Papa bear in our case is 'over-regulation'. Baby bear is 'under-regulation'. Goldilocks is trespassing, but for metaphorical purposes we will forgive her those sins and focus on Mama bear - the 'just right' – striking the optimal regulatory balance.

This paper poses questions as to what 'just right' means in an Australian context. How do we regulate the many shades of grey in this magical technological world of 2022? Some issues go not just to competition law, but to the fundamental importance of information to modern democracy. We leave the policy answers to the ACCC and the Australian Government. However, we hope that, unlike Goldilocks, an iterative experiment with different extremes is not required. Australia can learn from international experiences. Australia has a real opportunity to get it 'just right'.

2 The evolution of digital ecosystems

2.1 Framing the issue: what is a digital ecosystem?

In preparing for this session, Chris Hodgekiss asked me to consider a paper written by Professor Michael Jacobides of London Business School; also the Chief Digital Advisor to the Hellenic Competition Commission of Greece. Professor Jacobides argues that modern competition laws are ill equipped to deal with digital ecosystems.[5] Reflecting this theme, Greece enacted a sector-specific *ex post* competition prohibition directed at certain digital ecosystems.[6]

Professor Jacobides describes a business ecosystem as a collection of products and services offered by firms that are loosely governed by a single '*orchestrator*' firm. The orchestrator creates and facilitates important complementarities, technical links and network effects between the products and services offered and the different users operating within the ecosystem. The orchestrator may also have a governance role as the platform creator and administrator.[7]

I'll give a practical example of this and ask what is a digital ecosystem? Apple may best illustrate the concept, as one of the most valuable companies in the world. Ignoring Apple hardware and focusing on the software, we have:

(1) First, a sophisticated proprietary 'operating system'.

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5 See M Jacobides and I Lianos *Ecosystems and competition law in theory*, Industrial and Corporate Change, 2021, 30, 1199–1229. Available at: https://doi.org/10.1093/icc/dtab061

6 Ibid, page 1221.

7 Ibid, 1200-1204.

Apple's 'Mac OS X 10.4 Tiger' operating system comprises a reputed 85 million lines of software code, being one of the largest operating systems ever written.[8] Such code enables the functionality of sophisticated electronic hardware devices to be readily accessed by simplified application software. The iOS operating system used for Apple mobile devices is a short-form version of the operating systems used for Apple laptops. Such operating systems reflect investments of hundreds of millions of dollars and are protected by extensive intellectual property rights.

Some of the competition issues arising from such software platforms were litigated in the case of *United States v Microsoft Corporation*[9] (**US v Microsoft**) some two decades ago, so are not new.

(2) Second, user-friendly application software, known colloquially as 'apps'.

There are over 3.4 million apps in the Apple iOS ecosystem that have been downloaded collectively some 150 billion times.[10] Such apps are often now supplied at very low, or no, cost to consumers via 'app stores'. Apps include, for example, Internet search, email, video calling, and software games.

In the Apple digital ecosystem, apps are supplied both by Apple and third party app developers. An unusual feature of iOS is that it is a closed ecosystem with Apple as the gatekeeper. Apple has a reputation for tightly controlling quality to deliver an optimal 'Apple' customer experience. There are significant disadvantages in 'jailbreaking' an iPhone in order to run software that has not been approved and distributed through Apple's 'App Store'.[11]

(3) Third, the use of the 'digital platform' to intermediate and co-ordinate the delivery of goods and services.

Operating system and application software, as a digital platform have facilitated a new era of global disruptive technological innovation, giving rise to Marc Andreesson's famous comment that 'software is eating the world'. Benefits to consumers have been truly spectacular and the world of business has transformed literally in our lifetimes with that transformation continuing at an incredible pace.

A diverse range of business models are now supported by digital platforms, typically facilitated by Internet-access. Such business models include the delivery of content, services, advertising, physical products and logistics. In the case of Apple, collectively the arrangements form a business ecosystem (digital and otherwise) supported by Apple's integrated hardware and software platforms. This ecosystem reaches throughout the global economy to an unprecedented degree.

Apple has vertically integrated into many business lines within this ecosystem, most notably into the delivery of digital content such as movies and music. Apple is inherently a vertically-integrated business that controls access to an underlying resource that Apple's competitors within the Apple digital ecosystem must access in order to compete. Such vertical integration tends to be at the core of regulatory concerns with digital ecosystems expressed in the 2020s.

Conceptually, a digital ecosystem can therefore be viewed as one or more underlying software platforms usually comprising interconnected operating and application software

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8 See "What's the Biggest Software Package by Lines of Code?" accessible at https://interestingengineering.com/whats-the-biggest-software-package-by-lines-of-code

9 253 F.3d 34 (D.C. Cir. 2001).

10 See "Number of Apps in Apple App Store in 2022/2023: Demographics, Statistics, and Predictions - Financesonline.com" accessible at https://financesonline.com/number-of-apps-in-apple-app-store-in-2019-2020-demographics-statistics-and-predictions/

11 Apple charges a commission for use by third parties of the Apple App Store. Apple's 30% commission fee is currently the subject of litigation brought by Epic Games in the United States (and in other jurisdictions, including Australia).

that, in turn, facilitates all manner of physical and virtual business models. Digital platforms may exist at the operating system level, as in the case of Apple, but may also exist as Internet-enabled software applications alone, as was historically the case with Amazon and Facebook.

2.2 Competition at the ecosystem level

Digital ecosystems in the 2020s have provided untold benefits to our modern society. Partly for this reason, governments have been reluctant to engage with the downside of modern technology given the risk of compromising the 'pot of gold' sitting at the end of this modern technological rainbow.

However, a number of developments during the 2010s and 2020s have led society to increasingly question this *laissez faire* stance, particularly as digital power has started to extend beyond markets and into the political system. Fundamentally, the *Sherman Act* of 1890 was borne of a public mistrust of the political influence of Standard Oil. Some have been openly questioning whether that mythical 'pot of gold' at rainbow's end will actually flow to consumers. In effect, we are no longer sweeping the downside of technology under the proverbial carpet.

Some commentators, such as Professor Jacobides, have suggested that the emergence of digital ecosystems requires significant reforms to competition laws. Professor Jacobides argues, for example, that competition law must expressly address competition that occurs both between and within digital ecosystems, given that such digital ecosystems are now fundamental to modern commerce.[12] Professor Jacobides argues for express legal recognition of competition at an entirely new dimension - at the level of the ecosystem- is required.

The solution to this issue adopted in Greece is one proposed policy solution on the continuum of available policy instruments, but I'm not yet convinced. Generic competition laws in their current form can, and already are, being applied to regulate digital ecosystems. Moreover, business ecosystems are not a unique digital phenomenon, but are a facet of our competitive landscape in many economic sectors. To me, the issue is not so much the existence of a business ecosystem, but rather the impact of the combined economics of software, data and communication networks on that ecosystem.

To illustrate the point, we can consider a historic business ecosystem based on a non-software platform, as a contrast to a modern digital ecosystem based on software. I will stay on the theme of 'magic' and consider Disney. I don't act for Disney, but I am a loyal Disney fan to a surprisingly emotional degree. Many of my lifetime's best memories are associated with Disney.

The Walt Disney World Resort in Florida can be viewed as a vertically-integrated business ecosystem founded on a theme park platform:

(1) Disney World is a 25,000 acre entertainment ecosystem comprising four inter-connected Disney theme parks with a vast hotel and transport infrastructure. Disney World is the most visited vacation resort in the world with an annual attendance of around 60 million visitors. It was opened in 1971 a few days before I was born. After my own family experiences, and without spruiking Disney, I would agree that it is indeed the 'Most Magical Place on Earth'.

(2) Walt Disney Company has been the self-governing authority of the Disney World precinct for some 50 years, although this is due to end in June next year.[13] Disney World is a self-governing business ecosystem made up of tangible platforms that

12 See Jacobides and Lianos, page 1201.

13 See "Florida governor signs bill stripping Disney of self-governing authority" accessible at https://www.reuters.com/world/us/florida-governor-signs-bill-stripping-disney-self-governing-authority-2022-04-22/

facilitate entertainment commerce. Other businesses, such as McDonalds, must operate within this ecosystem although Disney is vertically-integrated into most aspects of the Disney World offering. Disney has near total control of the Disney experience and, as a result, offers end-to-end vacation magic at a premium price.

(3) In selling theme park tickets, Disney is competing with Comcast Corporation the owner of the Universal Studios branded theme parks, but is also competing with entertainment centres and holiday resorts in the global market. At the same time, businesses operating within Disney World are competing for the patronage of consumers both within the resort but also more widely. Different services are being supplied and hence a range of different markets are involved that reflect the many different interactions of supply and demand.

(4) Disney makes the rules. The sale of goods or services, or the display of goods or services, is a prohibited activity unless prior written approval has been obtained.[14] Disney also has extensive intellectual property rights at the very core of the Disney experience. However, economic theory suggests that Disney would generally act to maximise long-term profits by consistently delivering a premium service to consumers. Ultimately, Disney only wins if it truly delivers the Disney Magic – and, in my view, there is little doubt that it hits the mark.

Disney World is an extreme, but it illustrates a point. When you think about it, platform-based business ecosystems exist throughout the economy. A Westfield shopping mall is a platform-based business ecosystem. Or, to go back in time, the Grand Bazaar in Istanbul is one of the largest and oldest covered marketplaces in the world dating back to the 1400s and is a platform that facilitated commerce between East and West for centuries.

In my mind, the issues that regulators are now confronting are not so much derived from the existence of business ecosystems, or business ecosystems based on platforms, or platform-based business ecosystems with vertical integration. All of these have existed throughout the era of modern competition law and have been effectively regulated by it.

The issues that regulators are now confronting are more borne of the unparalleled global scale of some of the modern digital ecosystems. That scale is raising concerns when considered in the context of the combined market power effects arising from the unique economics of software, information and communications networks.

If one accepts that platform-based ecosystems have already been successfully regulated by modern competition laws, then this begs the question as to why the digital version of such ecosystems warrant a new form of competition regulation?

To me the key question to ask is whether our orthodox or 'generic' competition laws of 2022 are sufficient to regulate imperfect competition, hence market power, derived from the unique economics of software, information and communications networks. To a degree, this is *déjà vu*. It is a 2020s version of the same regulatory issues we faced in the telecommunications sector in the 1990s. Equally, it is the same issue that we have faced many times before in determining whether to apply sectoral regulation to particular industries that exhibit structural characteristics that accentuate imperfect competition and confer abnormal levels of market power.

Deconstructing this further, the five key questions in my mind are:

(1) **A philosophical question** – at what point do we decide that generic competition law alone is insufficient?

(2) **An economic question** - are there unique market failures in digital ecosystems that confer abnormal levels of market power?

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14 See "Property Rules, Policies & Regulations | Walt Disney World Resort" accessible at https://www.disneyworld.eu/park-rules/

(3) **A legal question** - is generic competition law sufficient to address any such market failures to mitigate imperfect competition?

(4) **A factual question** – what international experience to date could guide Australian policymakers?

(5) **A policy question** - is sectoral regulation necessary for Australia and, if so, in what form?

Each of the five questions are considered in turn below.

3 A philosophical question - at what point do we decide that generic competition law is insufficient?

3.1 The role of competition law[15]

At the most basic philosophical level, modern competition law is a policy instrument premised on neoclassical microeconomic theory in which governments deliberately intervene in the economy to enhance market efficiency and address circumstances of imperfect competition.[16] Competition law is justified by policy-makers on the basis that if governments did not intervene, competition would be sub-optimal and therefore markets would not operate as efficiently as they otherwise should.[17]

Competition law assumes that the behaviour of market participants must be regulated so that they do not unfairly seek to increase their market power by engaging in anti-competitive conduct. Imperfect competition may enable a single firm to exercise significant individual market power to reduce competition. Firms can also co-ordinate their market behaviour (including by merging) to exacerbate imperfect competition and increase their collective market power.[18]

Competition law fits within the broader ideological construct of competition policy.[19] Competition policy promotes economic deregulation on a comprehensive basis, but such deregulation is underpinned by the existence of competition law as a legislative 'safety

15 Based on the book by the author M Taylor *International Competition Law: A New Dimension for the WTO?* (Cambridge University Press, London, 2005).

16 As is well known, modern competition law is specifically intended to regulate situations associated with the concentration of economic power held by one or more market participants in particular markets (ie 'market power'). Such market power would otherwise give such market participants an ability to influence the market price for their own profit-maximising benefit, to the detriment of market efficiency.

17 See FM Scherer 'Antitrust, Efficiency and Progress' (1987) 62 *New York University Law Review* 998. Market efficiency refers to the optimal and timely allocation of scarce resources, via the market mechanism, in a manner that maximises the 'total economic welfare' of society. Full market efficiency may be achieved when the combination of outputs with the highest attainable social value is produced from society's limited available resources, thereby maximising total economic welfare and eliminating social waste. There are three types of market efficiency recognised by modern neoclassical microeconomic theory: allocative, productive and dynamic efficiency.

18 By preventing anti-competitive behaviour, and the structural potential for it, competition law seeks to ensure that firms are continually subject to the disciplines of competition. Competitive forces in turn ensure that markets operate as efficiently as possible in allocating society's scarce resources between competing uses, thereby maximising social welfare. Social welfare gains also arise from productive and dynamic efficiencies flowing from the incentives imposed on market protagonists by competitive forces.

19 The concept of 'competition policy', at its broadest, encompasses any government policy that addresses the extent, nature and scope for competition in the economy. As with competition law, the *raison dˆetre* competition policy is to promote the efficient and fair operation of markets in order to maximise economic welfare. Competition policy thus plays an integral part of the broad set of government policies that aim to enhance market structures and improve the operation of markets so as to improve the level of social welfare. The ideological stance behind competition policy is that markets, when freed from unnecessary government intervention, achieve a reasonable degree of allocative efficiency in allocating scarce resources while creating the necessary incentives for increased productive and dynamic efficiency.

net'.[20] Competition law is viewed as the minimum necessary regulation of competition to mitigate market failures due to market power that is caused by imperfect competition. As the potential for anti-competitive behaviour exists in all markets, modern competition laws are given generic application across all markets to prevent such conduct.

3.2 When do we need sectoral regulation?

While competition policy is inherently deregulatory, it recognises the need for sectoral regulation in limited circumstances to supplement orthodox competition laws.[21] Historically, for example, Australian competition policy has endorsed sectoral regulation of certain essential utility and transport infrastructure.[22]

However, when do we need sectoral regulation? Resorting to microeconomic theory, the 'Theory of Second Best' provides insights into the dilemma faced by policy-makers in determining the optimal level of regulation in circumstances of imperfect competition:[23]

(1) The 'Theory of Second Best' reasons that government intervention could theoretically offset market imperfections and restore equilibrium conditions to their optimal result. However, markets are inter-related. Where market imperfections are subjected to intervention in any market, the equilibrium conditions will also change in other markets, cascading through the economy.

(2) The 'Theory of Second Best' suggests that the scope for suboptimal regulatory intervention is very considerable, given that any intervention in one market will necessarily affect the equilibrium conditions in a wide array of other markets. Governments operate in a world of imperfect competition, so regulatory imperfections are inevitable and modern regulatory strategy reflects this.

In this context, the potential welfare costs of sub-optimal regulation are clear:

(1) Over-regulation may occur where regulators over-compensate for market failures leading, for example, to adverse spillover effects into other markets, and/or impose disproportionate administrative costs. Over-regulation is also known as a 'Type I error' or a 'false positive', such as a fire alarm going off where there is no fire.

(2) Under-regulation may occur where regulators under-compensate for market failures, creating an opportunity cost. Under-regulation is also known as a 'Type II error' or a 'false negative', such as a fire alarm not going off when there is a fire.

So when facing a question whether to regulate, what approach should we adopt?

(1) The critical starting point for sound regulatory intervention is to establish a clear case for action based on evidence of harm. If generic competition law is proving to be (or is at risk of being) ineffective, then under-regulation may be occurring and

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20 Competition policy is *inherently deregulatory* in character. Competition policy promotes the removal of excessive government regulation from all sectors of the economy so as to promote free markets and greater competition. Notionally, in doing so, competition policy seeks to substitute heavy-handed government regulation for a light-handed minimalist approach and to shift the economy towards regulatory systems organised to a large extent around competition.

21 See, for example, D Newbury, *Privatisation and Liberalisation of Network Utilities* (OUP, Oxford, 1997). See also S Gorinson, 'Essential Facilities and Regulation' (1989) 58 *Antitrust Law Journal* 871.

22 The Hilmer Report into a National Australian Competition Framework, August 1993. The report notes: "*There are some industries where there is a strong public interest in ensuring that effective competition can take place, without the need to establish any anti-competitive intent on the part of the owner for the purposes of the general conduct rules. The telecommunications sector provides a clear example, as do electricity, rail and other key infrastructure industries. Where such a clear public interest exists, but not otherwise, the Committee supports the establishment of a legislated right of access, coupled with other provisions to ensure that efficient competitive activity can occur with minimal uncertainty and delay arising from concern over access issues".*

23 See R G Lipsey and K Lancaster, 'The General Theory of Second Best' (1956) 24(1) *Review of Economic Studies* 11-24.

sectoral regulation could be required. However, we would normally require empirical evidence of abnormal market circumstances that were exacerbating market power and weakening the effectiveness of competition laws in constraining such market power.

(2) Modern regulatory theory generally concludes that the most beneficial strategy for policy-makers is to offset market imperfections as directly as possible. Better targeted regulatory interventions have less risk of creating adverse spillover effects that will cascade through the economy.[24] Competition law, for example, is directly targeted at imperfect competition, hence reduces error and mitigates administrative costs in regulating market power.[25]

(3) Given the near impossibility of accurately identifying the optimal regulatory intervention in a complex 'second best' world, modern regulatory theory adopts a strategy based on abstract economic modelling and presumption. Simplistically, this involves the 'cost-benefit' ranking of different regulatory solutions based on their potential for realising Kaldor-Hicks efficiency improvements (i.e., net efficiency gains).[26]

(4) The risks of over-regulation (Type I errors) can be higher in dynamic innovation markets given errors may compound more quickly over time. This risk creates a conservative bias against regulation:

(a) The traditional view litigated in the historic *US v Microsoft* case was that innovation markets remain subject to the forces of Schumpeterian 'creative destruction', which itself exerts a competitive discipline.

(b) In a similar vein, the ACCC's Merger Guidelines state: "*markets that are characterised by rapid product innovation may be unstable so that any increased market power gained through a merger is transitory*".[27]

In summary, to determine when sectoral regulation is required we would need to determine:

(1) whether the particular market has market conditions that are persistently exacerbating market power and weakening the effectiveness of competition laws in constraining such market power; and

(2) if so, which regulatory instrument could best address these market conditions in a way that is both direct and net beneficial to market efficiency.[28]

3.3 Drawing from the international experience

Historically, there have been many different schools of thought on the extent and nature of so-called 'market failures' that may require greater sectoral regulation.[29]

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24 See, for example, discussion in J Bhagwati, 'The Generalised Theory of Domestic Distortions and Welfare' in J Bhagwati *et al, Trade, Balance of Payments and Growth* (OUP, New York, 1971). See, for example, H Demsetz, 'Information and Efficiency: Another Viewpoint' (1969) 12 *Journal of Law and Economics* 1. See also H Demsetz, 'Why Regulate Utilities?' (1968) 11 *Journal of Law and Economics* 11. See also H Demsetz, 'Two Systems of Belief About Monopoly' in H Demsetz, *The Organization of Economic Activity* (Blackwell, Oxford, 1988), Chap 3.

25 See M Landrigan and T Warren, 'Administrative Costs and Error Costs in Market Conduct Regulation: Two Case Studies' (2000) 7 *Competition & Consumer Law Review* 224.

26 Kaldor-Hicks efficiency refers to a state of the world in which no new allocation of resources could be made whereby those made better off could (hypothetically) fully compensate those made worse off, and still be better-off. See N Kaldor, 'Welfare Propositions of Economics and Interpersonal Comparisons of Utility' (1939) 6 *Economic Journal* 64. See also J R Hicks, 'The Valuation of Social Income' (1940) 7 *Economica* 134.

27 See paragraph 7.53, ACCC Merger Guidelines, November 2017.

28 By 'market efficiency', we mean both static efficiency (allocative and productive) and dynamic efficiency.

Back in the 1960s and 1970s there was a clear demarcation of views between different schools of thought. The so-called 'Harvard School', for example, viewed market failures as pervasive and proposed significant government intervention. The so-called 'Chicago School' viewed markets as operating effectively irrespective of imperfect competition, hence proposed minimal intervention.[30] However, during the 1980s and 1990s, the distinctions between these schools of thought greatly diminished as economic thinking matured.[31]

The modern regulatory approach attempts to balance these views and recognises that all markets are imperfectly competitive. As such, all markets 'fail' to maximise allocative, productive and dynamic efficiency. However, sectoral regulation is only necessary in a limited range of circumstances. Those limited circumstances are identified, for example, by international experience, economic modelling and empirical analysis.

The particular challenge we face with digital ecosystems in the 2020s is that there is not yet a significant body of international experience. Digital platforms are currently at the frontier of antitrust regulation. 'International best practice' is still evolving in real time.

As a consequence, we are very much in an era of experimentalist 'Goldilocks' regulation as various jurisdictions strive for an optimal result. Some jurisdictions could end up over-regulating. Other jurisdictions could end up under-regulating.

The challenge for Australia is to learn from the evolving international experiences and find that elusive 'just right'.

4 An economic question - are there any unique market failures in digital ecosystems that confer abnormal levels of market power?

4.1 Identifying the market failures[32]

The question next arises as to whether digital ecosystems do give rise to market conditions that are persistently exacerbating market power and weakening the effectiveness of competition laws in constraining such market power. We collectively refer to these conditions as 'unique market failures'.

Given the limited international experience in regulating digital ecosystems to date, the historical experiences with the telecommunications sector provide a useful analogy. International best practice clearly recognises the existence of unique market failures in telecommunications. International best practice is now enshrined in international economic law through the World Trade Organisation [33] However, any analogy must be used carefully

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29 Given the disproportionate influence of distributional issues on government policy, government regulation in most nations is not usually driven purely by efficiency considerations, but usually also reflects social choice theory and considerations of social justice. Accordingly, while government regulation may be principally concerned to maximise economic efficiency, such regulation is also concerned to ensure that modern commerce is 'fair' and does not result in a disproportionate aggregation of social welfare by a select few. Government regulation around the world therefore seeks an appropriate blend of efficiency and fairness. This appropriate blend is necessarily different for each nation and different governments give different weight to considerations of efficiency and fairness when formulating their respective regulations depending on their political preferences.

30 In a political context, such issues of the appropriate degree of government intervention are often fused with issues of social redistribution, but this is beyond the scope of this paper.

31 See R Posner "The Chicago School of Antitrust Analysis" (1979) 127:4 University of Pennsylvania Law Review 925.

32 Based on the paper by the author M Taylor "Looking to the Future: Towards the Exclusive Application of Competition Law" (2004) 5 *Business Law International* 172 which won a prize from the International Bar Association and was presented at a conference in Budapest, Hungary in 2003.

33 These are documented, for example, in documented in the Regulatory Reference Paper for Basic Telecommunications Services in the General Agreement on Trade in Services (GATS) as part of the World Trade Organisation (WTO), to which Australia is a signatory.

given the many nuanced distinctions between telecommunications networks and digital ecosystems.

Historically, the unique market failure most pervasive in the telecommunications industry has been the control by a vertically-integrated incumbent that already has market power of so-called 'bottleneck' or 'essential facilities'.[34] Such essential facilities comprise non-replicable resources, facilities or services to which access is essential if a competitor wishes to enter a telecommunications market and compete.[35]

Bottleneck's resulted in unique market failure in telecommunications markets and was exacerbated by other market conditions that have tended to entrench market power, ensure its longevity and weaken the effectiveness of competition laws in constraining such market power. These market conditions have included, for example, network effects and high switching costs. Collectively, these market features have delivered significant and sustainable market power to the incumbent due to reduced market contestability and increased barriers to market entry.[36]

Historically, such issues were most acute at the time of market liberalisation in which a legacy incumbent monopoly (or near monopoly) was exposed to competition.[37] In Australia, significant telecommunications regulation was introduced in 1991 and then enhanced in 1997 and 1999.[38] While the telecommunications access regimes were originally intended to be a temporary step in fostering competition, the regimes remain in existence today consistent with Australia's international law commitments and international best practice.

Importantly, the relevant 'essential facilities' in telecommunications are not limited to physical network infrastructure. The issues in telecommunications are manifested in many different dimensions, but with a common theme. Australia therefore imposes access regulation on other scarce and non-replicable 'bottleneck' resources in telecommunications, not just physical network infrastructure, including telephone numbers and radiofrequency spectrum. Software and information are relevantly included in the list.

Indeed, access regulation for software and information is not necessarily a novel issue for in Australia:

(1) Telecommunications network interconnection in Australia inherently involves the interfacing of software as well as access to critical databases and information. Australia's *Telecommunications Act 1997 (Cth)* extends sectoral access regulation

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34 See OECD, 'The Essential Facilities Concept', Series Roundtables on Competition Policy No 19, OCDE/GD(96)131, OECD, Paris, 7 October 1996.

35 The principal concern of competition regulation in the telecommunications sector is with the ability of incumbent firms that control such essential facilities to exploit that control so as to impede or delay market entry by competitors. Customer access network infrastructure is the most commonly recognised essential facility in the telecommunications industry. Access to such infrastructure is critical for market entry given the need for a market entrant to achieve any-to-any connectivity for its customers, thereby necessarily requiring network interconnection. It is not economically possible for any market entrant to provide full telecommunications capability without interconnecting to the incumbent carrier's customer access network. v Accordingly, the incumbent has significant market power arising from its control over such telecommunications infrastructure

36 In the words of Warren Buffet, there is an 'economic moat' that protects the firm from competition, drawing an analogy to a castle protecting itself from hostile forces.

37 In most telecommunications markets, the incumbent has usually evolved by way of corporatisation and subsequent privatisation of a government department that historically held a state-sanctioned monopoly in certain telecommunications markets. As part of that corporatisation process, the incumbent will typically have been given ownership of critical resources, such as 'last mile' customer access infrastructure. It may therefore own a large proportion of essential resources and can exercise its ownership rights to control access to these resources by its competitors.

38 I'm currently advising on Vodafone's market entry into Ethiopia which is one of the last countries in the world to liberalise its telecommunications markets, some 30 years after Australia. The author previously advised on Ooredoo's market entry into Myanmar during the period 2015-2019 in a similar telecommunications market liberalisation.

to IT systems and databases, as well as various types of critical information.[39] We have therefore been applying access regulation to software interfaces, information and databases for some 25 years. The current alarm being expressed from some quarters at applying access regulation beyond physical infrastructure is therefore somewhat surprising…

(2) The very first Australian Competition Tribunal case under the Part IIIA national access regime in 1997, now some 25 years ago, involved a request for access to a computer network. The Tribunal commented in 1997:

"*In the Tribunal's opinion there is a real doubt whether the applicant's alleged service is a `service' within the meaning of the Act. Whether such a computer network can constitute a `facility' for the purposes of Part IIIA is also open to question. However, the Tribunal does not find it necessary to decide these questions…*".[40]

4.2 Comparison to telecommunications

Can we legitimately say that digital ecosystems exhibit the same type of unique market failures (if any) as telecommunication networks. On the cursory analysis undertaken for this paper, there are certainly enough similarities to merit more detailed consideration (as is currently being undertaken by the ACCC).

Some of the similarities between the economic features of telecommunications networks and digital platforms are as follows:

(1) *Vertical integration with a 'bottleneck' resource*

Vertical integration is not always bad for competition. It can create efficiencies, for example, through the removal of double marginalisation.[41]

However, vertical integration may impede competition when an entity with control over 'upstream' or 'wholesale' essential resources is competing in 'downstream' or 'retail' dependent markets with competitors that require access to those essential resources in order to compete. In such circumstances, the vertically integrated entity may have an ability and incentive to impede access to the upstream resource (including by overcharging) and/or discriminate in its own favour, thereby impeding competition in downstream markets.

Many digital ecosystems exhibit a high degree of vertical integration. Much debate is continuing whether the underlying software platform may be regarded as a true 'bottleneck', yet it certainly seems that way on a cursory analysis to the extent that access to the digital ecosystem can be denied by a gatekeeper incumbent.

(2) *Network effects*

Direct network effects arise where the addition of an incremental user enhances utility for prior users.[42] The value of a network increases for all subscribers, the more people or businesses that are connected to it. Virtual or indirect network effects arise when a greater number of users of a good or service incentivises innovation to develop complementary products, which in turn increases the utility of

39 Schedules 1 and 2 to the *Telecommunications Act 1997 (Cth)*.

40 See *Re Australian Union of Students* (1997) 140 FLR 167; [1997] ACompT 1.

41 See Dr Mike Walker, Vertical Restraints, course notes for Postgraduate Diploma in Economics for Competition Law 2019/2020, Kings College, London, page 8-10.

42 See discussion in Productivity Commission, *Telecommunications Competition Regulation* (Australian Government, Canberra, 2001), para 2.12. See also M L Katz and C Shapiro, 'Systems Competition and Network Effects' (1994) 8 *Journal of Economic Perspectives* 93.

the good/service in question.[43] In this manner, the owner of the largest network can offer its subscribers the greatest benefits in the form of any-to-any connectivity. Accordingly, the largest network has an inherent competitive advantage.

There is little doubt that many digital ecosystems exhibit network effects. Part of the success of some digital ecosystems arises due to those network effects There is continuing debate over the strength and longevity of such network effects. It is also true that interoperability between digital ecosystems can alleviate barriers to entry by enabling network effects to be shared. Such interoperability does exist, but again there is debate about the appropriate extent and practical effect.

(3) ***High switching costs***

High customer switching costs can accentuate customer inertia and increase market entry costs. The existence of such switching costs means the market is less contestable and market power is more durable. In the telecommunications sector, switching costs include the inconvenience and cost of changing telephone numbers. Number portability was therefore introduced.

In digital ecosystems, personal content storage, personal information storage and personal email addresses are all examples of services that can increase switching costs. However, the evolving 'consumer data right' regime in Australia is progressively addressing some of these issues in an information access context.

(4) ***High fixed costs***

Telecommunications networks famously involve high up-front fixed costs which are effectively 'sunk'. Initial CAPEX is recovered by usage charges over the network life. The variable/marginal costs of supplying telecommunications services are very low. The competition implications of this cost structure are well known and have been the subject of extensive historic litigation in many countries.

Software has similar characteristics. In the *US v Microsoft* litigation, one of the findings of fact was: "*The fixed costs of producing software, including applications, [are] very high. By contrast, marginal [supply] costs are very low. Moreover, the costs of developing software are "sunk".*[44]

(5) ***Increasing returns to scale***

One consequence of such a cost structure is a tendency towards natural monopoly. The concept of a 'natural monopoly' is well known, namely that costs continue to reduce, as scale increases, for supply to the entire market. As such, the industry cost structure favours the largest firm and ultimately a single so-called 'natural monopoly'.[45]

Digital content and software similarly exhibit increasing returns to scale given the high fixed costs of creation and the low variable costs of supply. It is a question open for debate as to whether the cost characteristics of software mean that it can be similarly characterised as a 'natural monopoly' or similar. In Australia, such

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43 See Dr Adrian Majumdar, Boundaries of Competition Law and Economics: Network Effects and Intellectual Property Rights, course notes for Postgraduate Diploma in Economics for Competition Law 2019/2020, Kings College, London.

44 See US v Microsoft: Court's Findings of Fact, accessible at : https://www.justice.gov/atr/us-v-microsoft-courts-findings-fact

45 A. natural monopoly exists where one firm can fulfil the entire demand within a market at a lower cost than two or more firms. In such circumstances, economies of scope and scale in production will enable a firm to continue to reduce its costs, as its output increases, and thus undercut the pricing of competitors. Telephony networks have inherent natural monopoly characteristics as they usually exhibit declining costs up to the point where universal coverage is achieved. The existence of a natural monopoly means that it is not usually rational for a market entrant to duplicate the relevant infrastructure as it will be competing from a higher cost base.

debate could be particularly intense as the concept of a 'natural monopoly' has become controversial given it has been a gateway for access regulation and extensively litigated. One question, for example, could be whether the cost of replicating the software platforms are prohibitive (which, in turn, may be influenced by other market conditions such as intellectual property rights, network effects and tipping – meaning the analysis is inherently nuanced and multidimensional).

Some of the differences between the economic features of telecommunications networks and digital platforms are as follows:

(1) ***Market tipping***

Markets that are subject to strong positive network effects, high switching costs and restrictions on interoperability tend to be susceptible to 'winner-takes-all' market tipping.[46] Under network effects, the larger the network the greater the benefit of joining that network relative to other networks, hence the market structure 'tips' towards a near-monopoly.

While it is true that telecommunications networks would exhibit tipping in the absence of network interconnection, the regulatory regime for telecommunications has mitigated such effects by causing network effects to be shared.

In the context of digital ecosystems, the existence of interoperability may similarly mitigate against tipping. Some digital ecosystems exhibit interoperability, while others do not and, again, there are many shades of grey. Some digital ecosystems have incentives to facilitate the interoperability of some features, while others do not. It is also true that digital ecosystems exist in dynamic innovation markets, so longevity of network effects in the face of continued innovation will be a critical consideration.

(2) ***Multi-sided markets***

Digital platforms frequently have a 'broking' position where they are supplying services to sellers at the same time as supplying services to buyers. In such circumstances, the more price sensitive market can be cross-subsidised by the less price sensitive market. At the extreme, buyers may be supplied a service at no charge (e.g. Google search) with all costs recovered from other sources (e.g. sale of advertising).

However, multi-sided markets are not unique to digital systems. Business models involving cross-subsidisation have existed throughout modern commerce. The very first newspapers were created in the 1600s and even at that time they were subsidised by advertising, hence involved multi-sided markets. Similarly, 'free to air' television services involve content that is delivered free to subscribers under a cross-subsidy from advertisers. The mere existence of multi-sided markets is not necessarily a source of durable market power in its own right, but it could exacerbate market power in certain circumstances.

The cursory analysis set out above suggests that digital ecosystems do have enough similarities with telecommunications networks to merit further consideration whether unique market failures may arise. However, the issues that arise are multi-dimensional and highly complex.

46 See Dr Adrian Majumdar, page 13.

5 A legal question - is generic competition law sufficient to address any such market failures to mitigate imperfect competition?

5.1 The New Zealand experience in telecommunications[47]

A further question arising from the analysis set out above is whether digital ecosystems do give rise to market conditions that are weakening the effectiveness of competition laws in constraining such market power. Again, some insights into this issue can be drawn from the historic experience with the telecommunications sector.

During the 1990s, New Zealand decided to rely on generic competition law alone to regulate its telecommunications sector. This experiment lasted around a decade until the New Zealand government ultimately followed international best practice and adopted sectoral telecommunications regulation. Given New Zealand's generic competition laws are harmonised to a degree with Australia, this case study provides some insights into the likely issues that could arise in Australia.

It seems to me that, on one view, the world in the 2010s has been unwittingly conducting an experiment into the regulation of digital platforms based on generic competition law alone. The nature of that experiment is illustrated by the long list of *ex post* enforcement action set out in **Annexure A** to this paper. Some of the issues with *ex post* enforcement that raised concerns in New Zealand in the 1990s are again being mentioned today.

New Zealand was one of the first countries in the world to privatise telecommunications services and undertake comprehensive deregulation of its telecommunications sector.[48] Over the period from 1987 to 1990, New Zealand's telecommunications sector was subjected to comprehensive reform at a pace unprecedented in other nations. Indeed, the New Zealand Government prided itself as remaining at the forefront of global telecommunications liberalisation.[49]

In implementing industry deregulation, the New Zealand Government adopted what must be now regarded as a one of the most extreme approaches to the deregulation of telecommunications markets of any nation to date. This occurred partly because, at the time, there were few overseas precedents, and even less evidence, establishing best practice for telecommunications regulation. Accordingly, New Zealand decided to maximise the extent of deregulation while minimising any industry-specific telecommunications regulation.

The New Zealand Government adopted what became colloquially known as a 'light-handed regulatory approach', but is now more aptly described as 'hands off'. This approach relied almost wholly on the *ex post* application of generic competition law to regulate the market power of the incumbent telecommunications supplier, Telecom Corporation of New Zealand Limited (**TCNZ**).

In particular, the New Zealand approach relied on two key legislative instruments to address any market failures in the New Zealand telecommunications market:

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47 Based on a paper written by the author in 1998 and published at M D Taylor and M Webb, 'Light-handed Regulation of Telecommunications in New Zealand: Is Generic Competition Law Sufficient?' (1999) 2 *International Journal of Communications Law & Policy* 42. This paper has been cited in many subsequent global analysis of telecommunications policy, including by the OECD.

48 New Zealand commissioned a study as a precursor to corporatisation of its relevant Government department, the New Zealand Post Office, in 1985. On 1 April 1987, the Telecom Corporation of New Zealand Limited (TCNZ) was privatised via the corporatisation process. TCNZ was 100 per cent privatised on 12 September 1990 by way of private tender for a price of NZ$4.25 billion.

49 New Zealand's propensity to have accelerated reforms at the time was partly a function of its unicameral legislature, meaning legislation to give effect to government policy could more easily be enacted in New Zealand than in other countries with a bicameral legislature and multi-tier federal framework such as Australia. See Rt Hon Sir G Palmer, *Unbridled Power* (OUP, Wellington, 1993).

(1) ***Misuse of market power provision:*** New Zealand's misuse of market power provision was viewed as constraining potential abuses of power by TCNZ. This provision was contained within section 36 of New Zealand's generic competition legislation, the *Commerce Act 1986* (the **Commerce Act**), being the equivalent of Australia's historic section 46.[50]

(2) ***Information disclosure regulations:*** The Telecommunications (Disclosure) Regulations 1990 applied solely to the market incumbent, TCNZ, and were intended to increase the transparency of its accounting and contracting operations so as to facilitate commercial negotiations and assist competition law enforcement in detecting anticompetitive conduct, such as margin squeeze or price discrimination.[51]

The New Zealand Government also relied on a special 'golden' share which the New Zealand Government held in the fully privatised TCNZ. This golden share gave the New Zealand Government certain enforceable rights, as a shareholder, which were set out in the corporate constitution of TCNZ.[52] The golden share imposed various social policy obligations on TCNZ relating to the pricing of basic line rental and local call services provided to residential customers. [53]

Finally, the New Zealand Government publicly stated that if it considered that such light-handed regulation was proving unsuccessful, the Government would enact more heavy-handed regulation or would use its existing price control powers to impose controls on TCNZ's interconnection pricing. This threat of regulation was itself perceived as an integral part of the 'light-handed regulatory approach'.[54]

5.2 Problems with reliance on generic competition law alone

The problems with the New Zealand light-handed regulatory approach are now well documented. These difficulties were most obvious in the context of network interconnection. The New Zealand Government encouraged market entrants to enter into commercial negotiations with TCNZ, as incumbent, to establish interconnection agreements. The New Zealand Government also insisted that any refusal by TCNZ to provide interconnection on reasonable terms and conditions should be addressed by litigation under New Zealand's competition laws.

Not surprisingly, extensive litigation resulted over a diverse range of interconnection issues. Litigation, for example, occurred over:

(1) TCNZ's terms for interconnection for competing local network services; [55]

(2) TCNZ's conduct over a requirement that customers of competitors' toll services must dial an access override code; [56]

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50 Section 36 at that time prohibited any person with a dominant position in any New Zealand market from using that dominant position for a proscribed anti-competitive purpose.

51 Interconnection agreements entered into by TCNZ were required to be published under the terms of the Disclosure Regulations. See reg 4(1) (d) of the Telecommunications (Disclosure) Regulations 1990.

52 The Kiwi Share was adopted by the New Zealand Government as an alternative to structural separation of TCNZ prior to privatisation (ie separation of the natural monopoly PSTN assets from the contestable elements of TCNZ's business).

53 TCNZ also made unilateral undertakings in writing to the New Zealand Government that it would provide interconnection on fair and reasonable terms. However, following litigation, such undertakings were subsequently determined to be unenforceable.

54 This threat was viewed as constitutionally credible because of the New Zealand Government's ability to readily enact legislation; yet it lacked political credibility given that such legislation would have resulted in a policy reversal by the Government and a *de facto* concession that the light-handed regulatory approach had failed.

55 *CLEAR Communications Limited v Telecom Corporation of NZ Limited* (1992) 5 TCLR 166 (HC); 413, (CA); (1994) 6 TCLR 138 (PC).

(3) TCNZ's terms for the provision of additional points of interconnection; [57]

(4) TCNZ's terms for interconnection with respect to toll-free services provided by the market entrant to its customers; [58] and

(5) TCNZ's conduct with respect to modification of managed or leased private automatic branch exchange (PABX) equipment to receive calls from market entrants' services. [59]

Of these proceedings, the local service case and the non-code access case were successful and resulted in judgments against TCNZ under section 36 of the Commerce Act. However, successful litigation under New Zealand's competition law was not a panacea for access issues. Rather, such litigation created significant problems for market entrants.

In particular, the problems created by competition litigation as part of New Zealand's light-handed regulatory approach were as follows: [60]

(1) ***The regulator was under-resourced***

New Zealand had no industry-specific regulator; rather it relied on its generic competition regulator (the New Zealand Commerce Commission) to enforce New Zealand's generic competition laws. Interestingly, the Commerce Commission remained highly critical of the light-handed approach and initiated its own inquiry which concluded that sectoral regulation was necessary to address TCNZ's market power. However, the Government dismissed the report as 'superficial', while TCNZ brought successful legal proceedings against the Commerce Commission challenging its authority to conduct the inquiry. [61]

The practical ability of the Commerce Commission to undertake enforcement action was also restricted by its budgetary constraints. The Commerce Commission only selected those enforcement matters on which it knew it had high prospects of success. All remaining enforcement actions were left to the market entrant to enforce by using its right of private action.

(2) ***Litigation itself became a barrier to entry***

There is every incentive for an incumbent to use litigation strategically as a means of delaying market entry by competitors while substantially increasing the cost of such entry. Indeed, such behaviour is entirely rational under a game theoretic approach as the incumbent will continue to earn supernormal profits during the period of such delay and can use those profits to finance the litigation..

The incumbent also has incentives to continually expand the issues in dispute, and to divert sizeable resources to developing nuanced legal arguments in relation to such issues, forcing the market entrant to do likewise. Even when judicial

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56 *CLEAR Communications Limited v Telecom Corporation of NZ Limited and others,* Interim Award of Arbitrator, 26 May 1994.

57 *CLEAR Communications Limited v Telecom Corporation of NZ Limited,* CP 25/94, High Court, Wellington Registry (proceedings suspended by agreement).

58 *CLEAR Communications Limited v Telecom Corporation of NZ Limited* (1992), CP 373/92, High Court, Wellington Registry (proceedings suspended by agreement).

59 Proceedings withdrawn by agreement.

60 See Taylor and Webb. See also T Gilbertson, 'Beginning of the End of "Light Handed" Telecommunications Regulation in New Zealand' (2001) 7 *Computer and Telecommunications Law Review* 1-7. See also R Patterson, 'Light-Handed Regulation in New Zealand: Ten Years On' (1998) 6 *Competition & Consumer Law Journal* 134. See also B Fisse and K Harrison, 'International Trends in Telecommunications Regulation: Moving Away from the New Zealand Model', Paper commissioned by Optus Communications Limited, 1 January 1997.

61 *Commerce Commission v Telecom Corporation of New Zealand Limited* [1994] 2 NZLR 421 (CA).

outcomes are obtained, the incumbent has every incentive to appeal those outcomes which are decided against it. [62]

Competition litigation through the courts in New Zealand was (and still is) lengthy and extremely costly, as in the courts of most jurisdictions around the world. [63] In Australia, the Channel Seven competition litigation is famously one of the most expensive instances of commercial litigation in Australian history.

In New Zealand's *Telecom v CLEAR* interconnection litigation, for example, millions of dollars were spent litigating competition issues over a period of three years from August 1991 until October 1994 with hearings at each of the three tiers of New Zealand's judicial system. Litigation over TCNZ's ownership of the AMPS-A cellular frequencies (i.e., 1G mobile spectrum) lasted around 18 months from November 1990 until June 1992.[64]

(3) ***Competition law decisions are fact intensive***

The incumbent was well aware that even if the market entrant is successful in litigation, this does not necessarily cure its problems as judicial decisions are necessarily isolated to the factual matrix as pleaded at the time the litigation commenced.

The highly fact-intensive nature of competition cases means that even if the market entrant succeeds in proving that particular conduct is anticompetitive, this does not necessarily mean that it will then be conferred access on reasonable terms and conditions. [65] The incumbent may follow a judgment to the extent required, and then deny access on a different basis and 'argue the turn' based on different facts. Furthermore, by the time the litigation is resolved, the dynamic nature of the telecommunications industry may mean that circumstances have changed and a significant first-mover advantage had been gained by the incumbent.

(4) ***There remained a continual risk of iterative litigation***

Interconnection negotiations necessarily involve negotiation on a multitude of different issues ranging, for example, from service definition, to the pricing of different terminating and originating services, to the number and location of points of interconnection. As a result, the incumbent has considerable scope to change the direction and dimensions of each access dispute.

Indeed, the incentives for the incumbent to restrict access are so great that access disputes are likely to continue to recur across a broad range of issues at multiple dimensions and in relation to multiple products and services. As innovations occur and amendments are required to previously negotiated agreements, so such amendments will provide a basis for yet further disputes. [66]

(5) ***Judicial decisions did not deliver optimal policy outcomes***

Several New Zealand cases were decided in a rather unfortunate manner from the perspective of the access seeker. The most famous of these was the *Telecom v*

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62 At one stage, for example, at least seven competition disputes existed in the telecommunications industry in New Zealand, at various stages of proceedings.

63 Such length and expense is exacerbated by the complexity of many telecommunications issues.

64 *Telecom Corporation of New Zealand Limited v Commerce Commission* [1992] 3 NZLR 429 (CA); [1994] 2 NZLR 421 (CA); *Broadcast Communications Ltd v Commerce Commission* (1991) 2 NZBLC 102,391 (HC).

65 Only in rare instances was a court willing to supervise commercial negotiations on an ongoing basis.

66 Telecommunications disputes in New Zealand, for example, have historically covered such issues as access, numbering plans, technological standards, system architecture, new services and availability of information.

CLEAR case on the appropriate interconnect pricing methodology.[67] New Zealand's highest court, the Privy Council, did not make a decision that we would regard today, in hindsight, as optimal from a public policy perspective. Rather, the court adopted what we would now regard as a legalistic 'black letter' interpretation of the relevant statute and used this as a basis for justifying its ultimate decision.[68]

The *Telecom v CLEAR* experience in New Zealand illustrates the danger in leaving courts to make important regulatory decisions on the basis of a competition statute alone. Courts strive to interpret the parliamentary intent, but they do not make policy decisions based on a cost-benefit analysis to determine the optimal policy solution. Such policy decisions should ideally be made by government officials on a fully informed basis after careful research by experienced policy analysts and on the basis of a proper cost-benefit assessment of different regulatory options.

Ultimately, the New Zealand telecommunications experience demonstrates some of the potential pitfalls with relying solely on *ex post* competition enforcement, hence generic competition law alone.

6 A factual question - what international experience to date could guide Australian policymakers?

6.1 International best practice is still evolving

International best practice in the regulation of digital platforms is still evolving in real time. Different countries are proposing different approaches. It remains too early to determine the extent to which such approaches amount to 'over-regulation' (or even 'under-regulation'). We are very much at the frontier of modern antitrust regulation.

The different approaches of different countries also reflect domestic political influences and agendas. The politicisation of regulation is a further challenge for implementing an appropriate regulatory solution, even if it were identified. The United States currently appears to be facing significant domestic political challenges in this regard.[69]

These different regulatory approaches have been informed by the different experiences around the world of different regulators in the application of generic competition law to digital platforms, as set out in the tables in **Annexure A** to this paper (which identifies a sample of some of the many recent cases brought against some of the internet giants, by some of the major competition law regulators, but is by no means exhaustive).

The material set out in **Annexure A** is illustrated graphically below:

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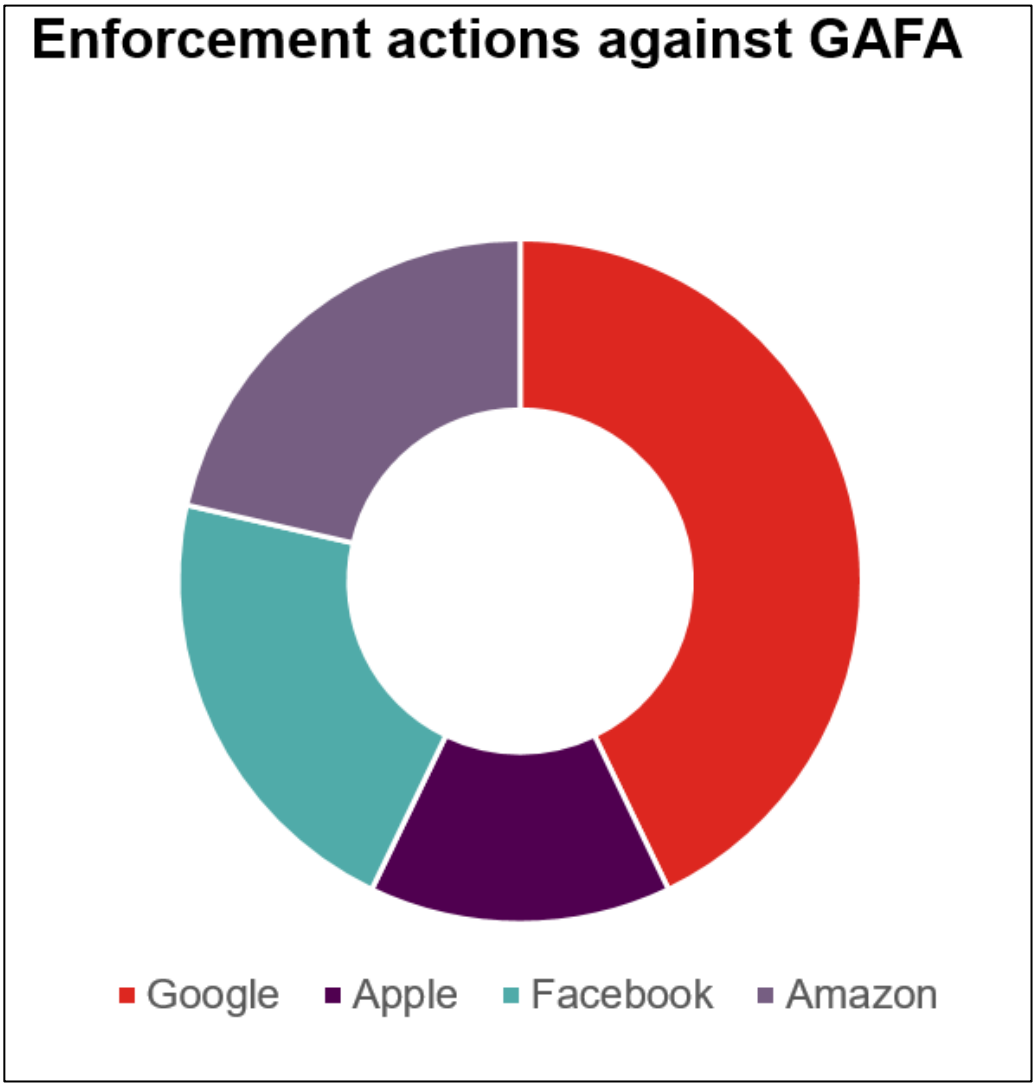
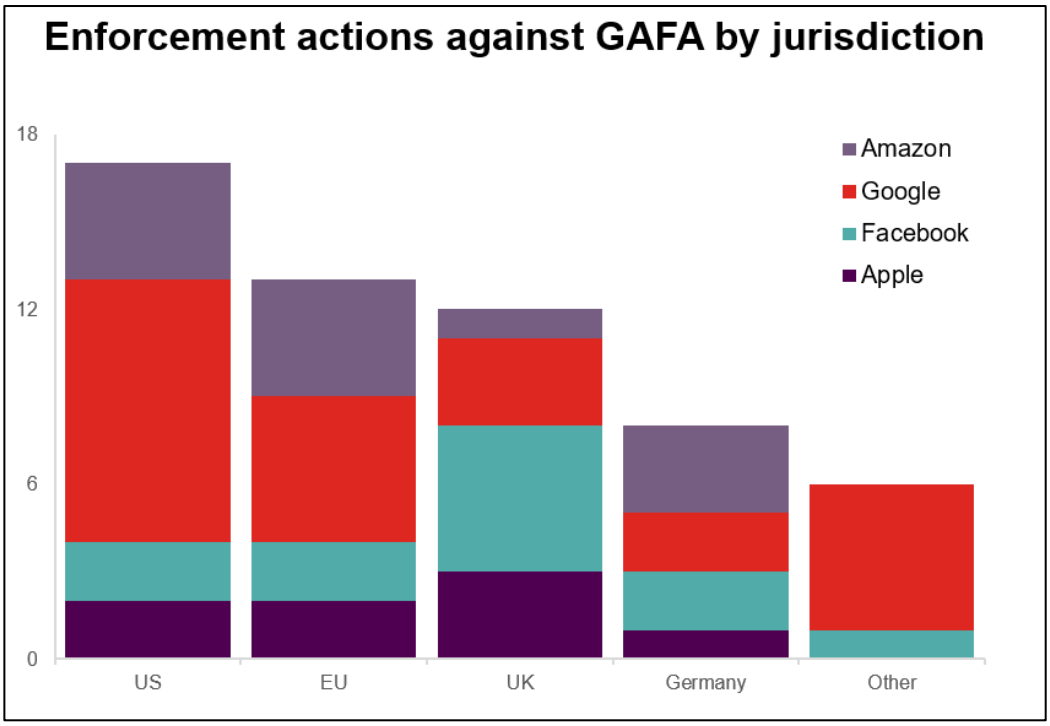
67 See W Baumol andJ Sidak, *Toward Competition in Local Telephony* (MIT Press, Washington, DC, 1994). See also W Baumol andJ Sidak, 'The Pricing of Inputs Sold to Competitors' (1994) 11 *Yale Journal on Regulation* 171-202. See also N Economides and L White, 'Access and Interconnection Pricing: How Efficient Is the "Efficient Component Pricing Rule"?' (1995) 40(3) *The Antitrust Bulletin* 557-579. See also N Economides and L White, 'The Inefficiency of the ECPRYet Again: A Reply to Larson' (1988) 43(2) *The Antitrust Bulletin* 429-444.

68 The Privy Council concluded that the 'Baumol-Willig' Efficient Component Pricing Rule (ECPR) was an appropriate pricing methodology for the incumbent. Essentially, the ECPR methodology states that a firm seeking access should pay the incumbent a sum sufficient to compensate it for the opportunity cost of customers lost by the incumbent to the entrant, including the incumbent's forgone profits, if any. As a consequence of that decision, the New Zealand Government was required to issue statements expressly discrediting the ECPR methodology. However, in the absence of legislative intervention by the Government such statements had no legal effect and therefore the Privy Council decision remained the law in New Zealand, severely restricting any leverage provided by New Zealand competition law on interconnect pricing.

69 See "The Clock is running out for Congress to pass Big Tech antitrust bills this year" accessible at https://www.marketwatch.com/story/the-clock-is-running-out-for-congress-to-pass-big-tech-antitrust-bills-this-year-11652389182


Enforcement actions against GAFA
Google
Apple
Facebook
Amazon


Enforcement actions against GAFA by jurisdiction
18
12
6
0
US
EU
UK
Germany
Other
Amazon
Google
Facebook
Apple

To assist in identifying the current status of regulatory proposals around the world, this paper sets out below a brief summary of developments in the United States, European Union, United Kingdom and Greece. The different approaches in those countries currently fall along a continuum from lighter to heavier regulation, so illustrate some of the different approaches currently being adopted. However, the respective regimes are continuing to evolve and the ultimate level of sectoral regulation may well change.

6.2 United States

The approach in the United States to the regulation of digital platforms is continuing to evolve in real time. Various legislation is before the United States Congress, but it remains unclear what (if anything) may ultimately be enacted into law. While both the Republicans and the Democrats appear to have a common view that sectoral regulation is required, the current political climate in the United States is not conducive to bipartisan law-making.

In October 2020, the U.S. House Judiciary Subcommittee on Antitrust issued a lengthy report on the state of competition in digital markets.[70] The investigation behind the report involved both Democrats and Republicans, but the report was issued by the House Majority (i.e., the Democrats).[71]

The report considered the state of competition in digital markets and whether firms were acting anti-competitively as well as whether existing laws were sufficient to address these issues. The report concludes that dominant platforms possess monopoly power due to a number of intricacies unique to digital markets, including the fact that dominant platforms act as 'gatekeepers' for key distribution channels which allow them to control access to digital markets.

The report also expressed concern that the large digital platforms may have been engaging in anticompetitive practices under existing antitrust laws. The practices of concern included self-preferencing as well as engaging in 'killer acquisitions'.

The report recommended reforms for consideration which are aimed at addressing anticompetitive conduct in digital markets, strengthening merger and monopolisation enforcement and improving the administration of antitrust laws:

(1) The report recommends new legislation to reform existing antitrust laws relating to essential facilities and the provision of non-discriminatory access.

(2) The report recommends that the US Congress consider structural separation and line of business restrictions. Structural separation would prohibit a dominant intermediary from operating in markets that place the intermediary in competition with the firms dependent on its infrastructure. Line of business restrictions would limit the markets in which a dominant firm could compete. Both structural separations and line of business restrictions would seek to eliminate the conflict of interest faced by a dominant firm when it enters markets that place it in competition with dependent businesses.

(3) The report also recommends that the US Congress consider altering the presumptions for future acquisitions by the dominant platforms. Any acquisition by a dominant platform would be presumed anticompetitive unless the merging parties could show that the transaction was necessary for serving the public interest and that similar benefits could not be achieved through internal growth and expansion.

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70 See Investigation of Competition in Digital Markets, Majority Staff Report and Recommendations, Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary, Jerrold Nadler and David Cicilline.

71 See Clifford Chance, U.S. House Report on Competition in Digital Markets Focuses on Big Tech Dominance and Need for Antitrust Reform

Because the report was issued without bipartisan backing it seems highly unlikely that it will be implemented in its entirety. However, it does seem likely that some of the recommendations will be incorporated into draft legislation. The progress of such legislation will depend on US domestic political factors, noting that the Democrats do not currently have an outright majority in the Senate and the US 'mid-term' elections are due in 6 months. Policy experts predict that the next 3 months will be critical for the passage on any antitrust laws against Big Tech. There is a possibility that unless the current bills are enacted by Labor Day there could be a legislative stalemate.[72]

In the absence of legislative reform, the Biden administration has advocated aggressive enforcement against 'big tech' platforms using existing antitrust laws. In his executive order from July 2021, President Biden describes existing competition laws as "*the first line of defense against the monopolization of the American economy*".[73] As a result, US antitrust agencies have been effectively directed to increase *ex post* enforcement activity. The US antitrust agencies are aggressively pursuing enforcement actions against large digital platforms, including significant actions being launched against Google and Apple.

President Biden has also made a number of high-profile political appointments to the antitrust agencies that have facilitated and further signaled an approach of aggressive *ex post* enforcement by the FTC and the DOJ.

(1) Lina Khan has been appointed as chair of the FTC. Before her appointment, Ms Khan was a well-known critic of big tech and is well-known for a 2017 law review article which advocates for a new antitrust framework to address market power in digital markets using antitrust laws to protect broader social interests.

(2) Recently, Alvaro Beoya was sworn in as a new FTV Commissioner. Alvaro is a known advocate for progressive privacy rights.

(3) Jonathan Kanter is the assistant attorney general overseeing the DOJ Antitrust Division. Mr Kanter was a private practice attorney and has represented clients in suits against big tech.

Interestingly, the bipartisan nature of support for sectoral regulation is illustrated by a range of different Bills introduced by both Republican and Democrat members of Congress. The general theme of these legislative proposals is the creation of bespoke laws that would apply only to large digital platforms based on materiality thresholds. By way of example:

(1) ***Digital Platform Commission Act***

Introduced in Congress on 12 May 2022 by Democratic Senator Michael Bennet. this proposed legislation envisages the creation of a federal digital platform regulator with the mandate to develop and enforce '*thoughtful guardrails for a sector that had been left for too long to write its own rules*.'[74]

(2) ***Augmenting Compatibility and Competition by Enabling Service Switching Bill***:[75]

This proposed legislation requires large online platforms (as designated by the FTC) to facilitate consumers and businesses switching from one platform to

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72 See "The Clock is running out for Congress to pass Big Tech antitrust bills this year" accessible at https://www.marketwatch.com/story/the-clock-is-running-out-for-congress-to-pass-big-tech-antitrust-bills-this-year-11652389182

73 Executive Order, July 2021. Accessible at https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/

74 Bennet Introduces Landmark Legislation to Establish Federal Commission to Oversee Digital Platforms

75 A copy of the Bill is available here: https://www.congress.gov/bill/117th-congress/house-bill/3849?q=%7B%22search%22%3A%5B%22H.R.+3849%2C+the+Augmenting+Compatibility+and+Competition+by+Enabling+Service+Switching+%28ACCESS%29+Act+of+2021%22%5D%7D&r=1&s=1

another. Designated platforms will be required to maintain interfaces that securely transfer user data to other platforms (i.e., portability), and allow other platforms to interoperate.

(3) ***Ending Platform Monopolies Bill***[76]

The Bill seeks to eliminate conflicts of interest that arise from dominant online platforms concurrent ownership or control of an online platform and certain other businesses. Designated or covered platforms will be precluded from disadvantaging a competitor's use of the platform or tying a user's use of the platform to the purchase of a product or service as a condition of access.

(4) ***Open App Markets Bill***[77]

This Bill is intended to enact legislation that promotes competition and reduces gatekeeper power in the app economy, increases choice, improves quality, and reduces costs for consumers. To achieve this the bill places a number of restrictions on "covered companies", being any person that owns or controls an app store with more than 50 million users (i.e., at least Google and Apple). The restrictions imposed under the Bill prevent covered companies from:

(a) requiring developers to use or enable an in-app payment system owned by the covered company as a condition of the distribution of an app on an app store;

(b) including any MFN terms in relation to the distribution of apps on an app store operated by a covered company (to ensure that the covered company gets the benefit of the most favourable pricing terms compared to other competing app stores); and

(c) taking punitive action or imposing less favourable terms and conditions against a developer that offers different pricing terms or conditions of sale through another in-app payment system or on another app store.

Under the Bill, covered companies are also precluded from self preferencing through search results. Specifically, covered companies cannot *"provide unequal treatment of apps in an app store through unreasonably preferencing or ranking the apps of the covered company or any of its business partners over those of other apps in organic search results".*

(5) ***American Innovation and Choice Online Bill***[78]

The Bill creates a series of prohibitions that apply to covered platforms. The Bill prohibits covered platforms from:

(a) self-preferencing their own products on the platform;

(b) unfairly limiting the availability on the platform of competing products from another business,

(c) discriminating in the application or enforcement of the platform's terms of service among similarly situated users; and

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76 A copy of the Bill is available here: https://www.congress.gov/bill/117th-congress/house-bill/3825/text#:~:text=Introduced%20in%20House%20(06%2F11%2F2021)&text=To%20promote%20competition%20and%20economic,platform%20and%20certain%20other%20businesses.

77 A copy of the Bill is available here: https://www.congress.gov/bill/117th-congress/senate-bill/2710/text

78 A copy of the Bill is available here: https://www.congress.gov/bill/117th-congress/senate-bill/2992

(d) impeding the capacity of a competing business to access or interoperate with the same platform, operating system, or hardware or software features.

(6) ***Platform Competition and Opportunity Bill*:**[79] This Bill is designed to prevent predatory acquisitions by large digital platforms. The Bill applies to covered platforms, which carries a similar definition to that proposed by the American Innovation and Choice Online Act (except that it includes a market capitalization threshold in addition to a user threshold).

6.3 European Union

The European Commission (**EC**) has recognised the important benefits derived from digital services. However, the EC has identified concerns with the small number of large online platforms that have captured a large share of the overall value generated within the digital economy.

Through various enforcement actions and market studies the EC has identified the following competition issues in digital services markets:[80]

(1) Digital markets comprise markets for platform services that are highly concentrated.

(2) As a result of market concentration, only a few platforms act as gateways for business users to reach customers.

(3) The digital platforms can abuse their 'gatekeeper power' to the detriment of smaller businesses and consumer.

The EU's Digital Markets Act (**DMA**) sets out a new *ex ante* regime to regulate digital markets and address harms associated with digital competition. The drafting of the DMA was agreed by the EU parliament on 24 March 2022 and Commissioner Vestager indicated that the DMA would be implemented in the spring of 2023.[81]

The DMA seeks to create obligations and punitive measures for so-called gate-keepers operating in digital markets. The status of 'gatekeeper' will be limited to companies that have a "*strong economic and intermediation position within the internal market*" and will have an "*entrenched or durable position in the ma*rket". The DMA also includes market capitalisation thresholds for the designation of gate keepers.

Amongst other things, gatekeepers will be required to:

(1) facilitate interoperability; and

(2) facilitate user access to data generated on the gatekeeper's platform.

Gatekeeper platforms will be precluded from self-preferencing or limiting multi-homing and will be limited in their ability to track users without their consent.

The DMA proposes high penalties for gatekeepers that fail to comply fines of between 10%-20% of worldwide turnover and additional remedies can be imposed following a market investigation. These additional remedies could include divestitures or behavioural remedies.

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79 A copy of the Bill is available here: https://www.congress.gov/bill/117th-congress/house-bill/3826/text

80 European Commission, Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act) 2020/0374 (COD).

81 Speech of Executive Vice-President Vestager at the ICN Annual Conference, Berlin, 5 May 2022. Available here: https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_22_2822

Interestingly, Germany has been pro-active in enacting its own version of the DMA which has domestic application. Many of the large digital platforms are already under investigation in Germany under the DMA-like competition law.[82]

The Digital Services Act (**DSA**) is a related piece of legislation which seeks to regulate 'dark patterns' which seek to coerce or nudge users of digital platforms or online intermediaries from the perspective of content moderation and online advertising. The DSA would only apply to very large platforms, being any platform with at least 45 million users or 10 % of the EU's population.

Large digital platforms will be required under the DSA to provide the parameters of any algorithms used to moderate online content and to provide targeted advertising. They will also be required to report to the EC on their content moderation efforts and implement free and easy to use virtual complaint systems where users can lodge complaints about content moderation and targeted advertising.

6.4 United Kingdom

The Competition and Markets Authority (**CMA**) in the United Kingdom generally considers that the size and presence of large digital platforms is not inherently bad, but that there is evidence that features of some digital markets can cause them to tip in favour of one or two incumbents. Market tipping then confers market power. The CMA considers that such market power can become entrenched, leading to higher prices, barriers to entry for entrepreneurs, less innovation, and less choice and control for consumers.[83]

Drawing on the work of the Furman Report[84] into digital markets, the UK government has reached a view that entrenched market power in digital markets cannot necessarily be dissipated by competition. The UK government is currently implementing the recommendations of the Furman report, as well as other market studies into digital markets which found that digital markets will only work well if they are supported with strong pro-competition policies. The UK is therefore favouring greater sectoral regulation through the creation of a pro-competition regulatory regime to counteract entrenched market power.

The UK government started consulting on a new pro-competition regime for digital markets in July 2021. The consultation sought views on the proposed design of a new pro-competition regime for digital markets that will actively boost competition and innovation while tackling the harmful effects and sources of substantial and entrenched market power.

The UK Government released its response to this consultation processes on 6 May 2022, as follows:

(1) A Digital Markets Unit (**DMU**) has been established within the CMA on a non-statutory basis to begin work to operationalise the new regime. In the long-term, the DMU will be responsible for implementing and enforcing the new pro competition regime.

(2) The UK Government intends to introduce legislation to provide a statutory basis for the regime. The DMU will continue to be a division within the CMA and will not be established as a separate regulator.

(3) The pro-competition regulatory regime will address concerns relating to digital platforms with 'strategic market status' (**SMS**) only. Firms will have an SMS status if they are found to have substantial and entrenched market power in at least one

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82 C Carugati, The Implementation of the Digital Markets Act with National Antitrust Laws, 22 April 2022. Available on SSRN here: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4072359

83 See "A New pro-competitive regime for digital markets – government response to consultation" accessible at https://www.gov.uk/government/consultations/a-new-pro-competition-regime-for-digital-markets/outcome/a-new-pro-competition-regime-for-digital-markets-government-response-to-consultation

84 See Unlocking Digital Competition, Report of the Digital Expert Panel, March 2019.

digital activity, providing them with a strategic position. The legislation will also include a requirement for a UK nexus. SMS status will be based on a minimum revenue threshold to make it clear which firms are out of scope of designation.

(4) Firms with SMS status will be subject to binding conduct requirements, pro-competitive interventions and additional merger notification obligations.

(a) ***Conduct requirements****:* Firms with SMS status will be subject to new conduct requirements including, for example:

(i) requiring SMS firms not to apply discriminatory terms, conditions or policies to certain users or categories of users, compared to equivalent transactions;

(ii) preventing bundling or tying the provision of its other products or services by making access to them conditional on the use of the relevant designated activity; and

(iii) providing clear, relevant, accurate and accessible information to users.

Binding conduct requirements will manage the effects SMS firms' market power and prevent harms before they occur.

(b) ***Pro-competitive interventions****:* The DMU will have broad discretion over the pro-competitive interventions to be imposed on SMS firms, including the power to implement ownership separation. Pro-competitive interventions will only be imposed where an adverse effect on competition can be demonstrated and will be subject to a statutory 9 month period of investigation (optional 3 month extension).

(5) ***Additional merger notification obligations****:* SMS firms will have additional obligations to notify the CMA of M&A activity in order to give the CMA enhanced visibility over mergers involving SMS firms.

The DMU will be able to impose financial penalties of up to 10% of a firm's global turnover, along with an additional 5% of daily turnover each day the offence continues, for regulatory breaches and up to 1% of global turnover for information offences, with additional 5% daily penalties available for continued non-compliance.

To some extent the CMA is already operationalizing aspects of the new regime. On 15 June 2021, the CMA launched a market study into Apple's and Google's mobile ecosystems over concerns they have market power. The market study also considers whether Apple or Google should be designated as SMS entities in respect of the supply of mobile devices and operating systems, the distribution of mobile apps, the supply of mobile browsers and browser engines and competition between app developers.

The CMA's Interim Report into Mobile Ecosystems was released on 14 December 2021. In the report the CMA considers that both Google and Apple would likely have Strategic Market Status under the proposed new regime. The CMA has also proposed a number of pro-competitive interventions to remove barriers and restrictions imposed by Google and Apple to enhance consumer choice.

6.5 Greece

Greece has taken a more interventionist step to deal with market power issues in digital markets. Whilst the issues identified in digital platform markets in Greece are similar to those identified in other jurisdictions, the proposed response by the Hellenic Competition Commission is far broader in scope.

The remedy solution apparently stems from the idea that *ex post* regulation cannot deal with ecosystem issues because orthodox competition principles are tethered to the idea of dominance within a relevant market. The Greek proposal argues that big tech platforms derive market power from network effects, complementarities and technical links built into the ecosystem. Therefore, defining a single market or multiple markets does not account for the true nature of competition taking place within and between ecosystems. As such enforcement of traditional competition laws are doomed to fail and a new framework is required to regulate digital ecosystems.

The Hellenic Competition Commission has proposed a new provision for the Greek Competition Act that would prohibit a firm holding a dominant position in an *ecosystem* of *paramount importance* in respect of competition in Greece from abusing its position. This provision is an *ex post* enforcement mechanism and is designed to complement and not replace the EU's DMA, which is an instance of *ex ante* regulation.

Under the proposed law, the relevant field of competition is the ecosystems of paramount importance. An ecosystem is defined as:

> "*a web of interconnected and largely interdependent economic activities carried out by different undertakings with the intention of supplying products, services or a nexus of products and/or services that impact the same set of users,* ***or***
>
> *a platform of economic activities carried out by different undertakings with the intention of supplying products, services or nexuses of products and/or services that impact the same users or different categories of users*."

The Greek approach contrasts with Australia, which has taken steps to recognise competition between ecosystems as part of conventional antitrust analysis in the course of its investigation into digital platforms.[85]

6.6 Conclusions on international best practice

While the international experience to date shows that there are some common themes and approaches emerging (such as jurisdictional thresholds and a preference for *ex ante* regulation), there is not currently a uniform approach.

Law and regulations are path dependent and each jurisdiction around the world has its own unique legal system with its own bespoke laws, institutions, and processes. Each jurisdiction's view of what is 'just right' is therefore inherently a function of its unique market circumstances, political preferences and institutions, as well as the historic regulatory environment. This has certainly been the case for telecommunications regulation with broad consensus on the regulatory strategy, but each country having its own unique application.

In essence, while Australia can look to the international experience to date for guidance, we should be wary of blindly adopting a solution from another jurisdiction without considering Australia's unique environment (including the need for a harmonised national approach and the need to align with existing laws and regulations).

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[85] In contrast to this approach, the ACCC has also recently recognised ecosystem based competition. In its Interim Report into App market places the ACCC comments "*it is important to recognise that competition occurs, or can occur, at two levels. At one level there is competition between mobile ecosystems. At another level there is competition within Apple and Google's mobile ecosystems*." Recognising this level of competition, the ACCC considers that "*it important to ensure that any measures proposed to increase competition within mobile ecosystems do not lessen competition between mobile ecosystems.*" In contrast to the Greek proposal, the ACCC is considering ecosystem level competition as another dimension of competition. See ACCC *Digital platform services inquiry Interim report No. 2- App market places*, March 2021 at page 7

7 A policy question - is sectoral regulation necessary for Australia and, if so, in what form?

The ACCC is currently undertaking public consultation on this issue. As such, I am happy to leave the answer to the policy questions in the capable hands of the ACCC and the Australian Government.

The ACCC's Discussion Paper sets out at a high-level the potential regulatory tools/policy instruments that could be used to supplement existing competition and consumer laws in Australia and then proceeds to consider reforms to address specific competition/consumer harms prevalent in digital platform services markets. The ACCC does not express any views on the appropriateness of the various reforms.

The policy instruments currently being considered by the ACCC include:

(1) rule-making powers to address specific harms;

(2) implementation of specific codes of practice (which the ACCC in fact adopted Media Bargaining Code);

(3) introducing pro-competitive measures to address specific harms;

(4) developing specific prohibitions and obligations targeted at consumer harms endemic to digital platform markets; and

(5) a bespoke digital platform service access regime.

Each of these policy instruments are the subject of detailed explanation in the ACCC's Discussion Paper, so I don't propose to repeat those explanations in this paper. As such, a range of feasible options are being considered including self-regulatory, co-regulatory and non-regulatory approaches, consistent with Australia's unique circumstances and historic experiences.

Relevantly, these tools are all consistent with approaches adopted in the UK, US and EU. For example, the UK's proposed regime includes pro-competitive interventions where the DMU identifies harm and the EU's DMA includes specific obligations/prohibitions targeted at gatekeepers.

The ACCC is also considering a number of possible reforms to address competition harm from an enforcement perspective including:

(1) measures to combat anticompetitive conduct, such as self-preferencing or the imposition of discriminatory terms;

(2) specific prohibitions against self-preferencing. For example, preventing Google search from being bundled with other products and services to create default positions;

(3) mandating interoperability;

(4) various measures to address data advantages, including data portability obligations (e.g. tools to encourage consumers to export their data) and limiting the way data is used by incumbent platforms (e.g. data silos to prevent analytic techniques where data is combined across ecosystems); and

(5) a specific merger rules for digital platforms to heighten the ACCC ability to monitor M&A activity.

These potential reforms are again broadly similar to those currently being considered in the EU and UK.

Submissions on the ACCC's 2022 Discussion Paper are currently up on the ACCC's website with an interim report due from the ACCC by 30 September 2022. A final report us due from the ACCC to government by 31 March 2025.

8 Conclusions

At the start of this paper I pointed to the time-honoured nursery tale – Goldilocks and the Three Bears. During this paper I highlighted the manner in which digital ecosystems are at the frontier of antitrust regulation, so we are very much in an era of experimentalist regulation. I provided examples of the types of regulation that is currently being considered or implemented in the US, EU, UK and Greece. Each of these jurisdictions fall on a continuum from a lighter regulatory model to a more heavy-handed regulatory model.

We hope that, unlike Goldilocks, an iterative experiment with different extremes is not required in Australia. Australia can learn from international experiences. Australia has a real opportunity to get it 'just right' in the context of a bespoke Australian approach.

Importantly, business ecosystems based on platforms have been a feature of the competitive landscape throughout the history of modern competition law. As such, the key source of the concerns expressed about digital ecosystems are not the fact of the ecosystem, but rather the manner in which the ecosystem is exacerbating concerns arising from the unique combined economics of software, information and communications networks. The key question to ask is whether our generic competition laws of 2022 are sufficient to regulate imperfect competition, hence market power, derived from the unique economics of software, information and communications networks.

We then asked five questions with the following answers:

(a) **A philosophical question – at what point do we decide that generic competition law alone is insufficient?**

The critical starting point for sound regulatory intervention is to establish a clear case for action based on evidence of harm. We need to determine whether the particular market has market conditions that are persistently exacerbating market power and weakening the effectiveness of competition laws in constraining such market power. However, in doing so we should only regulate if we can identify the regulatory instrument that best addresses these market conditions in a way that is both direct and net beneficial to market efficiency. We should also adopt a cautious approach in regulating innovation markets.

(2) **An economic question - are there unique market failures in digital ecosystems that confer abnormal levels of market power?**

In the absence of international experience, we considered this question in light of the historic experience with telecommunications which does have unique market failures of this nature. Our cursory analysis suggested that digital ecosystems do have enough similarities with telecommunications networks to merit further consideration whether unique market failures may arise. However, there are many nuances that require careful consideration.

(3) **A legal question - is generic competition law sufficient to address any such market failures to mitigate imperfect competition?**

We considered the historic experience with telecommunications in New Zealand to illustrate the types of issues that may arise in reliance on *ex post* enforcement alone. The New Zealand telecommunications experience demonstrates the pitfalls with relying solely on *ex post* antitrust regulation. A key question is whether the last decade of reliance on competition law alone constitutes optimal regulation or under-regulation. This matter is still being considered by the ACCC.

(4) **A factual question – what international experience to date could guide Australian policymakers?**

We identified that international best practice in the regulation of digital platforms is still evolving in real time. Different countries are proposing different approaches and it is likely too early to determine the extent to which such approaches amount to 'over-regulation' (or even 'under-regulation'). While the international experience to date shows that there are some common themes and approaches emerging (such as jurisdictional thresholds and a preference for *ex ante* regulation), there is not necessarily a 'one size fits all' approach. The EU and UK seem most advanced in adopting policy solutions and some lessons can already be learned.

While Australia can look to the international experience to date for guidance, Australia should be wary of blindly adopting a solution from another jurisdiction without considering Australia's unique environment (including the need for a harmonised national approach and the need to align with existing laws and regulations)..

The ACCC has already given express recognition of inter and intra ecosystem competition in its consideration of app distribution.[86] It achieved this by considering ecosystem based competition as another dimension of competition, in a similar way that orthodox principles look at competition along geographic, product or temporal lines. This is a sensible approach.

(5) **A policy question - is sectoral regulation necessary for Australia and, if so, in what form?**

Sectoral regulation remains a matter that is currently under active consideration by the ACCC. A range of feasible options are being considered by the ACCC and Government, including self-regulatory, co-regulatory and non-regulatory approaches, consistent with Australia's unique circumstances and historic experiences (including in regulating the telecommunications sector).

This paper posed the question as to whether regulating business ecosystems amounts to a new paradigm for competition law. We don't believe it does. Modern competition law is sufficiently flexible and fluid that novel theories of harm can be appropriately ventilated. However, the current global trend appears to be to impose sectoral regulation on digital platforms (and hence digital ecosystems) in recognition of perceived unique market failures.

This paper leaves the precise policy answers to the ACCC and Government. However Australia can learn from international experiences and avoid an iterative 'Goldilock's experiment with different\ regulatory extremes. Australia has a real opportunity to avoid a Goldilocks scenario and to get it 'just right'.

12,000 words

86 See ACCC *Digital platform services inquiry Interim report No. 2- App market places*, March 2021 at page 7.

Annexure A: Foreign enforcement actions and private litigation against 'Big Tech'

The table below contains details of major enforcement action taken against Google, Apple, Facebook and Amazon. The analysis focuses on enforcement actions brought by a representative cross section of antitrust regulators across the globe over the last 12 years. It is not exhaustive.

	Regulatory body	Allegations	Date Opened	Status
Google	EU Commission	Abusing search dominance to favor its own shopping product.[87]	30 November, 2010	The EU fined Google U$2.7 billion in 2017. Google is appealing the fine.[88]
	FTC	Complaint that Google used deceptive tactics and violated its own privacy promises to consumers when it launched its social network, Google Buzz, in 2010.[89]	30 March, 2011	Closed on 24 October 2011 due to settlement barring the company from future privacy misrepresentations, requiring it to implement a comprehensive privacy program, and calling for regular, independent privacy audits for the next 20 years.[90]
	Competition Commission of India	Abuse of dominance to create search bias in favour of Google	2012	The CCI fined Google ~1.36 billion rupees in February 2018.[91]
	FTC	Proceedings filed alleging Google billed for charges related to activity within kids' applications without any password requirement or other method to ensure account holder authorization.[92]	2 December , 2014	Closed due to settlement requiring Google to provide full refunds of unauthorized in-app charges incurred by children and to modify its billing practices to obtain express, informed consent from consumers before billing them for in-app charges. If the company gets consumers' consent for future charges, consumers must have the option to withdraw their consent at any time.[93]
	EU Commission	Abusing its mobile operating system dominance to favour its own services.[94]	15 April, 2015	The EU fined Google U$5 billion in July 2018. Google is appealing the fine.
	Russia's Federal Antimonopoly Service	Abusing its dominance by requiring pre-installation of applications, including search tools, on mobile devices using Android. Allegation raised in a complaint by Yandex, a	September, 2015	Google was fined in 2015 and settled the dispute in 2017. Under the settlement Google will no longer demand

87 https://ec.europa.eu/commission/presscorner/detail/en/IP_10_1624
88 https://ec.europa.eu/commission/presscorner/detail/en/IP_17_1784
89 See "Complaint filed by the FTC" accessible at https://www.ftc.gov/sites/default/files/documents/cases/2011/03/110330googlebuzzcmpt.pdf
90 FTC Gives Final Approval to Settlement with Google over Buzz Rollout.
91 https://www.cci.gov.in/sites/default/files/press_release/Press%20Release-%2007%20%26%20%2030%20of%202012_0.pdf
92 Complaint filed by the FTC.
93 See "FTC Approves Final Order in Case About Google Billing for Kids' In-App Charges Without Parental Consent " accessible at https://www.ftc.gov/news-events/news/press-releases/2014/12/ftc-approves-final-order-case-about-google-billing-kids-app-charges-without-parental-consent
94 https://ec.europa.eu/commission/presscorner/detail/en/MEMO_15_4782

	Regulatory body	Allegations	Date Opened	Status
		Russian based search tool.		exclusivity of its applications on Android devices in Russia, and it will not restrict the pre-installation of any competing search engines and applications.[95]
	EU Commission	Suppressing competition in digital advertising	14 July, 2016	The EU fined Google U$1.7 billion in March 2019. Google is appealing the fine.
	Korean Fair Trade Commission	Monopolizing mobile operating systems through an Anti-fragmentation Agreement which prevented phone manufacturers from installing Android forks (modified versions of the OS).	July 2016	The KFTC fined Google U$177 million on Sept.14, 2021. Google vowed to appeal the ruling.[96]
	FTC and New York Attorney General	Complaint filed alleging that YouTube violated the COPPA Rule by collecting personal information—in the form of persistent identifiers that are used to track users across the Internet—from viewers of child-directed channels, without first notifying parents and getting their consent. YouTube earned millions of dollars by using the identifiers, commonly known as cookies, to deliver targeted ads to viewers of these channels, according to the complaint.[97]	9 April, 2019	Closed in on 4 September 2019 when Google LLC and YouTube, LLC agreed to pay $170 million to settle the allegations.[98]
	CMA	Investigation into whether Google and Amazon are taking sufficient measures to protect consumers from fake and misleading reviews. In particular, it will examine how the websites currently detect, investigate and respond to fake and misleading reviews.[99]	22 May, 2020 (June 25, 2021, formal enforcement cases opened)[100]	Investigation ongoing
	US DOJ	Monopolizing search and online advertising, including by:[101] (1) Entering into exclusivity agreements to prevent pre-installation of competing services; (2) Entering into long term agreements with Apple that require Google to	20 October, 2020	Lawsuit filed[102]

95 http://en.fas.gov.ru/press-center/news/detail.html?id=49774
96 https://english.hani.co.kr/arti/english_edition/e_business/1011884.html
97 See "YouTube Complaint for Permanent Injunction_"accessible at https://www.ftc.gov/system/files/documents/cases/youtube_complaint.pdf
98 See "Google and YouTube Will Pay Record $170 Million for Alleged Violations of Children's Privacy Law | Federal Trade Commission_"accessible at https://www.ftc.gov/news-events/news/press-releases/2019/09/google-youtube-will-pay-record-170-million-alleged-violations-childrens-privacy-law
99 See "CMA investigates misleading online reviews; Online reviews" accessible at https://www.gov.uk/cma-cases/online-reviews
100 See "CMA to investigate Amazon and Google over fake reviews" accessible at https://www.gov.uk/government/news/cma-to-investigate-amazon-and-google-over-fake-reviews
101 https://www.justice.gov/opa/pr/justice-department-sues-monopolist-google-violating-antitrust-laws
102 Copy of Google Complaint filed: https://www.justice.gov/opa/press-release/file/1328941/download

	Regulatory body	Allegations	Date Opened	Status
		be the default search engine.		
	Competition Commission of India	Abuse of dominance in respect of Play Store billing policy mobile payments. The regulator has made preliminary findings of discriminatory practices and we understand that Google still has an opportunity to present arguments.[103]	8 November , 2020	Preliminary findings issues against Google, inquiry ongoing
	US Attorney Generals (led by the State of Texas)	Monopolizing the publisher ad server market and foreclosed publisher's ability to trade on exchanges (imposition of a 'one exchange' rule and through anticompetitive practices to preclude innovation aimed at reinvigorating competition).	16 December, 2020	Lawsuit filed[104]
	US Attorney Generals	Google has improperly maintained and extended its search-related monopolies through exclusionary conduct that has harmed consumers, advertisers, and the competitive process itself.	17 December, 2020	Lawsuit filed[105]
	CMA	Investigation into Google's 'Privacy Sandbox' browser changes	7 January 2021	Closed. The CMA accepted commitments from Google on 11 February 2022.[106]
	US Attorney Generals	Monopolizing mobile app distribution and in-app payments.	7 July, 2021	Lawsuit filed.[107]
	Russian Federal Antimonopoly Service	Investigation into Google's YouTube unit and allegations that the company's actions had resulted in the sudden blocking and deletion of some users' accounts.[108]	19 April, 2021	Unknown
	German Federal Cartel Office	Proceeding initiated to determine whether the company is of paramount significance across markets, and whether Google/Alphabet makes the use of services conditional on the users agreeing to the processing of their data without giving them sufficient choice as to whether, how and for what purpose such data are processed.[109]	25 May, 2021	On 30 December 2021, the Bundeskartellamt has determined pursuant to Section 19a(1) of the German Competition Act (GWB) that Alphabet Inc. including its affiliates within the meaning of Section 36(2) GWB (in the following "Google") is of paramount significance for competition across markets.[110]

103 https://economictimes.indiatimes.com/tech/technology/cci-probe-finds-googles-play-store-billing-guidelines-unfair-and-discriminatory/articleshow/90550596.cms?from=mdr

104 Copy of Google Complaint filed: https://www.texasattorneygeneral.gov/sites/default/files/images/admin/2020/Press/20201216%20COMPLAINT_REDACTED.pdf

105 https://coag.gov/app/uploads/2020/12/Colorado-et-al.-v.-Google-PUBLIC-REDACTED-Complaint.pdf

106 https://www.gov.uk/cma-cases/investigation-into-googles-privacy-sandbox-browser-changes

107 https://context-cdn.washingtonpost.com/notes/prod/default/documents/0953a894-bc13-404a-86da-e4dfc08bacfe/note/98417c4a-bec9-46a0-b003-bcae6a541634.#page=1

108 See "Russian competition watchdog opens case against Google over YouTube curbs " accessible at https://www.reuters.com/technology/russian-competition-watchdog-opens-case-against-google-over-youtube-curbs-2021-04-19/

109 See "Proceeding against Google based on new rules for large digital players (Section 19a GWB) – Bundeskartellamt examines Google's significance for competition across markets and its data processing terms" accessible at https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/25_05_2021_Google_19a.html;jsessionid=FF9D4E4B53890C43875A83712E09964B.1_cid387?nn=3591568

110 See "Case summary" accessible at https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Missbrauchsaufsicht/2022/B7-61-21.pdf?__blob=publicationFile&v=6

	Regulatory body	Allegations	Date Opened	Status
	German Federal Cartel Office	Investigation into whether the announced integration of the Google News Showcase service into Google's general search function is likely to constitute self-preferencing or an impediment to the services offered by competing third parties. The authority is also examining whether the relevant contractual conditions include unreasonable conditions to the detriment of the participating publishers and, in particular, make it disproportionately difficult for them to enforce the ancillary copyright for press publishers introduced by the German Bundestag and Bundesrat in May 2021. [111]	4 June, 2021	Investigation ongoing
	EU Commission	Formal antitrust proceedings initiated against Google and Alphabet to investigate whether they have violated EU competition rules by favouring, through a broad range of practices, its own online display advertising technology services in the so called "ad tech" supply chain, to the detriment of competing providers of advertising technology services, advertisers and online publishers.[112]	22 June, 2021	Investigation ongoing
	CMA	Anti-competitive agreement with Meta to restrict or prevent the uptake of header bidding services (Jedi Blue).	11 March 2022	Investigation ongoing.[113]
	EU Commission	Investigation into an agreement signed in September 2018 by Google and Meta (then known as Facebook), with respect to Meta's participation in Google's Open Bidding programme. The Commission is concerned that the agreement may be part of efforts to restrict or distort competition in markets for online display advertising and related intermediary services in the European Economic Area.[114]	11 March, 2022	Investigation ongoing
	Sued by Epic Games in the US (but also in other jurisdictions-including Australia)	Monopolizing in-app purchases	28 April, 2022	Ongoing
	Sued by Match Group in the Northern District of California, US	Match Group claims Google "illegally monopolized the market for distributing apps" on Android by forcing apps to use Google's own billing system and then taking a cut of the payments.[115]	9 May , 2022	Ongoing
Apple	FTC	Proceedings filed alleging Apple billed for charges related to activity within kids' applications without any password requirement or other method to ensure account	15 January, 2014	Closed due to settlement requiring Apple to change its billing practices to ensure that it has obtained express,

111 See "Bundeskartellamt examines Google News Showcase" accessible at https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/04_06_2021_Google_Showcase.html?nn=3591568

112 See "European Commission case information" accessible at https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/04_06_2021_Google_Showcase.html?nn=3591568

113 https://www.gov.uk/cma-cases/investigation-into-suspected-anti-competitive-agreement-between-google-and-meta-and-behaviour-by-google-in-relation-to-header-bidding

114 See "European Commission case information" accessible at https://ec.europa.eu/competition/antitrust/cases1/202212/AT_40774_8223225_264_12.pdf

115 See "Complaint filed by Match Group. " accessible at https://ia802509.us.archive.org/25/items/gov.uscourts.cand.395326/gov.uscourts.cand.395326.1.0.pdf

	Regulatory body	Allegations	Date Opened	Status
		holder authorization.[116]		informed consent from consumers before charging them for in-app purchases. Apple was also Apple also required to provide full refunds, totalling a minimum of $32.5 million, to consumers who were billed for in-app purchases that were incurred by children and were either accidental or not authorized by the consumer.[117]
	CMA	Investigation into failure to clearly warn consumers that their phone's performance could slow down following a 2017 software update designed to manage demands on the battery.[118]	9 August, 2018	Undertaking obtained from Apple Inc.[119]
	EU Commission	Monopolizing mobile payments and app distribution. (3) Initially the investigation concerned Apple's terms, conditions and other measures for integrating Apple Pay in merchant apps and websites on iPhones and iPads, Apple's limitation of access to the Near Field Communication (**NFC**) functionality on iPhones for payments in stores, and alleged refusals of access to Apple Pay.[120] (4) The Commission is now focussing its investigation on Apple's decision to prevent mobile wallet app developers from accessing NFC inputs.[121]	16 June, 2020	Investigation ongoing, statement of objections in respect of NFC issue released on 2 May 2022.
	EU Commission	Monopolizing mobile music streaming through Apple's mandatory in app commission fee and the use of anti-steering provisions.	16 June, 2020	Investigation ongoing, Commission issued a Statement of Objections on 30 April 2021.[122]
	Private action by Epic Games in the US (also in other jurisdictions- including Australia)	Monopolizing in-app purchases	14 August, 2020	District Court ordered Apple to change some of its App Store policies, but rejected antitrust allegations. Apple and Epic are appealing.
	German Cartel Office	Monopolisation of App Store[123]	21 June 2021	Investigation ongoing
	CMA	Monopolization of app distribution through restrictive terms and conditions (including	3 March 2021	Investigation ongoing, evidence gathering.[124]

116 See "Complaint filed by the FTC. " accessible at https://www.ftc.gov/sites/default/files/documents/cases/140115applecmpt.pdf
117 See "FTC Approves Final Order in Case About Apple Inc. Charging for Kids' In-App Purchases Without Parental Consent " accessible at
118 See "Apple iPhones: consumer protection case" accessible at
119 See "Apple pledges clearer information on iPhone performance; Summary of undertaking" accessible at
120 https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1075
121 https://ec.europa.eu/commission/presscorner/detail/en/IP_22_2764
122 https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2061
123 https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/21_06_2021_Apple.html?nn=3591568

	Regulatory body	Allegations	Date Opened	Status
		commission fees).		
	CMA	Anti-competitive agreement with Meta to restrict or prevent the uptake of header bidding services (Jedi Blue).	11 March 2022	Investigation ongoing.[125]
Facebook (Meta)	German Federal Cartel Office	Abusing its monopoly on social media to improperly harvest user data	2 March, 2016	On 6 February 2019 regulator ordered Facebook to stop combining user data from separate apps without consent. Facebook is appealing the order.[126]
	CMA	Investigation into Instagram due to concerns that it was not doing enough to prevent its users from endorsing businesses without making it clear that they had been paid or given free gifts to do so[127]	16 August, 2018	Investigation ongoing
	CMA	Investigation into Facebook's completed acquisition of Giphy the world's supply of gifs	11 June 2020	On 30 November 2021, the CMA ordered Facebook to sell off Giphy.[128] We understand that Facebook is appealing the order.
	Federal Trade Commission (US)	Suppressing competition from social media rivals. In its amended complaint on 19 August 2021 the FTC alleges that after repeated failed attempts to develop innovative mobile features for its network, Facebook instead resorted to an illegal buy-or-bury scheme to maintain its dominance.[129]	9 December, 2020	FTC refiled its lawsuit after a judge dismissed an earlier version
	US Attorney Generals	Suppressing competition from social media rivals by "*illegally acquiring competitors in a predatory manner and cutting services to smaller threats —depriving users from the benefits of competition and reducing privacy protections and services along the way — all in an effort to boost its bottom line through increased advertising revenue*".[130]	9 December, 2020	States are appealing after a judge dismissed their lawsuit.[131]
	German Federal Cartel Office	Abuse proceedings against to examine the linkage between Oculus virtual reality products and the social network and Facebook platform.[132] The scope of the proceedings was expanded on January 28 2021 to examine whether Facebook is subject to the new rules applying to undertakings of paramount significance for	10 December, 2020	Ongoing

124 https://www.gov.uk/cma-cases/investigation-into-apple-appstore
125 https://www.gov.uk/cma-cases/investigation-into-suspected-anti-competitive-agreement-between-google-and-meta-and-behaviour-by-google-in-relation-to-header-bidding
126 https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Missbrauchsaufsicht/2019/B6-22-16.pdf?__blob=publicationFile&v=
127 See "Social Media Endorsements" accessible at https://www.gov.uk/cma-cases/social-media-endorsements
128 https://www.gov.uk/government/news/cma-directs-facebook-to-sell-giphy
129 https://www.ftc.gov/news-events/news/press-releases/2021/08/ftc-alleges-facebook-resorted-illegal-buy-or-bury-scheme-crush-competition-after-string-failed
130 https://ag.ny.gov/press-release/2020/attorney-general-james-leads-multistate-lawsuit-seeking-end-facebooks-illegal
131 See for example press release from Californian Attorney General: https://oag.ca.gov/news/press-releases/attorney-general-bonta-appeals-ruling-facebook-antitrust-lawsuit
132 See "Bundeskartellamt examines linkage between Oculus and the Facebook network" accessible at https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2020/10_12_2020_Facebook_Oculus.html?nn=3591568

	Regulatory body	Allegations	Date Opened	Status
		competition across markets (s 19a *German Competition Act*, GWB) and whether linking the services is to be assessed on this basis.[133]		
	EU Commission	Using its digital advertising market power to improperly compete against third-party advertisers on its platform	4 June, 2021	Investigation ongoing
	CMA	Using its digital advertising market power to improperly compete against third-party advertisers on its platform	4 June, 2021	Investigation ongoing
	Class action litigation before the Competition Appeal Tribunal in the UK, brought by Dr Liza Lovdahl Gorsman	Abuse of dominance through unfair terms and conditions that demanded consumers surrender valuable personal data to access the network	14 February, 2022	Class action is seeking GBP2,3 billion for loss and damages. Currently before Competition Appeal Tribunal.
	CMA	Anti-competitive agreement with Google to restrict or prevent the uptake of header bidding services (Jedi Blue).	11 March 2022	Investigation ongoing.[134]
	EU Commission	Investigation into an agreement signed in September 2018 by Google and Meta (then known as Facebook), with respect to Meta's participation in Google's Open Bidding programme. The Commission is concerned that the agreement may be part of efforts to restrict or distort competition in markets for online display advertising and related intermediary services in the European Economic Area.[135]	11 March, 2022	Investigation ongoing
	South African Competition Commission	Abuse of dominance in relation to WhatsApp Business	14 March, 2022	Referred to the Competition Tribunal for determination.
Amazon	German Federal Cartel Office	The Bundeskartellamt took administrative proceedings against Amazon Services Europe S.à.r.l., Luxembourg (Amazon) on account of the design of Amazon's Marketplace platform, in particular, its price parity obligation for retailers. The proceedings were terminated after the price parity clause was definitively abandoned.	2012	Closed on 26 November 2013 after the price parity clause was definitively abandoned.

133 See "First proceeding based on new rules for digital companies – Bundeskartellamt also assesses new Section 19a GWB in its Facebook/Oculus case" accessible at https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/28_01_2021_Facebook_Oculus.html;jsessionid=2261ED020CD0FC7B6A3A06945134B427.2_cid387?nn=3591568

134 https://www.gov.uk/cma-cases/investigation-into-suspected-anti-competitive-agreement-between-google-and-meta-and-behaviour-by-google-in-relation-to-header-bidding

135 See "European Commission case information" accessible at https://ec.europa.eu/competition/antitrust/cases1/202212/AT_40774_8223225_264_12.pdf

	Regulatory body	Allegations	Date Opened	Status
	EU Commission	Investigation into certain clauses included in Amazon's contracts with publishers that require publishers to inform Amazon about more favourable or alternative terms offered to Amazon's competitors and/or offer Amazon similar terms and conditions than to its competitors, or through other means ensure that Amazon is offered terms at least as good as those for its competitors.[136]	11 June, 2015	Closed
	German Federal Cartel Office	The Bundeskartellamt initiated abuse of dominance proceedings against Amazon to examine its terms of business and practices towards sellers on its German marketplace amazon.de. It addressed various aspects of Amazon's general terms of business as specified, in particular, in its Business Solutions Agreement "BSA" as well as certain practices towards sellers on Amazon's marketplaces.	29 November, 2018	Closed on 17 July 2019 as Amazon amended the general terms of business for sellers on its marketplaces objected to by the Bundeskartellamt and promised further alterations to its marketplace operation to dispel competition concerns about the practices contested.[137]
	EU Commission	Using its e-commerce monopoly to unfairly compete against third-party sellers	17 July, 2019	Investigation ongoing
	CMA	Investigation into whether Google and Amazon are taking sufficient measures to protect consumers from fake and misleading reviews. In particular, it will examine how the websites currently detect, investigate and respond to fake and misleading reviews. It will look into issues such as: • suspicious reviews – where, for example, a single user has reviewed an unlikely range of products or services; • whether businesses are manipulating the presentation of reviews about their products and services by, for example, combining positive reviews for one product with the reviews for another; and how these websites handle reviews about products or services that the reviewer has received a payment or other incentive to review.	22 May, 2020 (June 25, 2021, formal enforcement cases opened against Amazon and Google)	Investigation ongoing
	EU Commission	Proceedings commenced regarding he conditions and criteria that govern the selection mechanism of the Buy Box that prominently shows the offer of one single seller for a chosen product on Amazon's websites, with the possibility for consumers to directly purchase that product, as well as the conditions and criteria that govern the eligibility of third party sellers to offer products under the Prime label to users of Amazon's Prime programme.	10, November, 2020	Ongoing
	EU Commission	Using its e-commerce monopoly to unfairly compete against third-party sellers	17 July, 2019	Investigation ongoing

136 See "European Commission case information; Antitrust: Commission opens formal investigation into Amazon's e-book distribution arrangements" accessible at https://ec.europa.eu/competition/antitrust/cases/dec_docs/40153/40153_1359_6.pdf

137 See "Case summary" accessible at https://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Fallberichte/Missbrauchsaufsicht/2019/B2-88-18.pdf?__blob=publicationFile&v=5

	Regulatory body	Allegations	Date Opened	Status
	US class action	Anticompetitive agreements with publishers in relation to Ebooks, through the use of MFNs	14 January, 2021	Complaint filed in US District Court Southern District of New York
	FTC	Complaint filed against Amazon and its subsidiary, Amazon Logistics, for advertising that drivers participating in the Flex program would be paid $18–25 per hour for their work making deliveries to customers. The ads, along with numerous other documents provided to Flex drivers, also prominently featured statements such as: "You will receive 100% of the tips you earn while delivering with Amazon Flex."[138]	2 February , 2021	Closed on 2 November 2021 due to settlement. Under the terms of the settlement with the FTC, Amazon will be required to pay $61,710,583, which will be used by the FTC to compensate Flex drivers. In addition, Amazon will be prohibited from misrepresenting any driver's likely income or rate of pay, how much of their tips will be paid to them, as well as whether the amount paid by a customer is a tip. Amazon also will be prohibited from making any changes to how a driver's tips are used as compensation without first obtaining the driver's express informed consent.[139]
	German Federal Cartel Office	Monopolizing e-commerce	18 May, 2021	Investigation ongoing
	Washington DC Attorney General	Suppressing competition in e-commerce	25 May, 2021	Lawsuit filed
	District of Columbia Attorney General	The District alleges that, due to Amazon's significant market power, agreements between Amazon and its merchant partners affect not only how sellers set prices on items sold on Amazon's platform, but also elsewhere—leading to an outsized effect on the entire online marketplace.	27 April, 2022	Ongoing

138 See "Complaint filed by the FTC" accessible at https://www.ftc.gov/system/files/documents/cases/amazon_flex_complaint.pdf

139 See "Amazon To Pay $61.7 Million to Settle FTC Charges It Withheld Some Customer Tips from Amazon Flex Drivers " accessible at https://www.ftc.gov/news-events/news/press-releases/2021/02/amazon-pay-617-million-settle-ftc-charges-it-withheld-some-customer-tips-amazon-flex-drivers