MANAGING NASCENT DIGITAL COMPETITION: AN ASSESSMENT OF AUSTRALIAN MERGER LAW UNDER CONDITIONS OF RADICAL UNCERTAINTY

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The Australian Competition and Consumer Commission is among several national competition regulators that have recently expressed concerns about the inability of existing merger law to address competition issues that arise from acquisitions of digital start-ups. The unique characteristics of rapidly evolving digital markets present unprecedented challenges for traditional merger regimes that rely on predictions of future market conditions to justify intervention. This article argues that Australian merger law is unable to adequately address the uncertain risks presented by acquisitions of nascent competitors in digital markets. It further argues that traditional rule-based merger regimes are unable to properly navigate conditions of extreme uncertainty. An alternative regulatory model that is explored in detail is experimentalist governance, which promises to allow regulators and firms to respond to radical uncertainty by recursively crafting solutions to problems that emerge in dynamic digital markets over time.

I INTRODUCTION

'*[It] is not for technology to decide our future, it is for us*.'[1]

Between 2008 and 2018, Google, Amazon and Facebook acquired almost 300 companies,[2] with approximately 60% of their targets being under four years old at the time of purchase.[3] Of these, few have received *ex ante* scrutiny from competition authorities worldwide and none were prohibited.[4] Recently, the

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1 Margrethe Vestager, 'Opening Remarks' (Speech, Shaping Competition Policy in the Era of Digitisation Conference, 17 January 2019) 0:10:23–0:10:28 <https://www.youtube.com/watch?v=mTkxMpLztNA&> ('Vestager Speech').

2 Lear, 'Ex-post Assessment of Merger Control Decisions in Digital Markets' (Final Report, 9 May 2019) 10 [I.48] ('Lear Report').

3 Ibid 17 [I.64].

4 Digital Competition Expert Panel, 'Unlocking Digital Competition' (Report, March 2019) 12, 91 [3.45], 92 [3.47] ('Furman Report').

Australian Competition and Consumer Commission ('ACCC') chair, Rod Sims, expressed concern that the ACCC may face significant challenges in opposing such acquisitions of digital start-ups which could present nascent competitive threats to dominant technology incumbents.[5] Other national regulators are similarly grappling with questions of how best to apply merger laws to digital markets.[6]

This article argues that section 50 of the *Competition and Consumer Act 2010* (Cth) ('*CCA*'), as currently interpreted by courts, inadequately addresses the complexities of nascent competition concerns in digital markets, generating poor market outcomes for consumers. A nascent competitor is a firm which is developing within or adjacent to the market of a dominant incumbent, but whose competitive potential is uncertain.

Many competition regulators and commentators share concerns that mergers which eliminate digital start-ups may remove a substantial competitive constraint on dominant incumbents, thereby entrenching their market power.[7] This concern supposes that the start-up, although nascent at the time of the proposed acquisition, could have possibly grown into a vigorous future competitor that presents an existential threat to the incumbent. For instance, in a recent joint media release from the ACCC and the national competition authorities from the United Kingdom ('UK') and Germany (the Competition and Markets Authority ('CMA') and the Bundeskartellamt respectively) highlighted that acquisitions of *digital* start-ups may generate competition concerns that may not otherwise arise in traditional markets:

> [A] seemingly small transaction can cause a competitive market to tip in an anticompetitive direction. For example, an acquisition of a small start-up could in reality be the acquisition of what would have been a major competitive threat to the purchaser in the longer term.[8]

Given the post-merger success of high-profile digital targets such as Waze (acquired by Google) and Instagram (acquired by Facebook), regulators are left wondering whether these targets could have presented a real competitive threat in their now concentrated digital markets.[9]

A particularly striking theory of harm related to nascent competition is the 'killer acquisition'. In this scenario, which originally developed in pharmaceutical markets,[10] the dominant incumbent strategically acquires a nascent rival with the

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5 Rod Sims, 'Address to the International Competition Network Merger Workshop 2020' (Speech, International Competition Network Merger Workshop 2020, 27 February 2020) ('Sims ICN Speech 2020'). See also Rod Sims, 'ACCC 2021 Compliance and Enforcement Priorities' (Speech, Committee for Economic Development Australia, 23 February 2021) ('Sims CEDA Speech 2021').

6 See, eg, 'Vestager Speech' (n 1).

7 See, eg, Australian Competition and Consumer Commission, 'Digital Platforms Inquiry' (Final Report, June 2019) 8–9 ('DPI Final Report'); Stigler Center, 'Stigler Committee on Digital Platforms' (Final Report, 2019) 81 ('Stigler Report').

8 Competition and Markets Authority, Australian Competition and Consumer Commission, and Bundeskartellamt, 'Joint Statement on Merger Control Enforcement' (Statement, April 2021) 2 [8] ('Joint Statement on Merger Control Enforcement').

9 Digital Competition Expert Panel, 'Furman Report' (n 4) 91 [3.46], 92 [3.49]; Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 74–5, 80–1.

10 Colleen Cunningham, Florian Ederer and Song Ma, 'Killer Acquisitions' (2021) 129(3) *Journal of Political Economy* 649.

purpose of discontinuing the rival's potentially disruptive pipeline innovation.[11] Commentators have since applied a broader understanding of the 'killer acquisition' moniker to digital markets by extending it to theories where the dominant incumbent supresses competition by 'buy[ing] start-ups before they have a chance to grow',[12] regardless of whether the targets' innovations are 'killed off' completely.[13] Some have also used the term 'zombie acquisition' to describe the scenario where the acquirer does not discontinue the targets' projects, but leaves them underdeveloped.[14]

This concern was perhaps most prominently showcased in Facebook's acquisition of Instagram in 2012. In its Digital Platforms Inquiry Final Report, the ACCC claims that 'Facebook eliminated a potential competitor'.[15] This acquisition made headlines[16] when the United States ('US') House of Representatives Subcommittee on Antitrust examined communications between Facebook's Chief Executive Officer ('CEO') (Zuckerberg) and its Chief Financial Officer (Ebersman) about Facebook's plans to acquire Instagram. In an email to Ebersman, Zuckerberg acknowledged that '[Instagram is] nascent but the networks are established, the brands are already meaningful and if they grow to a large scale they could be very disruptive to [Facebook]'.[17] Ebersman also suggested that the acquisition could have both anti-competitive purposes (to 'neutralize a potential competitor') and pro-competitive purposes (to 'integrate [Instagram's] products with [Facebook's] in order to improve [Facebook's] service).[18]

Was Facebook's acquisition of Instagram a 'killer acquisition', or did it provide consumers with better services? Absent the acquisition, would Instagram still have

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11 *Pipeline innovations* are innovation projects that are still in development and not yet commercialised. See, eg, Chris Pike, 'Start-Ups, Killer Acquisitions and Merger Control: Background Note' (Background Note DAF/COMP(2020)5, Competition Committee, Organisation for Economic Co-operation and Development, 10–12 June 2020) 12 [27]; Cunningham, Ederer and Ma (n 10).

12 Contribution to Conference Discussion by Margrethe Vestager (Shaping Competition Policy in the Era of Digitisation Conference, 17 January 2019), quoted in Tristan Lécuyer, 'Digital Conglomerates and Killer Acquisitions: A Discussion of the Competitive Effects of Start-Up Acquisitions by Digital Platforms' [2020] (1) *Concurrences* 42, 42 [2].

13 Benoit d'Udekem, Divya Mathur and Marc Van Audenrode, 'Remember Stacker? Another Look at "Killer" Acquisitions in the Digital Economy' (2020) 2(2) *Antitrust Chronicle* 38, 42.

14 David Pérez de Lamo, 'Assessing "Killer Acquisitions": An Assets and Capabilities-Based View of the Start-Up' (2020) 2(2) *Antitrust Chronicle* 50, 51.

15 Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 80.

16 See, eg, David McCabe, 'Mark Zuckerberg Questioned under Oath in FTC Antitrust Inquiry', *The New York Times* (online, 20 August 2020) <www.nytimes.com/2020/08/20/technology/facebook-zuckerberg-ftc-questioned.html>; Tony Romm, Cat Zakrzewski and Rachel Lerman, 'House Investigation Faults Amazon, Apple, Facebook and Google for Engaging in Anti-Competitive Monopoly Tactics', *The Washington Post* (online, 7 October 2020) <www.washingtonpost.com/technology/2020/10/06/amazon-apple-facebook-google-congress/>.

17 Email from Mark Zuckerberg to David Ebersman, 27 February 2012 (23:41:03 PST) <https://judiciary.house.gov/uploadedfiles/0006322000063223.pdf>.

18 Email from David Ebersman to Mark Zuckerberg, 28 February 2012 (09:37:43 PST) <https://judiciary.house.gov/uploadedfiles/0006322000063223.pdf> ('Ebersman Email'); Email from Mark Zuckerberg to David Ebersman, 28 February 2012 (09:55:42 PST) <https://judiciary.house.gov/uploadedfiles/0006322000063223.pdf>.

attracted an Australian audience of over 10 million people[19] to present a significant competitive constraint on Facebook? Would Instagram have even existed without the prospect of being acquired by Facebook?

These questions are hard to answer *ex post*, and even harder to answer *ex ante* (before a regulatory decision is made). Facebook submitted to the ACCC Digital Platforms Inquiry that it 'is entirely speculative'[20] to assume that Instagram's current success implies that they would have formed a substantial competitive constraint on Facebook absent the acquisition. On the other hand, some argue that Facebook's willingness to pay USD715 million for Instagram, which had generated no pre-merger revenue, was an *ex ante* indication that Instagram would have become a vigorous competitor to Facebook absent the acquisition.[21] Conversely, this substantial valuation may have also reflected expected pro-competitive post-merger synergies, which were validated by Instagram's subsequent success.[22] Further, even if Facebook had intended to neutralise Instagram as a potential threat, it is unclear whether Facebook would face fewer long run competitive constraints, because as Ebersman argued, 'someone else will spring up immediately in [Instagram's] place'.[23]

Significant uncertainty confounds predictions of the future state of rapidly evolving digital markets.[24] In fact, uncertainty is a recurring theme in this article. Scholars are uncertain about the way in which digital start-up acquisitions might affect markets. There is also uncertainty in how different merger interventions might affect incumbents' and potential entrants' incentives to innovate. Section 50 of the *CCA* lacks the nuance necessary to properly deal with these uncertainties.

Indeed, regulators have recognised that these fundamental uncertainties complicate questions of how merger decision rules (which determine 'which mergers proceed and which should not')[25] should be designed to manage digital competition. This suggests that a merger control regime that relies on *ex ante* decision rules may not be sufficiently responsive to the unpredictable challenges that arise in digital markets. It is therefore valuable to characterise Australian merger control not only by the decision rules applied by courts and regulators, but also by the institutional structures that apply these rules. This article argues that much (but not all) of the broader governance architecture that gives effect to

19 Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 43.

20 Facebook Australia, Submission to Australian Competition and Consumer Commission, *Digital Platforms Inquiry* (3 March 2019) 46 <https://www.accc.gov.au/system/files/Facebook%20Australia%20%28March%202019%29.PDF>.

21 See Digital Competition Expert Panel, 'Furman Report' (n 4) 40 [1.111]; 'Stigler Report' (n 7) 88–9; Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 80.

22 See, eg, Competition and Markets Authority, 'Completed Acquisition by PayPal Holdings Inc of iZettle AB' (Final Report, 12 June 2019) <https://assets.publishing.service.gov.uk/media/5cffa74440f0b609601d0ffc/PP_iZ_final_report.pdf> ('Completed Acquisition by PayPal').

23 'Ebersman Email' (n 18).

24 'Vestager Speech' (n 1); Rod Sims, 'Address to the 2019 Competition Law Conference' (Speech, 2019 Competition Law Conference, 25 May 2019) <https://www.accc.gov.au/speech/address-to-the-2019-competition-law-conference> ('Sims Competition Law Conference Speech 2019').

25 Rod Sims, 'Tackling Market Power in the COVID-19 Era' (Speech, National Press Club, 21 October 2020) <https://www.accc.gov.au/speech/tackling-market-power-in-the-covid-19-era> ('Sims National Press Club Speech 2020'). Margrethe Vestager shared similar sentiments: 'Vestager Speech' (n 1).

section 50 constrains the ability of Australian merger institutions (including courts, tribunals and the ACCC) to appropriately manage radical uncertainty over time.[26]

This article is organised as follows. Part II examines the extent to which competitive concerns arising from the removal of nascent digital threats are supported by economic literature. Part III assesses the viability of nascent competition theories and the likely probative value of certain types of evidence in digital merger litigation. Part IV evaluates the efficacy of section 50 and its surrounding institutional architecture in addressing nascent competition concerns. It explores 'experimentalist governance' as a dynamic alternative to prevailing rule-based institutional structures. Experimentalist frameworks promise to allow regulators and market participants to iteratively develop remedies to competition issues as they evolve over time. This Part also assesses the extent to which Australia's existing merger regime facilitates experimentalism. Part V provides concluding remarks.

II ARE DIGITAL ACQUISITIONS OF NASCENT COMPETITORS HARMFUL?

Many commentators have argued that the lack of *ex ante* regulatory scrutiny and intervention in acquisitions of nascent digital competitors by dominant incumbents amounts to underenforcement.[27] However, this conclusion depends on whether these transactions could meaningfully harm the competitive process by generating durable market power for incumbents. The economic literature on the effects of start-up acquisitions on digital market power remains ambiguous.

Broadly, commentators have adopted one of two analytical models of competition in digital markets. The 'Arrowian' perspective argues that 'monopoly power acts as a strong disincentive to further innovation'.[28] Arrowian literature views incumbent market power as enduring and posits that the removal of potential competition would entrench this market power. The lack of any 'existential threat' to the incumbent from a potential entrant generates poor market outcomes, such as

26 'Radical uncertainty' is used in this article to describe environments where the set of future states of the world cannot be defined. This concept is explored in more detail in Part IV. See generally Frank H Knight, *Risk, Uncertainty and Profit* (Houghton Mifflin, 1921).

27 See, eg, Digital Competition Expert Panel, 'Furman Report' (n 4) 84 [3.5]; House of Representatives Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary, United States Congress, *Investigation of Competition in Digital Markets* (Report, October 2020) 391 ('*Subcommittee on Antitrust Report*'); 'Sims National Press Club Speech 2020' (n 25). See also 'Sims CEDA Speech 2021' (n 5), where Rod Sims argued that Australia's merger control regime is 'skewed towards clearance'.

28 Kenneth J Arrow, 'Economic Welfare and the Allocation of Resources to Invention' in National Bureau of Economic Research (ed), *The Rate and Direction of Inventive Activity: Economic and Social Factors* (Princeton University Press, 1962) 609, 620, quoted in Carl Shapiro, 'Competition and Innovation: Did Arrow Hit the Bull's Eye?' in Josh Lerner and Scott Stern (eds), *The Rate and Direction of Inventive Activity Revisited* (University of Chicago Press, 2012) 362.

lower quality products and low levels of innovation.[29] As the Chief Executive of the CMA recently argued, 'existing market dynamics … mean that the next great innovation cannot emerge'.[30]

Conversely, the 'Schumpeterian' view sees monopoly power as fragile. It argues that technology markets are subject to 'major paradigm shifts [which] frequently cause incumbents' positions to be completely overturned',[31] pressuring incumbents to innovate constantly to avoid being displaced by an innovative start-up. Regulators should therefore not be concerned about the removal of nascent competitors because incumbents remain subject to threats of effective entry and expansion (also known as 'dynamic competition').

'Removal of a nascent competitor' or 'killer acquisition' theories of harm are likely to emphasise Arrowian perspectives and downplay Schumpeterian models. Before examining how the Australian merger control regime may handle these novel theories of harm in dynamic digital contexts, it is beneficial to first establish the economic characteristics of the markets in which these theories intend to operate.

A Characteristics of Digital Markets

While the characteristics outlined in this section are typical of many digital markets, the strength of these characteristics are heterogenous across different markets. Therefore, while some digital mergers may be anti-competitive, others will be benign.

1 Multi-Sidedness and Network Effects

In the recent US Supreme Court case of *Ohio v American Express Co*,[32] the Court described a 'two-sided platform' as a 'platform [that] offers different products or services to two different groups who both depend on the platform to intermediate between them'. This description of two-sidedness (or generalising to any number of groups, multi-sidedness) applies to many digital products.[33] For example, Google Search is multi-sided because, by placing advertisements in search results, it allows advertisers to interact with individuals. These platforms

29 Kevin A Bryan and Erik Hovenkamp, 'Startup Acquisitions, Error Costs and Antitrust Policy' (2020) 87(2) *University of Chicago Law Review* 331, 349.

30 Andrea Coscelli, 'Digital Markets: Using Our Existing Tools and Emerging Thoughts on a New Regime' (Speech, Fordham Competition Law Institute Conference, 9 October 2020) <https://www.gov.uk/government/speeches/digital-markets-using-our-existing-tools-and-emerging-thoughts-on-a-new-regime> ('Coscelli Digital Markets Speech').

31 PA Geroski, 'Competition in Markets and Competition for Markets' (2003) 3(3) *Journal of Industry, Competition and Trade* 151, 156, quoting David J Teece, *Managing Intellectual Capital: Organizational, Strategic and Policy Dimensions* (Oxford University Press, 2000) 160–3.

32 585 US ___, slip op 2 (Thomas J) (2018).

33 For a recent survey on the economics of multi-sided platforms and their prominence in digital markets, see Juan Manuel Sanchez-Cartas and Gonzalo León, 'Multisided Platforms and Markets: A Survey of the Theoretical Literature' (2021) 35(2) *Journal of Economic Surveys* 452. There are also several reports that refer to multi-sidedness through a competition law lens: see, eg, 'Stigler Report' (n 7) 29; Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 60–5; Digital Competition Expert Panel, 'Furman Report' (n 4) 89 [3.27].

are typified by positive *network externalities*,[34] where the number of users on one side of the market increases the value of the platform to the same or another group of users. For example, the value of Facebook to individuals increases as more people join the platform because individuals value having more opportunities to connect with others. The value of Facebook to advertisers is also increasing in the number of people on the platform.

2 Economies of Scale and Scope

Large digital incumbents also enjoy very low marginal costs and can almost instantly distribute their products worldwide.[35] While digital platforms are not unique in displaying strong economies of scale, Crémer, Montjoye and Schweitzer's 'Competition Policy for the Digital Era' report argues that the digital economy 'pushes [scale economies] to the extreme'.[36]

Digital giants also often operate 'ecosystems' of complementary products.[37] For example, Google operates Google Search, YouTube, Google Maps and Motorola,[38] among other products. Google's scope allows it to accumulate diverse user data and improve its service offerings in ways that non-conglomerates cannot.[39]

3 Market Tipping

In digital platform markets, firms typically compete to establish *standards*. A standard is an interface around which products which are compatible with the standard can be developed. However, these products are not typically interoperable with other standards. Moreover, some platforms are characterised by extensive *single-homing* behaviour, where most users only adopt one standard in that market.[40]

Digital platform markets typified by strong network externalities and widespread single-homing behaviour are susceptible to *tipping*. A market is experiencing tipping when one firm's initial market advantage allows it to 'pull away' from its competitors.[41] When a digital market is in the process of tipping, it is unlikely to support multiple competing standards (competition *in the market*). Rather, firms intensely compete to win the entire market by establishing the sole 'winning' standard once the market has tipped (competition *for the market*).[42]

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34 See, eg, 'Stigler Report' (n 7) 29, 34, 38–9; Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 66–7; 'Lear Report' (n 2) 3–6; Digital Competition Expert Panel, 'Furman Report' (n 4) 35.

35 'Stigler Report' (n 7) 39.

36 Jacques Crémer, Yves-Alexandre de Montjoye and Heike Schweitzer, 'Competition Policy for the Digital Era' (Final Report, 2019) 20 ('Crémer Report').

37 Digital Competition Expert Panel, 'Furman Report' (n 4) 40 [1.106]–[1.108]; Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 73–89.

38 Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 75.

39 Digital Competition Expert Panel, 'Furman Report' (n 4) 32–5 [1.65]–[1.79]; 'Crémer Report' (n 36) 29; Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 73–89.

40 Geroski (n 31) 154; 'Stigler Report' (n 7) 42–3.

41 Lécuyer (n 12) 44 [11]. See also Digital Competition Expert Panel, 'Furman Report' (n 4) 88 [3.26].

42 Contribution to Panel Discussion by James Tierney (Tipping in Digital Platform Markets, 21 September 2020) 0:6:50–0:07:12, 0:08:12–0:08:20. See also Geroski (n 31) 153–7; Michael L Katz and Carl Shapiro, 'Systems Competition and Network Effects' (1994) 8(2) *Journal of Economic Perspectives* 93, 105.

B The Competitive Effects of the Removal of Nascent Digital Competitors Is Ambiguous

The 'nascent competition' theory posits that the removal of nascent competitors is harmful because their acquisition eliminates their possible development into vigorous competitors for the market. This creates durable market power for incumbents who lack incentives to generate innovations for consumers.[43]

However, the true durability of this market power is disputed. Schumpeterian commentators argue that, like in any other dynamic market, digital market power is quickly eroded by the frequent emergence of start-ups. Therefore, the removal of a single start-up should not substantially reduce the level of competition 'for the market'.[44] This ostensibly aligns with the ACCC's default position on the fragility of market power in technology markets: '[M]arkets that are characterised by rapid product innovation may be unstable such that increased market power gained through a merger is only transitory in nature'.[45]

Schumpeterian commentary maintains that barriers to entry are low as start-ups can rapidly deploy their innovations with limited investment,[46] leaving digital incumbents exposed to dynamic competitive threats. This perspective of competitive dynamics argues that incumbents may be upended by 'gales of creative destruction' that arise from fierce competition 'for the market',[47] which usurped once dominant technology companies such as MySpace and America Online.[48] Some argue that dominant digital incumbents such as Uber, Google and Facebook continue to innovate due to their exposure to dynamic competition, thereby *improving* consumer welfare.[49] For example, in 2018, Google spent approximately 15% of its global revenue on research and development.[50] Google has argued that

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43 Arrow (n 28) 620; Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 74–81.

44 Facebook's Chief Financial Officer (Ebersman) ostensibly adopted this perspective in an email to its CEO (Zuckerberg), suggesting that it would not be wise for Facebook to acquire Instagram for the purpose of 'neutraliz[ing] a potential competitor' because 'someone else will spring up immediately in their place': 'Ebersman Email' (n 18).

45 Australian Competition and Consumer Commission, 'Media Merger Guidelines 2017' (31 October 2017) 7 [48] <https://www.accc.gov.au/system/files/Media%20Merger%20Guidelines%202017_0.pdf> ('Media Merger Guidelines 2017'). See also Australian Competition and Consumer Commission, 'Merger Guidelines' (21 November 2008) 46 [7.54] <https://www.accc.gov.au/system/files/Merger%20guidelines%20-%20Final.PDF> ('Merger Guidelines 2008'); Australian Competition and Consumer Commission, 'Application for Authorisation Lodged by iHail in Respect of Joint Venture Arrangements between Taxi Companies and Other Participants in the Taxi Industry to Launch the iHail Smartphone Taxi Booking Application' (Determination, 22 March 2016) 47 [178] <https://www.accc.gov.au/system/files/public-registers/documents/D16%2B35596.pdf>.

46 Mats Holmström et al, 'Killer Acquisitions? The Debate on Merger Control for Digital Markets' (2018) *2018 Yearbook of the Finnish Competition Law Association*, 10.

47 Geroski (n 31) 156–7.

48 Nicolas Petit, 'Are "FANGs" Monopolies? A Theory of Competition under Uncertainty' (Working Paper, July 2019) 1; Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 78.

49 Robert Akerlof, Richard Holden and Luis Rayo, 'Network Externalities and Market Dominance' (2018) 2 <http://www.robertakerlof.com/download/ahr-networks-december-15-2018.pdf>; Google Australia, Submission to Australian Competition and Consumer Commission, *Digital Platforms Inquiry* (28 October 2018) 9. <https://www.accc.gov.au/system/files/Google%20Submission%202%20%28October%202018%29.pdf>; Facebook Australia (n 20) 44.

50 Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 73.

its investments in advertising technology were motivated directly by threats of innovative entrants.[51]

The ACCC Digital Platform Inquiry has, however, differentiated Facebook and Google from previous digital market leaders due to their unprecedented scale. It observes that Facebook's user base is now over 20 times that of MySpace at its peak.[52] Similarly, the Digital Competition Expert Panel's Unlocking Digital Competition report ('Furman Report') highlights that Google and Facebook have enjoyed market leadership for much longer periods of time than their predecessors, AltaVista and MySpace respectively, suggesting that the markets in which Google and Facebook operate are now 'tipped'.[53] Kwoka theorises that Google's and Facebook's strong network externalities and substantial scale economies heighten barriers to entry, affording them 'irreversible market place advantages'.[54] Indeed, the ACCC suggests that, unlike earlier digital market leaders that were competing 'for the market', Google's and Facebook's extensive network effects and scale insulates them from dynamic competition.[55]

This perspective is echoed in the ACCC's Media Merger Guidelines: 'Even if a market is dynamic and experiencing rapid technological innovation, if there are barriers [to expansion], the dynamic nature of the market will not necessarily overcome the competition concerns raised'.[56]

Further, unlike the Schumpeterian perspective which sees entry as commonplace, Geroski suggests nascent competitive threats are uniquely *scarce* in digital markets (and therefore warrant protection) because competition 'in the market' is qualitatively different to competition 'for the market'.[57] In competition 'in the market', new entrants can realise success by imitating incumbents' strategies and products. In contrast, in competition 'for the market', due to the extreme network externalities and scale economies of incumbents, an entrant that imitates an incumbent is unlikely to gain significant market share. For example, Google's attempt to imitate Facebook through Google+ was discontinued because users continued to single-home by using Facebook as the dominant incumbent.[58] Instead, successful entry typically requires *breakthrough* innovation to displace the incumbent and 'win' the market. Since it is more costly for a prospective entrant to innovate than to mimic existing competitors, competition 'for the market' is likely more fragile than competition 'in the market'.[59] Proponents for a rethinking of digital merger control therefore argue that regulators should place greater scrutiny

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51 Google Australia (n 49) 9.
52 Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 78.
53 Digital Competition Expert Panel, 'Furman Report' (n 4) 39 [1.100]–[1.101].
54 John E Kwoka Jr, Submission to the Senate Committee on the Judiciary Subcommittee on Antitrust, Competition Policy and Consumer Rights, United States Senate, *Does America Have a Monopoly Problem? Examining Concentration and Competition in the US Economy* (5 March 2019) 12 ('Kwoka Testimony'). See also 'Joint Statement on Merger Control Enforcement' (n 8) 3 [10].
55 Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 76–8.
56 Australian Competition and Consumer Commission, 'Media Merger Guidelines 2017' (n 45) 8 [51].
57 Geroski (n 31) 158–65.
58 'Lear Report' (n 2) 129.
59 Geroski (n 31) 163.

over mergers that remove the few innovative start-ups that provide competitive constraints to incumbents.[60]

Moreover, while the tipping phase generates short-term consumer benefits because it generates fierce competition 'for the market',[61] the Final Report of the Stigler Committee on Digital Platforms ('Stigler Report') maintains that the elimination of nascent threats curtails this tipping phase and produces tipped markets.[62] It argues that consumers are harmed because the market winner in a tipped market can reliably 'avoid [new rounds] of competition for the market', such that the market 'winner' may not be the most efficient firm in the long run.[63] Conversely, some scholars contend that regulators should not be concerned about durable market power in tipped markets. They argue that market tipping is efficient in removing 'duplication, … fragmentation and … uncertainty'.[64] Additionally, Akerlof, Holden and Rayo suggest that a dominant incumbent's market position remains fragile, even when network effects are strong.[65] This is illustrated by Zoom's recent usurping of Skype in the virtual conferencing market, which suggests that tipped markets can be easily 'untipp[ed]'.[66]

The heterogeneity of economic literature highlights that the question of whether the removal of nascent digital competitors is beneficial or anti-competitive remains largely unresolved.

C 'Killer' Incentives and Conglomerate Effects

The term 'killer acquisition' was first introduced to the lexicon by Cunningham, Ederer and Ma's empirical study, which conservatively estimated that 6% of acquisitions in the US pharmaceutical market were consummated solely to discontinue the target's pipeline innovations.[67] Theoretical economic models also suggest that market leaders have strong incentives to acquire potential entrants to entrench their market power.[68]

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60 See eg, Andrea Coscelli, 'Competition in the Digital Age: Reflecting on Digital Merger Investigations' (Speech, OECD/G7 Conference on Competition and the Digital Economy, 3 June 2019) <https://www.gov.uk/government/speeches/competition-in-the-digital-age-reflecting-on-digital-merger-investigations>.

61 Contribution to Panel Discussion by Nicholas Petit (Tipping in Digital Platform Markets, 21 September 2020) 0:39:40–0:40:06. See also the lecture slide at 0:42:20, which notes that 'fierce competition *for the market* takes place during the tipping phase' (emphasis added).

62 'Stigler Report' (n 7) 81.

63 Andrea Coscelli, 'Speech at GCR Live: Telecoms, Media and Technology 2020' (Speech, GCR Live TMT, 2 March 2020) <https://www.gov.uk/government/speeches/speech-at-gcr-live-telecoms-media-and-technology-2020> ('Coscelli GCR Speech').

64 Contribution to Panel Discussion by Nicholas Petit (Tipping in Digital Platform Markets, 21 September 2020) 0:40:25–0:40:53.

65 Akerlof, Holden and Rayo (n 49).

66 Contribution to Panel Discussion by Nicholas Petit (Tipping in Digital Platform Markets, 21 September 2020) 0:43:20–0:44:30.

67 Cunningham, Ederer and Ma (n 10) 649, 649.

68 Akerlof, Holden and Rayo (n 49); Kevin A Bryan and Erik Hovenkamp, 'Antitrust Limits on Startup Acquisitions' (2020) 56 *Review of Industrial Organisation* 615.

Some commentators conjecture that killer acquisitions are also prevalent in digital markets.[69] Pike suggests that killer acquisitions could be *more* prevalent in digital markets than in pharmaceuticals because the opaque product pipelines of digital start-ups may allow incumbents to thwart innovative efforts without being detected by regulators.[70] Others caution against extrapolating empirical results from the pharmaceuticals market to the digital sphere. They cite key differences between these markets including the lack of research and development or regulatory certifications needed to launch a digital product, the replicability of digital innovations and the erratic evolution of digital markets.[71]

The absence of observable product development pipelines in digital markets creates challenges for empiricists. One attempt at quantification by Gautier and Lamesch estimated that out of the 175 acquisitions made by Google, Amazon, Facebook, Apple and Microsoft in a three-year period, only one transaction was a possible 'killer acquisition'.[72] However, this study applies a rather narrow definition of 'killer acquisitions', excluding as possible 'killers' any acquisitions without a substantial overlap between the merger parties' core products, and any transactions where the acquired projects continue under the acquirer's branding. There is, however, a paucity of empirical estimates of the prevalence of 'killer acquisitions' when defined more generally to include situations where, for instance, there is no horizontal overlap at the time of the transaction because the incumbent pre-empts eventual horizontal competition. Hence the true threat of such acquisitions in digital markets remains highly uncertain.

Some argue that start-up innovations are typically mere complements to the incumbent's products. Hence such transactions are benign because they do not remove a current (or future) horizontal competitor.[73] The pro-competitive potential of such vertical and conglomerate mergers is well-established.[74] For example, Holmström and Roberts show that vertical integration can improve efficiency by removing hold-up.[75] Conglomerate digital mergers can improve product quality by, for example, combining search engine and mapping capabilities.

Indeed, the ACCC Merger Guidelines acknowledge that 'vertical and conglomerate mergers are generally less likely than horizontal mergers to raise competition concerns'.[76]

Some commentators warn that ostensibly vertical or conglomerate mergers raise horizontal concerns because the target's projects, which are currently

69 See especially Pike (n 11) 12 [27]. See also Digital Competition Expert Panel, 'Furman Report' (n 4) 45 [1.137]; Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 75.

70 Pike (n 11) 12 [27].

71 Holmström et al (n 46) 10. See also Digital Competition Expert Panel, 'Furman Report' (n 4) 49 [1.154].

72 Axel Gautier and Joe Lamesch, 'Mergers in the Digital Economy' (Working Paper No 8056, CESifo, January 2020) 1, 1.

73 See, eg, 'Crémer Report' (n 36) 117–8.

74 Digital Competition Expert Panel, 'Furman Report' (n 4) 90–1 [3.39].

75 Bengt Holmström and John Roberts, 'The Boundaries of the Firm Revisited' (1998) 12(4) *Journal of Economic Perspectives* 73, 74.

76 Australian Competition and Consumer Commission, 'Merger Guidelines 2008' (n 45) 22 [5.4].

complements to the incumbent's, may develop into substitutes in the future.[77] However, even if the digital start-up does not eventually compete horizontally with the incumbent, the non-horizontal merger may still present harms through *platform envelopment*.[78] This theory of harm posits that where the acquirer's and target's markets share a common user base, the acquirer can leverage its strong network effects in its original market to gain strong market power in the target's market by combining functionalities across both markets.[79] By creating a product ecosystem 'across multiple layers of value chains',[80] platform envelopment solidifies the acquirer's market power in its original market. Scholars have also posited that envelopment strategies may leave many adjacent markets susceptible to tipping,[81] and can generate harms by restricting interoperability, hence limiting competition and consumer choice in these markets.[82]

D Ambiguous Effects on Innovation Incentives

This section will analyse the effect of digital start-up acquisitions on market innovation, a key contributor to consumer welfare.[83] Clearly, 'killer acquisitions' limit consumer welfare because the acquirer's innovations never reach consumers. However, assuming that killer acquisitions are at most a mild problem, some commentators argue that acquisitions of start-ups by dominant incumbents improve innovation incentives in digital markets.

First, dominant incumbents may provide the business and technical capabilities necessary to develop and commercialise the start-up's innovations.[84] Second, it is argued that the prospect of acquisition spurs start-up activity, thereby improving market innovation.[85] Venture capitalists may perceive significant risks associated with start-up growth such as increased regulatory burdens or the uncertain success of initial public offerings. Hence the prospect of acquisition may incentivise investments in high-risk digital innovation.[86] This is supported by a 2019 study which found that 50% of surveyed start-ups had a long-term goal of being acquired.[87]

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77 Pike (n 11) 6 [10]–[11].

78 'Crémer Report' (n 36) 108.

79 Thomas Eisenmann, Geoffrey Parker and Marshall van Alstyne, 'Platform Envelopment' (2011) 32(12) *Strategic Management Journal* 1270; Lécuyer (n 12) 47 [30]–[32]; 'Crémer Report' (n 36) 112–13.

80 Digital Competition Expert Panel, 'Furman Report' (n 4) 40 [1.106], [1.108].

81 Contribution to Panel Discussion by David Sevy (Tipping in Digital Platform Markets, 21 September 2020) 0:21:15–0:21:40.

82 Holmström et al (n 46) 19.

83 See generally Paul M Romer, 'Endogenous Technological Change' 98(5) *Journal of Political Economy* S71. See also Yane Svetiev, 'Antitrust Governance: The New Wave of Antitrust' (2007) 38(3) *Loyola University of Chicago Law Journal* 593, 622 ('Antitrust Governance').

84 De Lamo (n 12) 52; Digital Competition Expert Panel, 'Furman Report' (n 4) 40 [1.110]–[1.111].

85 'Crémer Report' (n 36) 111; Digital Competition Expert Panel, 'Furman Report' (n 4) 49–50 [1.156]–[1.158], 97 [3.40]. But see Cunningham, Ederer and Ma (n 10) 695–6.

86 Kelly Fayne and Kate Foreman, 'To Catch a Killer: Could Enhanced Premerger Screening for "Killer Acquisitions" Hurt Competition?' (2020) 34(2) *Antitrust* 8, 10.

87 Ibid, citing Silicon Valley Bank, 'US Startup Outlook 2019: Key Insights from the Silicon Valley Bank Startup Outlook Survey' (Report, 2019) 7 <https://www.svb.com/startup-outlook-report-2019/us>.

Others posit that these acquisitions dampen, rather than enhance, *ex ante* incentives for innovative entry. The Stigler Report argues that such acquisitions, and the substantial barriers to entry that they solidify, deprive start-ups of the chance to win the entire market and its associated rents. The comparatively lower expected payoffs available to start-ups through acquisition diminishes *ex ante* entry incentives.[88]

Bryan and Hovenkamp contend that these acquisitions dynamically reduce and distort innovative entry incentives.[89] They suggest that market leaders have the greatest incentives to acquire innovations to foreclose rivals' access to these technologies which may otherwise allow them to 'catch up'.[90] Start-ups then distort their innovative efforts to maximise their chances of being acquired by the dominant incumbent (which has the highest willingness to pay for innovations), rather than to *win* the market. This distorted innovation effort detracts from consumer welfare.

These acquisitions of start-up technologies entrench the market leader's dominance and force laggards to exit the market. As the number of potential acquirers in the market falls, the dominant incumbent's willingness to pay for start-ups declines, leaving start-ups with low *ex ante* incentives to innovate in the long run.[91]

Finally, even an apparently pro-competitive acquisition where the start-up's projects are integrated into the incumbent's products may generate poor market outcomes if it is a 'reverse killer acquisition'. This novel theory of harm posits that because the acquirer has *purchased* an innovation, it no longer needs to *produce* innovations.[92] The resulting loss of parallel innovative effort is harmful because, as various scholars argue, multiple independent innovation efforts are more likely to develop a product that expands the 'quality frontier' than if the efforts were 'merged'.[93]

E Conclusions

Historically, digital start-ups have disproportionately been the source of breakthrough innovations.[94] These innovations substantially improve consumer welfare and may provide valuable competitive constraints to incumbents. However, a recent survey of economic literature found that 'we remain far from a general

88 'Stigler Report' (n 7) 76.

89 Bryan and Hovenkamp, 'Startup Acquisitions, Error Costs and Antitrust Policy' (n 29) 343–4.

90 Ibid 339–43.

91 Ibid 344–5.

92 Christina Caffarra, Gregory S Crawford and Tommaso Valleti, '"How Tech Rolls": Potential Competition and "Reverse" Killer Acquisitions' (2020) 2(2) *Antitrust Chronicle* 13, 15–16.

93 Ibid; Svetiev, 'Antitrust Governance' (n 83) 631, citing Jonathan B Bendor, *Parallel Systems: Redundancy in Government* (University of California Press, 1985) 79–80; Suraj Prasad and Marcus Tomaino, 'Resources and Culture in Organizations' (2020) 29(4) *Journal of Economics and Management* 854, 856. See also Bryan and Hovenkamp, 'Startup Acquisitions, Error Costs and Antitrust Policy' (n 29) 347.

94 William J Baumol, 'Education for Innovation: Entrepreneurial Breakthroughs vs Corporate Incremental Improvements' (Working Paper No 10478, National Bureau of Economic Research, June 2004) 36–7. See also Bryan and Hovenkamp, 'Startup Acquisitions, Error Costs and Antitrust Policy' (n 29) 346–7.

theory of innovation competition'.[95] While the literature provides arguable theories of harm for regulators, it remains unclear whether acquisitions of nascent digital competitors by dominant incumbents generate consumer harms.

III NASCENT COMPETITION THEORIES AND AUSTRALIAN JURISPRUDENCE

Given the heterogeneity of digital markets, this Part will examine whether Australian triers of fact are capable of differentiating (*ex ante*) between anti-competitive and benign digital acquisitions. While Australian courts and tribunals have not yet dealt with a section 50 scenario where a dominant incumbent has acquired a nascent digital threat, future litigation of this variety is a real possibility. The ACCC has recently considered nascent digital competition concerns in coordination with overseas regulators in its investigations into the completed Facebook/Giphy[96] and Google/Fitbit acquisitions.[97] In fact, in its review of Google/Fitbit, the ACCC has ostensibly considered innovation issues and 'reverse killer acquisition' concerns.[98] Nascent competition issues will likely become more prevalent in Australia given the proliferation of merger activity in domestic digital markets, as highlighted by the completed MYOB/Greatsoft[99] (accounting software) and National Australia Bank/86 400 (digital banking) acquisitions.[100] The recent emergence of Australian start-ups

95 Richard Gilbert, 'Looking for Mr Schumpeter: Where Are We in the Competition Innovation Debate' (2006) 6 *Innovation Policy and the Economy* 159, 206.

96 Rod Sims, 'The ACCC's Digital Platforms Inquiry and the Need for Competition, Consumer Protection and Regulatory Responses' (Speech, Australia-Israel Chamber of Commerce (Western Australia, 6 August 2020) <https://www.accc.gov.au/speech/the-acccs-digital-platforms-inquiry-and-the-need-for-competition-consumer-protection-and-regulatory-responses>.

97 Australian Competition and Consumer Commission, 'Google LLC: Proposed Acquisition of Fitbit Inc' (Statement of Issues, 18 June 2020) <https://www.accc.gov.au/system/files/public-registers/documents/Google%20Fitbit%20-%20Statement%20of%20Issues%20-%2018%20June%202020.pdf>. The ACCC noted on its public informal merger reviews register that '[a]s the transaction completed on 14 January 2021, before the ACCC had finished its investigation, this matter [had] become an enforcement investigation of a completed merger [as at 15 January 2021]': 'Google LLC Proposed Acquisition of Fitbit Inc', *Australian Competition and Consumer Commission* (Web Page, 2021) <https://www.accc.gov.au/public-registers/mergers-registers/public-informal-merger-reviews/google-llc-proposed-acquisition-of-fitbit-inc>.

98 Ibid 24 [142]–[144].

99 Australian Competition and Consumer Commission, 'MYOB: Proposed Acquisition of GreatSoft' (Statement of Issues, 11 February 2021). The ACCC announced that it would not oppose the proposed acquisition on 16 April 2021: Australian Competition and Consumer Commission, 'MYOB's Acquisition of GreatSoft Not Opposed' (Media Release, 16 April 2021) <https://www.accc.gov.au/media-release/myobs-acquisition-of-greatsoft-not-opposed>. <https://www.accc.gov.au/system/files/public-registers/documents/MYOB%20GreatSoft%20-%20Statement%20of%20Issues.pdf>.

100 Request for Submissions Letter on National Australia Bank's Proposed Acquisition of 86 400 from Australian Competition and Consumer Commission to Interested Parties, 29 January 2021 <https://www.accc.gov.au/system/files/public-registers/documents/NAB%2086400%20-%20Market%20Inquiries%20Letter.pdf>. The ACCC announced that it would not oppose the proposed acquisition on 30 March 2021: Australian Competition and Consumer Commission, 'NAB's Acquisition of 86 400 Not Opposed' (Media Release, 30 March 2021) <https://www.accc.gov.au/media-release/nabs-acquisition-of-86-400-not-opposed>.

that have grown into tech 'unicorns'[101] may catalyse the development of a uniquely Australian jurisprudence on nascent digital competition. An examination of both domestic and overseas merger decisions may reveal the extent to which Australian courts will entertain these novel theories of harm.

A Orthodox Judicial Interpretation of Section 50[102]

Relevantly, section 50(1) of the *CCA*[103] prohibits acquisitions by corporations of shares or assets if the acquisition 'would have the effect, or be likely to have the effect, of substantially lessening competition in any market'. Ordinarily, the ACCC investigates proposed acquisitions through its informal review process and indicates whether it intends to seek an injunction to prevent the transaction from proceeding because it considers the transaction likely to contravene section 50. There are two main routes for the matter to reach the Federal Court of Australia:

(i) The merger parties apply to the Federal Court for a declaration of non-contravention of section 50; or
(ii) The ACCC seeks an injunction,[104] divestiture order[105] or other remedy[106] from the Federal Court.

In either case, the applicant has the burden of proving or negativing[107] the fact that the acquisition 'would have the effect, or be likely to have the effect of substantially lessening competition in a market'.[108]

1 Standard of Proof

In *Vodafone Hutchison Australia Pty Ltd v Australian Competition and Consumer Commission* ('*Vodafone*'),[109] Middleton J briefly noted that an applicant must prove its section 50 case to the 'balance of probabilities' standard provided by the *Evidence Act 1995* (Cth) ('*Evidence Act*')[110] and the *Briginshaw* principles. The *Briginshaw* principles require courts to reach an 'actual persuasion'[111] that

101 StartupAUS, 'Crossroads: An Action Plan to Develop a World-Leading Tech Startup Ecosystem in Australia' (Report, 2020) 68–9.
102 See generally Ruth CA Higgins 'Section 50: Still Working after All These Years' (2020) 27 *Competition and Consumer Law Journal* 88, which provides a good overview of the contemporary operation of section 50.
103 *Competition and Consumer Act 2010* (Cth) s 50(1).
104 Ibid s 80.
105 Ibid s 81.
106 Ibid ss 79, 82.
107 See, eg, *Australian Gas Light Co v Australian Competition and Consumer Competition* (2003) 137 FCR 317, 420 [355]–[356] (French J) ('*AGL*'); *Vodafone Hutchison Australia Pty Ltd v Australian Competition and Consumer Commission* [2020] FCA 117, [214] (Middleton J) ('*Vodafone*'). See also *Australian Competition and Consumer Commission v Pacific National Pty Ltd* (2020) 277 FCR 49, 156–7 [386] (Perram J) ('*Pacific National II*').
108 *Competition and Consumer Act 2010* (Cth) s 50(1).
109 [2020] FCA 117, [68] (Middleton J). See also *Briginshaw v Briginshaw* (1938) 60 CLR 336 ('*Briginshaw*').
110 *Evidence Act 1995* (Cth) s 140 ('*Evidence Act*').
111 *Briginshaw* (1938) 60 CLR 336, 361–2 (Dixon J).

the applicant's case is made out. The standard is not achieved through a 'mere mechanical comparison of probabilities'.[112]

The precise meaning of 'balance of probabilities' has not been disputed in recent section 50 litigation. Part IV(A) of this article will provide a more focused analysis of how this standard might apply distinctly in *digital* merger litigation.

2 The Fact to Be Proven

Section 50 offers two alternatives to establish a contravention – either the acquisition 'would have the effect' or is 'likely to have the effect' of substantially lessening competition.[113]

It is uncontroversial that 'would have the effect' requires the applicant to prove on the balance of probabilities that the transaction will (or will not) substantially lessen competition.[114] In *Australian Competition and Consumer Commission v Pacific National Pty Ltd [No 2]* ('*Pacific National I*'),[115] the Federal Court clarified that 'likely to have the effect' requires the ACCC to prove, on the balance of probabilities, that the transaction has a 'real chance' of substantially lessening competition.[116] Courts have interpreted 'real chance' as a 'meaningful' or 'commercially relevant' chance.[117] This test is a 'single evaluative judgement',[118] where an applicant need not prove any hypothetical on the balance of probabilities.[119]

A section 50(1) contravention requires the impugned lessening of competition to be '*substantial*'. This requires the competitive harm to be 'meaningful … to the competitive process', rather than a 'short term effect readily corrected by market processes'.[120] Therefore, a successful claim requires the court to accept that competitive harms are *durable*. The discussion in Part II suggests that the ACCC may have difficulty demonstrating this in relation to digital start-up acquisitions.

Finally, in all section 50 cases in the last two decades,[121] the Federal Court has explained its understanding of 'competition' by citing *Re Queensland Co-operative Milling Association Ltd* ('*QCMA*').[122] 'Competition' has been described as a

112 Ibid.

113 *Competition and Consumer Act 2010* (Cth) s 50(1).

114 Daniel McCracken-Hewson, 'How Likely is "Likely"? Metcash, Counterfactuals and Proof under s 50' (2012) 40(5) *Australian Business Law Review* 363, 364, quoting *AGL* (2003) 137 FCR 317, 417–18 [352] (French J). See also *Australian Competition and Consumer Commission v Metcash Trading Ltd* (2011) 198 FCR 297, 308 [40] (Buchanan J) ('*Metcash*').

115 [2019] FCA 669 ('*Pacific National I*').

116 Ibid [1266], [1277]–[1279] (Beach J).

117 *Vodafone* [2020] FCA 117, 324 [10] (Middleton J); *AGL* (2003) 137 FCR 317, 416–17 [348] (French J), citing *Rural Press Ltd v Australian Competition and Consumer Commission* (2003) 216 CLR 53, 71 [41] (Gummow, Hayne and Heydon JJ).

118 *Vodafone* [2020] FCA 117, [65] (Middleton J). See also *Pacific National I* [2019] FCA 669, [1277] (Beach J); *Metcash* (2011) 198 FCR 297, 341 [227] (Yates J).

119 See, eg, *Pacific National II* (2020) 277 FCR 49, 109 [216] (Middleton and O'Bryan JJ).

120 *Pacific National I* [2019] FCA 669, [1262] (Beach J), quoted in *Vodafone* [2020] FCA 117, [49] (Middleton J).

121 *AGL* (2003) 137 FCR 317, 440 [427] (French J); *Metcash* (2011) 198 FCR 297, 345 [250] (Yates J); *Vodafone* [2020] FCA 117, [48] (Middleton J); *Pacific National II* (2020) 277 FCR 49, 73–4 [100] (Middleton and O'Bryan JJ).

122 (1976) 25 FLR 169, 187–8 (Woodward J, Member Shipton and Prof Brunt) ('*QCMA*').

'dynamic process'[123] that creates 'rivalrous behaviour'.[124] This view of competition as dynamic is embedded in the current formulation of the *CCA* which requires courts to consider the 'dynamic characteristics of the market, including growth, innovation and product differentiation'.[125] While this understanding of competition ostensibly accommodates the rapid evolution of digital markets, it remains unclear how federal courts will deal with temporal trade-offs that may frequently arise in these markets. For example, a digital acquisition may improve short run market innovation by accelerating the growth of a technology start-up, but may also heighten long run barriers to entry resulting in lower innovation and higher prices.

B Counterfactual Analysis

In assessing whether the transaction has *caused* a substantial lessening of competition, courts will compare the future state of the market with the merger (the 'factual') and without the merger (the 'counterfactual').[126] In an *ex ante* merger review, this forward-looking test requires proof of two hypothetical future states. This arguably invites more uncertainty than other areas of litigation that require proof of causation.[127] For example, to establish a causation in tort, the plaintiff must only prove a single hypothetical state of the world where the impugned tortious act did not occur.[128] Further, Finkelstein argues that the forward-looking nature of counterfactual analysis itself introduces uncertainty because it requires applicants to prove their case based on 'predictions' and 'hypothetical conjecture'.[129] As Rod Sims highlighted in a recent speech,[130] this increased uncertainty inherent in *ex ante* merger analysis places heightened evidentiary requirements on applicants.

1 Courts Demand Cogent Factual Evidence of Harm, Not Merely Theoretical Evidence

To support a finding of a section 50(1) contravention, the applicant must show that the transaction in question has a 'real chance' of substantially lessening competition. In *AGL*, French J highlighted that a court's assessment of this chance 'cannot rest upon speculation or theory'[131] and must 'operate in the real world'.[132] In particular, his Honour noted that noted that section 50 'must not … expose

123 *Pacific National II* (2020) 277 FCR 49, 73–4 [100] (Middleton and O'Bryan JJ), quoting *QCMA* (1976) 25 FLR 169, 187–9 (Woodward J, Member Shipton and Prof Brunt).

124 *Vodafone* [2020] FCA 117, [48] (Middleton J), quoting *QCMA* (1976) 25 FLR 169, 188 (Woodward J, Member Shipton and Prof Brunt).

125 *Competition and Consumer Act 2010* (Cth) s 50(3)(g). This is also captured in the ACCC's Merger Guidelines: 'Merger Guidelines 2008' (n 45) 23 [5.11].

126 See, eg, *AGL* (2003) 137 FCR 317, 417 [352] (French J).

127 See, eg, McCracken-Hewson (n 114) 365.

128 Ibid. See also *Civil Liability Act 2002* (NSW) s 5D(1)(a).

129 Ray Finkelstein, 'What is Wrong with Mergers in the Federal Court' (2020) 27 *Competition and Consumer Law Journal* 79, 82–3.

130 'Sims CEDA Speech 2021' (n 5).

131 *AGL* (2003) 137 FCR 317, 416–17 [348].

132 Ibid.

acquiring corporations to a finding of contravention simply on the basis of … *economic theory alone*'.[133]

This assumption that economic theory is divorced from the real world is not entirely self-evident. Economic theory highlights commercial incentives generated by a particular market structure, and as Rod Sims explained in a recent speech, reflects 'business … conventional wisdom'.[134] Nonetheless, subsequent authorities have accepted that economic theory about the likely anti-competitive effects arising from a market's structure, without more, is not 'hard evidence'[135] that can support a finding of a contravention. Applicants must therefore rely on often contested facts to prove that the chance of a substantial lessening of competition is not merely speculative.

However, counterfactual analysis in dynamic digital markets involving nascent targets may be particularly speculative. When the relevant market is stable, the level of speculation required by counterfactual analysis is attenuated because litigants typically take the 'status quo' at the time of the transaction as the counterfactual,[136] leaving the applicant to prove only the factual. Yet, this assumption is generally inappropriate for assessments of digital acquisitions of nascent competitors. First, the rapid evolution of digital markets means that the relevant future is likely dissimilar to prevailing market conditions at the time of the transaction.[137] Second, the ACCC is likely to allege a counterfactual where the nascent target would have entered the incumbent's market absent the merger to provide a substantial competitive constraint which did not exist at the time of the transaction.[138] Hence merger analysis involving nascent digital competitors typically invites additional uncertainty because it generally requires the ACCC to prove *both* the factual and counterfactual.

Additionally, hypothetical futures for transactions involving nascent targets are inherently more uncertain than mergers involving established targets. As the plurality stated in *Pacific National II*:

> Most markets have a history from which an assessment of substitution possibilities, concentration, barriers to entry and other commercial behaviours and conditions can be undertaken and reliable predictions about the future can be made.[139]

Hence, even when the alleged competitor has not yet entered the relevant market, if the market evolves predictably and the potential entrant is well-established in an adjacent market, reasonable predictions can be formed about the future of

133 Ibid (emphasis added).

134 Rod Sims, 'Keynote Address: RBB Economics Conference' (Speech, RBB Economics Conference 2016, 27 October 2016) <https://www.accc.gov.au/speech/keynote-address-rbb-economics-conference-0> ('Sims RBB Economics Conference Speech').

135 *Pacific National I* [2019] FCA 669, [613] (Beach J).

136 Australian Competition and Consumer Commission, 'Merger Guidelines 2008' (n 45) 11 [3.17].

137 Digital Competition Expert Panel, 'Furman Report' (n 4) 41 [1.115]; Bryan and Hovenkamp, 'Startup Acquisitions, Error Costs and Antitrust Policy' (n 29) 333; Bruce Hoffman, Submission to Committee on the Judiciary, Subcommittee on Antitrust, Competition Policy and Consumer Rights, United States Senate, *Competition in Digital Technology Markets: Examining Acquisitions of Nascent or Potential Competitors by Digital Platforms* (24 September 2019).

138 Australian Competition and Consumer Commission, 'Merger Guidelines 2008' (n 45) 11 [3.18].

139 *Pacific National II* (2020) 277 FCR 49, 110 [218] (Middleton and O'Bryan JJ).

the relevant market. For example, in *Vodafone*,[140] the ACCC (unsuccessfully) alleged a counterfactual where TPG would enter the mobile network operations ('MNO') market by rolling out a mobile network within the next five years. In this counterfactual, the ACCC submitted that TPG would likely be a 'vigorous and effective competitor for price-sensitive customers in metropolitan areas' in the MNO market based on its history of 'aggressive pricing' and 'innovative retail products' as a mobile virtual network operator.[141]

However, the Full Court's reliance on historical market trends is uniquely problematic for nascent digital competition analysis. First, unlike TPG, start-up targets may have little relevant history in *any* market. In its early stages, a digital start-up may attract little or no revenue while focusing on expanding its user base to attract strong network externalities.[142] In an industry with great heterogeneity in start-up growth trajectories, reliable counterfactuals can hardly be drawn from a start-up's early stages of development.[143] These unpredictable growth trajectories magnify the uncertainty inherent in digital counterfactual analysis. As the Furman Report notes, '[i]t is impossible to … predict how [future technologies] might affect current incumbents'.[144] Economists have also noted that the network effects which typify digital markets create multiple equilibria such that current analytical tools cannot reliably predict the future dynamic path that a digital market may take.[145]

Second, as digital markets are characterised by 'innovative' and abrupt entry, market responses to 'the history of entry to and exit from the market'[146] hardly inform a prediction of how the market will respond to an innovative product. It is challenging to identify a potential entrant that is 'just around the corner',[147] and equally difficult to characterise innovative barriers to entry with any certainty.[148] Commentators have therefore described counterfactual analysis involving digital start-ups as 'hopelessly speculative'.[149] Given courts' expectations of detailed evidence, plaintiffs would face almost insurmountable obstacles to satisfying the 'real chance' factual requirement.

Moreover, at the time of the proposed acquisition, there may be little or no horizontal overlap between the target and the incumbent's core business. While the competition regulator would allege a counterfactual where a horizontal overlap will eventually emerge, the director of the Bureau of Competition at the Federal Trade Commission ('FTC') highlighted that courts are often sceptical of such

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140 [2020] FCA 117.

141 Ibid [195] (Middleton J).

142 Pike (n 11) 8 [20]; De Lamo (n 14) 53, citing 'Crémer Report' (n 36) 116.

143 'Sims ICN Speech 2020' (n 5); 'Coscelli GCR Speech' (n 63).

144 Digital Competition Expert Panel, 'Furman Report' (n 4) 41 [1.115].

145 Akerlof, Holden and Rayo (n 49); Petit (n 48) 19.

146 *Pacific National II* (2020) 277 FCR 49, 122 [262] (Middleton and O'Bryan JJ).

147 Geroski (n 31) 160.

148 Ibid.

149 Pike (n 11) 17 [50]. Additionally, Svetiev observes that the competitive effects of a proposed acquisition can be 'difficult to establish for … agencies on the balance of probabilities, especially where the presently observable effects are ambiguous, in light of the complex analysis of factual analysis and the need for economic interpretation': Yane Svetiev, *Experimentalist Competition Law and the Regulation of Markets* (Hart Publishing, 2020) 132 ('*Experimentalist Competition Law*').

predictions.[150] Competition authorities may alternatively present the non-horizontal theories of harm outlined in Part II(C). Some recognise, however, that courts are frequently 'hostile' towards these non-horizontal theories.[151]

C Australian Merger Law May Carry Implicit Assumptions about Markets Which Undermine Nascent Competition Theories

The Stigler Report argues that many US judges continue to cite and apply 'outdated Chicago School publications of the 1970s and 1980s', even in relation to digital markets,[152] and 'appear … inhospitable to new learning'.[153] The Chicago School posits that barriers to entry are often overstated and an incumbent's market power tends to erode over time as its supernormal profits attract new entry.[154] Chicagoan logic therefore places great confidence in the ability of markets to produce competitive outcomes without regulatory intervention. This section explores the degree to which Australian jurisprudence exhibits Chicagoan thinking, and the extent to which this represents an obstacle to the ACCC's success in pursuing a nascent digital competition theory of harm.

In the mergers section of its Digital Platforms Inquiry Final Report, the ACCC asserted: 'Recent cases also suggest that there can be undue confidence placed by the Tribunal and the courts in the ability of *market forces* … to overcome increased barriers caused by an acquisition'.[155]

However, recent merger cases[156] reveal little *explicit* reliance by Australian courts or Tribunals on market forces to correct issues of excess market power. For example, in *Vodafone* and *Pacific National II*, the ACCC's case failed because it did not prove to the requisite standard that market entry (by TPG, Qube or any other entity) was likely in the counterfactual.[157] Similarly, in *Metcash*, the ACCC's case failed because the court disagreed with the ACCC's market definition and found that its 'alternative buyer' counterfactual was unlikely.[158] These cases appeared to turn on the credibility of the ACCC's counterfactual analysis, rather than on any question of market power or barriers to entry.

Moreover, in *Pacific National I*, Beach J impliedly *rejected* Chicagoan logic. His Honour doubted the Chicagoan assumption of low entry barriers, highlighting

150 Hoffman (n 137) 11.

151 Bryan and Hovenkamp, 'Startup Acquisitions, Error Costs and Antitrust Policy' (n 29) 348. See also *AGL* (2003) 137 FCR 317; *Pacific National II* (2020) 277 FCR 49. See generally Paul McLachlan, 'Vertical Merger Analysis in the United States, Europe and Australia' (2015) 23(1) *Australian Journal of Competition and Consumer Law* 17, 33–5.

152 'Stigler Report' (n 7) 91, 93.

153 Ibid 31.

154 See generally Bryan and Hovenkamp, 'Startup Acquisitions, Error Costs and Antitrust Policy' (n 29) 335–6; 'Stigler Report' (n 7) 80–1.

155 Australian Competition and Consumer Commission, 'DPI Final Report' (n 7) 108 (emphasis added).

156 *Vodafone* [2020] FCA 117; *Pacific National I* [2019] FCA 669; *Pacific National II* (2020) 277 FCR 49; *Metcash* (2011) 198 FCR 297; *AGL* (2003) 137 FCR 317; *Re Tabcorp Holdings Ltd* [2017] ACompT 5 ('*Tabcorp Authorisation*').

157 *Vodafone* [2020] FCA 117, [214] (Middleton J); *Pacific National II* (2020) 277 FCR 49, 122 [263] (Middleton and O'Bryan JJ).

158 *Metcash* (2011) 198 FCR 297, 343 [237] (Yates J).

that 'the utility of the contestable market model has been queried'.[159] His Honour also recognised the limitations of market forces in eroding monopoly power, noting that 'a medium to long term effect not easily corrected [by market processes] may amount to a substantial lessening of competition'.[160]

Significantly, in *AGL*, the ACCC's theory of harm partially turned on whether Loy Yang (an electricity generator) possessed market power and would have an incentive to use this market power to foreclose rivals following its acquisition by Australian Gas Light (a retailer).[161] To the contrary, the Court suggested that Loy Yang's market power in the electricity spot market was at most transient because its ability to raise prices would be 'quickly eroded' by new entry.[162] The Court reasoned that there was no substantial lessening of competition because barriers to entry to both the generation and retail markets remained low. Since the Court's finding of low barriers to entry was supported by cogent evidence of historical market entry,[163] the extent to which Chicagoan ideologies affected the Court's decision-making is unclear.

While courts have generally not explicitly applied Chicagoan logic in merger cases, their reluctance to accept theoretical or structural arguments in these cases suggests an implicit judicial bias towards non-intervention, aligning with the Chicagoan view that consolidations are generally benign.[164] Some scholars argue that contemporary Australian merger law continues to be influenced by Chicagoan thinking which was dominant during the early development of section 50.[165] For example, from 1977–92, section 50 was only triggered where the acquirer would be in 'a position to dominate or control a market'.[166] This test assumes that markets are self-correcting so long as they are not controlled by monopolies. While section 50 has since changed to a 'substantial lessening of competition' test,[167] as explored in Part IV(A), the residual assumptions of the Chicago School which structurally underpin section 50 may produce a merger control regime which is inappropriate for a paradigm defined by dynamic digital markets.

A Chicagoan view of markets is perhaps more evident in non-merger cases. In *Boral Besser Masonry Ltd v Australian Competition and Consumer Commission* ('*Boral*'),[168] the ACCC alleged that Boral had contravened section 46 (misuse of market power prohibition) by supplying concrete products below cost, thereby

159 *Pacific National I* [2019] FCA 669, [130].
160 Ibid [1262], cited in *Vodafone* [2020] FCA 117, [70] (Middleton J).
161 *AGL* (2003) 137 FCR 317, 323 [7] (French J).
162 Ibid 474–5 [548] (French J).
163 Ibid 430–1 [391] (French J).
164 Adam Triggs and Andrew Leigh, 'A Giant Problem: The Influence of the Chicago School on Australian Competition Law, Economic Dynamism and Inequality' (2019) 47(4) *Federal Law Review* 696, 709.
165 See generally Maxine Rich, '"Sons of Uncle Sam: Have They Grown Up in His Image?": A Comparative Analysis of the Merger Laws and Policies of Australia and the European Union in the Context of US Antitrust Theory' (1994) 17 *University of New South Wales Law Journal* 109.
166 *Trade Practices Act 1974* (Cth) s 50, as amended by *Trade Practices Legislation Amendment Act 1977* (Cth) s 27 and later amended by *Trade Practices Legislation Amendment Act 1992* (Cth) s 6.
167 *Trade Practices Legislation Amendment Act 1992* (Cth) s 6, amending *Trade Practices Act 1974* (Cth) s 50, as enacted.
168 (2003) 215 CLR 374 ('*Boral*').

driving existing competitors out of the market and deterring potential entrants. The majority held that Boral had not breached section 46 because it did not have substantial market power, and even if it did, it did not 'take advantage' of that market power (as required by section 46 at the time). McHugh J's judgment imported the 'recoupment test' from US jurisprudence. This test posits that the firm's ability to raise prices to recoup losses suffered during a 'predatory pricing' phase is a 'necessary element of a "predatory pricing" claim'.[169] His Honour argued that without recoupment, 'predatory prices lower aggregate prices … and consumer welfare is enhanced',[170] thereby reasoning that Boral could not be 'taking advantage' of its market power by simply price-cutting.[171] Recoupment theory implicitly rejects the effectiveness of strategic barriers to entry created by predatory pricing, and as one commentator argued, represents 'a deference to the self-regulating capabilities of the market'[172] and an adoption of Chicagoan ideologies. While recoupment has since been legislatively rejected,[173] this case suggests the possibility that Chicagoan judicial thinking from section 46 cases may spill over into section 50 analysis.

D The Use of Richer Evidence Sources Is Unlikely to Overcome the Structural Barriers to a Finding of a Section 50 Contravention

In a recent speech, Rod Sims noted that the ACCC 'needed to improve the evidence it presents' in merger cases.[174] Sims recently added that the ACCC's cases have often been criticised for being '"theoretical" and "speculative"'.[175] He has also noted that current merger regime is problematic,[176] in part because it forensically disadvantages the ACCC which lacks the same level of detailed industry knowledge possessed by merger parties.[177]

On the other hand, the CMA (which also applies a substantial lessening of competition standard) has maintained that UK merger legislation is fit for purpose.[178] To overcome the evidentiary challenges of counterfactual analysis in digital markets, the CMA has highlighted its strategy to use richer and more sophisticated analytical tools.[179]

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169 Ibid 464 [278].

170 Ibid 463 [275], quoting *Brooke Group Ltd v Brown & Williamson Tobacco Corp*, 509 US 209, 212 (Kennedy J) (1993).

171 *Boral* (2003) 215 CLR 374, 264–5 [280] (McHugh J).

172 Triggs and Leigh (n 164) 704, quoting Kathryn McMahon, 'Competition Law, Adjudication and the High Court' (2006) 30(3) *Melbourne University Law Review* 782, 820.

173 *Competition and Consumer Act 2010* (Cth) s 46(1AAA), later repealed by *Competition and Consumer Amendment (Misuse of Market Power) Act 2017* (Cth) sch 1 item 1.

174 Rod Sims, 'Address to the Law Council of Australia Competition Law Workshop 2019' (Speech, Law Council of Australia, Competition Law Workshop 2019, 30 August 2019) <https://www.accc.gov.au/speech/address-to-the-law-council-of-australia-competition-law-workshop-2019> ('Sims Competition Law Workshop Speech 2019').

175 'Sims National Press Club Speech 2020' (n 25).

176 'Sims Competition Law Workshop Speech 2019' (n 174); 'Sims National Press Club Speech 2020' (n 25).

177 'Sims RBB Economics Conference Speech' (n 134).

178 Letter from Andrea Coscelli to Alex Chisholm and Charles Roxburgh, 21 March 2019, 5 <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/890013/CMA_letter_to_BEIS_-_DCEP_report_and_recommendations__Redacted_.pdf>.

179 'Coscelli GCR Speech' (n 63).

This raises the following questions: does the ACCC simply need to use more advanced analytical tools to adapt to the novel challenges presented by digital mergers? Or does Australian merger law structurally prevent the ACCC from viably pursuing nascent competition theories in digital markets?

This section will argue that even if the ACCC could identify anti-competitive transactions *ex ante*, it would likely be unable to prove a section 50 contravention, even if its arguments are supported by 'richer' evidence sources.

1 Courts Are Sceptical of Technical Econometric Evidence

Commentators highlight that traditional static tools of merger analysis such as diversion and critical loss ratios measure the *present* competitive constraint imposed by rivals, but understate the *future* competitive threat presented by nascent digital start-ups.[180] Dynamic analytical tools which focus on innovation are incipient and not always well-understood by courts or litigants.[181]

While nuanced analytical models have recently been developed, as discussed in Part III(B), these models typically present multiple equilibria and cannot reliably predict the future state in which the market will settle.[182] There is also ambiguity as to which of several competing analytical models is most suitable for a particular market.[183] Due to this 'model uncertainty',[184] courts regularly reject technical modelling evidence in dynamic markets.[185] For example, in *Vodafone*, the Court heavily discounted financial modelling evidence because its predictions were too sensitive to speculative assumptions.[186] While *Vodafone* concerned a merger between two well-established companies, regulators would have even greater difficulty in presenting convincing econometric evidence to support nascent competition theories involving digital start-ups.

2 Courts Are Reluctant to Accept Internal Documents as Cogent Evidence of the Future of a Market

The CMA[187] and the Japan Fair Trade Commission[188] have signalled their increasing reliance on internal documentation to gain a clearer insight into the trajectory of the market, thereby reducing information asymmetry between

180 See, eg, Svetiev, *Experimentalist Competition Law* (n 149) 132; Bryan and Hovenkamp, 'Startup Acquisitions, Error Costs and Antitrust Policy' (n 29) 347; Digital Competition Expert Panel, 'Furman Report' (n 4) 119 [4.9]; 'Stigler Report' (n 7) 17.

181 'Stigler Report' (n 7) 91.

182 Matthew Jennejohn, 'Innovation and the Institutional Design of Merger Control' (2015) 41(1) *Journal of Corporation Law* 167, 191–2; Akerlof, Holden and Rayo (n 49).

183 Jennejohn (n 182) 191.

184 Ibid.

185 French J also rejected technical modelling evidence in *AGL* (2003) 137 FCR 317 as his Honour considered it incapable of predicting 'real world' outcomes: at 482 [566]. See also McLachlan (n 151) 34; Finkelstein (n 129) 83.

186 *Vodafone* [2020] FCA 117, [266] (Middleton J).

187 'Coscelli GCR Speech' (n 63).

188 Contribution to Panel Discussion by Reiko Aoki (Merger Working Group Plenary: Digital Mergers, International Competition Network 2020 Virtual Annual Conference, 15 September 2020).

regulators and merger parties. The CMA has previously analysed internal communications in its investigations of PayPal/iZettle and Illumina/PacBio.[189] Some suggest that these documents could uncover whether the merger parties believe that they will eventually compete horizontally or if there exists a killer acquisition rationale behind the proposed transaction.[190] Indeed, internal documents illuminated Facebook's intentions behind its acquisition of Instagram during the US Subcommittee on Antitrust's investigations.[191] However, section 50 is concerned only with the 'effect' or 'likely effect' of the proposed acquisition, rather than its purpose. Therefore, internal documents that reveal a 'killer acquisition' intent are only useful to the limited extent that they indicate the acquirer's belief that the target may grow into a future competitor for the market.[192]

Even where internal documents reveal planned entry in the counterfactual, Australian courts have indicated their reluctance to allow the ACCC to rely on this evidence in dynamic markets. In *Vodafone*, to show that TPG had plans to enter the MNO market in the counterfactual, the ACCC attempted to rely on a pre-merger statement made by TPG's board: '[l]ong-term, we have to be in the mobile space – the future is mobile'.[193] The ACCC argued that subsequent statements made by TPG's CEO (Teoh) which represented that TPG would not have entered absent the transaction were self-serving and inaccurate.

Middleton J heavily discounted the evidence of the board's statements for two reasons. First, his Honour ostensibly deferred to TPG's interpretations of these statements, noting that the commercial decision of whether TPG would enter the MNO's market was one for its board and that 'the ACCC will not be the entity rolling out the new mobile network'.[194] Second, Middleton J observed that the commercial landscape had changed significantly in the three years between when the board's statement was made and the proposed transaction date, justifying Teoh's change in position.[195] His Honour referred to specific occurrences in this period which radically altered TPG's market position, such as TPG's inability to be perceived as a market leader in 5G after its competitors had heavily advertised their 5G offerings.[196]

Vodafone illuminates difficulties that the ACCC may face in relying on evidence of a digital start-up's intentions to eventually compete horizontally with the acquirer's core business. In unpredictable and rapidly evolving digital markets, merger parties could likely readily reference specific intervening changes in market dynamics, leading courts to dismiss their commercial plans as

189 Competition and Markets Authority, 'Completed Acquisition by PayPal Holdings Inc of iZettle AB' (n 22); Competition and Markets Authority, 'Anticipated Acquisition by Illumina Inc of Pacific Biosciences of California Inc' (Issues Statement, 1 August 2020) <https://assets.publishing.service.gov.uk/media/5d41b98c40f0b60a8b2055ff/Illumina_Pacbio_issues_statement.pdf>.

190 'Coscelli GCR Speech' (n 63).

191 *Subcommittee on Antitrust Report* (n 27) 149–55.

192 Pike (n 11) 21 [61].

193 *Vodafone* [2020] FCA 117, [217] (Middleton J).

194 Ibid [22]. See also ibid [16].

195 Ibid [330].

196 Ibid [373]–[376].

provisional aspirations.[197] Moreover, courts may be sceptical of counterfactuals that rely heavily on the commercial predictions of market participants. Since firms are not omniscient,[198] their predictions about an entrant's prospects or the future state of the market need not be reliable or mainstream. For example, in *Vodafone*, Middleton J described Teoh as having a 'more informal and fluid approach' and an 'unconventional business style'.[199] The subjectivity and dynamism of business decision-making[200] therefore undermines the evidentiary value of internal documentation.

Further, if competition authorities appear to rely heavily on internal documents, merger parties may strategically distort their approaches to documentation in preparation for potential merger litigation. The ACCC has highlighted that submissions from merger parties often understate potentially anti-competitive concerns[201] and the European Commission recently fined Facebook for providing misleading information in its investigation of the Facebook/Whatsapp acquisition.[202] This historical behaviour suggests that merger parties will likely curate communications to ensure that internal documents are less useful than competition authorities may expect.

3 Transaction Valuations May Signal Potential Harm, but Are Not Sufficient Evidence of a Substantial Lessening of Competition

Several expert panels and regulators have emphasised that an acquirer's willingness to pay a substantial premium for low-turnover targets, far in excess of any expected post-merger synergies, may indicate the target's strong market potential in the counterfactual.[203] Such valuations may suggest the acquirer's intention to thwart a potential challenger for the market, thereby alerting regulators to a possible 'killer acquisition'.[204]

An analysis of acquisition valuations would typically require regulators to determine whether the value assigned by the merger parties to expected synergies are reasonable or bona fide.[205] However, it is empirically challenging for regulators, as outsiders to the deal, to disentangle the value of expected synergies from any anti-competitive premium, especially in dynamic markets.[206] Apparently high valuations may reflect genuine pro-competitive efficiencies which are idiosyncratic to the

197 See also ibid [22].
198 See Jennejohn (n 182) 195.
199 *Vodafone* [2020] FCA 117, [17].
200 See ibid [16] (Middleton J).
201 'Sims Competition Law Workshop Speech 2019' (n 174).
202 European Commission, 'Mergers: Commission Fines Facebook €110 Million for Providing Misleading Information about WhatsApp Takeover' (Media Release IP/17/1369, 18 May 2017) <https://ec.europa.eu/commission/presscorner/detail/en/IP_17_1369>.
203 Digital Competition Expert Panel, 'Furman Report' (n 4) 40 [1.111]; Pike (n 11) 25 [87]–[88]; 'Coscelli GCR Speech' (n 63).
204 See, eg, Pike (n 11) 25 [87]–[89]; 'Coscelli GCR Speech' (n 63).
205 Pike (n 11) 22–5. For an example of this approach, see also Competition and Markets Authority, 'Completed Acquisition by PayPal Holdings Inc of iZettle AB' (n 22) 38 [4.12]–[4.14].
206 Holmström et al (n 46) 15; Pike (n 11) 25 [87]–[88].

merger parties or reflect the target's strong negotiation position.[207] It is also not uncommon for digital incumbents to make speculative 'moon shot' acquisitions,[208] hence an incumbent's valuation of expected synergies may vastly differ from that of a regulator.

Additionally, even if a high transaction value successfully reveals that the incumbent *believes* that the start-up could grow into a competitive threat, a competition authority may nonetheless struggle to prove to the requisite standard that the start-up *would*, or *would likely*, grow into such a threat. As venture capitalists typically make losses on a third of investments,[209] an acquirer's predictions of a start-up's success cannot be relied upon.

E Overseas Experiences Provide Qualified Comfort that the ACCC Could Succeed in Digital Merger Litigation

While Australian courts and the ACCC have had little experience with nascent digital competition, the experiences of overseas merger regimes with nascent competition may inform the ACCC's prospects of success in pursuing similar theories of harm in Australian courts.

1 Illumina/PacBio

In 2019, the CMA made a reference for further investigation (Phase 2)[210] and the FTC lodged an administrative complaint[211] in relation to Illumina's proposed acquisition of Pacific Biosciences ('PacBio'). Both the CMA and FTC's actions were made pursuant to legislation which applies a similar 'substantial lessening of competition' standard to section 50.[212]

Illumina and PacBio supplied next-generation genome sequencing systems to similar customers – however, Illumina supplied short-read sequencing while PacBio supplied long-read sequencing. At the time of the proposed transaction, PacBio only had about 2% market share while Illumina had over 80% of the global market. Both the CMA and FTC raised similar concerns that this transaction 'could

207 Pike (n 11) 25 [88].

208 C Scott Hemphill and Tim Wu, 'Nascent Competitors' (2020) 167(7) *University of Pennsylvania Law Review* 1879, 1882; Oliver Latham, Isabel Tecu and Nikita Bagaria, 'Beyond Killer Acquisitions: Are There More Common Potential Competition Issues in Tech Deals and How Can These Be Assessed?' (2020) 2(2) *Antitrust Chronicle* 26, 35–6.

209 Kristen C Limarzi and Harry RS Phillips, '"Killer Acquisitions", Big Tech, and Section 2: A Solution in Search of a Problem' (2020) 2(2) *Antitrust Chronicle* 2, 9.

210 Competition and Markets Authority, 'Anticipated Acquisition by Illumina Inc of Pacific Biosciences of California Inc: Decision on Relevant Merger Situation and Substantial Lessening of Competition' (Decision No ME/6795/18, 18 June 2019) <https://assets.publishing.service.gov.uk/media/5d307b9ded915d2fe8096fb8/Illumina_PacBio_Full_textP1_Redacted.pdf > ('CMA Illumina/PacBio Decision').

211 Illumina Inc, 'Complaint', Submission in *Re Illumina Inc and Pacific Biosciences of California Inc*, Docket No 9387, 17 December 2019) ('FTC Illumina/PacBio Complaint').

212 *Enterprise Act 2002* (UK) s 33(1)(b); *Clayton Antitrust Act of 1914*, 15 USC § 18 (2002) ('*Clayton Act*'). Cf *Competition and Consumer Act 2010* (Cth) s 50. See generally Competition and Markets Authority, 'A Quick Guide to UK Merger Assessment' (Guide, March 2014) 5 [2.8] <https://www.gov.uk/government/publications/quick-guide-to-uk-merger-assessment> ('CMA Quick Guide').

be an opportunity for Illumina to eliminate a competitive threat'[213] because, despite its small market share, PacBio was 'poised to take increasing sequencing volume from Illumina in the future'.[214]

Echoing the characteristic challenges of digital merger assessments, a key point of contention was whether Illumina and PacBio were current and future complements or substitutes.[215] The CMA relied heavily on internal documents from the merger parties and third parties which indicated that PacBio could potentially develop into a strong competitive threat. It therefore concluded that there was a realistic prospect that the transaction would substantially lessen competition.[216] Illumina and PacBio subsequently abandoned the proposed transaction.[217]

Illumina/PacBio shares some characteristics with the digital merger scenario contemplated by this article. Next-generation genome sequencing is a dynamic and growing market typified by innovation, and to some extent, facilitates competition 'for the market'. However, as biotechnology product development pipelines are typically observable, the CMA and FTC broadly knew the patterns of innovation that would define the future state of the market. Therefore, the regulators' conclusions largely turned on whether Illumina and PacBio's products (both existing and forthcoming) that were known at the time of the acquisition were substitutable. Although the market was described as 'dynamic',[218] this dynamism is arguably significantly more predictable than the patterns of innovation which fundamentally reshape digital markets.

While Illumina/PacBio suggests that judiciaries may be receptive to nascent digital competition theories in relation to somewhat dynamic markets, it remains unclear whether courts would entertain these theories in relation to highly unpredictable digital markets where future products may not be known at the time of the acquisition. Further, as this merger was abandoned prior to litigation, it remains unclear whether such a theory of harm would withstand judicial scrutiny.

2 Mallinckrodt Complaint ('Mallinckrodt')

In 2017, the FTC lodged an administrative complaint alleging that Mallinckrodt's subsidiary (a monopolist in the US market for infantile anti-spasm drugs) violated section 2 of the *Sherman Act* by acquiring exclusive US rights to produce and sell a potential competitor drug.[219] Unlike section 50,[220] which broadly prohibits mergers that *substantially lessen competition*, section 2 of the *Sherman Act* prohibits

213 Competition and Markets Authority, 'CMA Illumina/PacBio Decision' (n 210) 6 [18].

214 Illumina Inc, 'FTC Illumina/PacBio Complaint' (n 210) 10 [68].

215 See generally Illumina Inc, *Response to Referral Decision* (1 August 2019) <https://www.gov.uk/cma-cases/illumina-inc-pacific-biosciences-of-california-inc-merger-inquiry#response-to-phase-1-decision>.

216 Competition and Markets Authority, 'CMA Illumina/PacBio Decision' (n 210) 1 [3], 6 [18].

217 'Illumina/PacBio Abandon Merger', *Competition and Markets Authority* (Web Page, 3 January 2020) <https://www.gov.uk/government/news/illumina-pacbio-abandon-merger>.

218 See, eg, Competition and Markets Authority, 'CMA Illumina/PacBio Decision' (n 210) 8 [32].

219 Federal Trade Commission, 'Complaint for Injunctive and Other Equitable Relief', Submission in *Federal Trade Commission v Mallinckrodt ARD Inc*, No. 1:17-cv-00120, 18 January 2017) ('Mallinckrodt Submission'); *Sherman Antitrust Act of 1890*, 15 USC § 2 (2004) ('*Sherman Act*').

220 *Competition and Consumer Act 2010* (Cth) s 50. Cf *Clayton Act* § 18.

monopolisation or attempted monopolisation. The FTC alleged that Mallinckrodt 'thwarted a nascent challenge' to its monopoly position.[221] Mallinckrodt agreed to settle the FTC's charges.[222]

Mallinckrodt shares similar limitations to Illumina/PacBio, in that unlike in many digital start-up acquisitions, the nascent competitor's potentially disruptive products are *known*. However, *Mallinckrodt* presents a potentially promising alternative path for digital merger litigation, where merger concerns are reframed as 'misuse of market power' concerns. Indeed, the ACCC has recently expressed interest in 'tools beyond … traditional merger tools to challenge … cases involving the acquisition of nascent competitors … [including the] monopolisation provisions, which the [FTC] has recently used'.[223]

The analogous provision in the *CCA* is section 46,[224] where the 'conduct' in question is a merger or a series of mergers. This section has not yet been invoked in relation to merger conduct in Australian litigation. The forensic advantage of section 46 over section 50 is that the applicant need not show that the merger has the '*effect*, or [likely effect] of substantially lessening competition',[225] which can be exceedingly challenging in nascent digital competition cases. The applicant may instead show that the conduct had the '*purpose* … of substantially lessening competition'.[226] This could ostensibly be achieved through, for instance, evidence of internal documents (notwithstanding the evidentiary shortcomings of internal documents discussed in Part III(D)). However, section 46 would be restricted in application to a small subset of digital mergers where the acquirer has 'substantial market power'.[227] Furthermore, Australian courts may be reluctant to allow section 46 and its notions of 'dominance' to be used in merger assessments, given section 50's explicit rejection of a 'dominance' standard following the 1992 amendments to the *CCA*.[228]

A detailed analysis of the viability of section 46 'merger conduct' claims is beyond the scope of this article, which aims to evaluate the efficacy of section 50 in addressing nascent digital competition concerns.[229]

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221 Federal Trade Commission, 'Mallinckrodt Submission' (n 219) 12 [50].

222 Federal Trade Commission, 'Mallinckrodt Will Pay $100 Million to Settle FTC, State Charges It Illegally Maintained Its Monopoly of Specialty Drug Used to Treat Infants' (Media Release, 18 January 2017) <https://www.ftc.gov/news-events/press-releases/2017/01/mallinckrodt-will-pay-100-million-settle-ftc-state-charges-it>.

223 'Sims ICN Speech 2020' (n 5).

224 *Competition and Consumer Act 2010* (Cth) s 46.

225 Ibid s 50(1) (emphasis added).

226 Ibid s 46(1) (emphasis added).

227 Ibid.

228 *Trade Practices Legislation Amendment Act 1992* (Cth) s 6, amending *Trade Practices Act* 1974 (Cth) s 50, as enacted.

229 The viability of section 46 as a tool of digital merger control is examined in Dave Poddar, Michael Gvozdenovic and Joshua Sinn, 'Digital Platform Acquisitions: Anti-competitive Mergers or Misuses of Market Power' in Michael Gvozdenovic and Stephen Puttick (eds), *Current Issues in Competition Law: Context and Interpretation* (Federation Press, forthcoming).

3 Lessons for Australia

On their surface, the success of overseas 'nascent competition' claims may suggest that the ACCC could succeed with a nascent digital competition theory in Australia. However, these cases have not yet tested the nascent competition theory against the extreme uncertainties inherent in digital start-up mergers. The viability of section 46 as an alternative to section 50 in relation to digital mergers where the acquirer has 'substantial market power' remains uncertain.

F Conclusions

It appears enormously challenging for the ACCC to succeed using a nascent digital competition theory of harm, given the prevailing judicial interpretation of section 50. While the ACCC's evidence sources have been criticised, even the most convincing evidence may not overcome the uncertainties inherent in digital merger analysis. This invites further investigation into the ability of Australian merger law and merger institutions to appropriately respond to these uncertainties.

IV AN EVALUATION OF AUSTRALIAN MERGER LAW UNDER RADICAL UNCERTAINTY

An analysis of acquisitions involving nascent digital competitors is faced with at least three cumulative sources of uncertainty:

(i) the economic literature on the competitive effects of the removal of nascent competitors is ambiguous;
(ii) the unpredictable evolution of digital markets leads ineluctably to highly uncertain future hypotheticals; and
(iii) the dynamic effects of intervention and non-intervention on markets are uncertain.[230]

These uncertainties combine to create practically insurmountable barriers for the ACCC to prohibit a digital start-up acquisition. As explored in Part III, in the face of tripartite uncertainty, section 50 arguably produces a decision rule of near-universal non-intervention.

A The Assumptions behind Judicial Interpretations of Section 50 Are Incongruous with the Characteristics of Digital Markets

A non-interventionalist merger decision rule is not intrinsically problematic. Opponents of merger reform express concerns that a recalibration of this rule (or overseas equivalents) may allow 'speculative' theories of harm in merger litigation.[231] Speculative theories may introduce unpredictability in merger litigation, thereby stifling risk-sensitive merger and acquisition markets which frequently deliver pro-

230 Ibid 20.

231 See, eg, Lécuyer (n 12) 44 [12]; RBB Economics, 'A Question of Balance: Comments on a Proposed New Test for UK Merger Control' (Research Brief No 59, April 2019) 3 <https://www.rbbecon.com/downloads/2019/05/RBB_B59_Brief1.pdf>.

competitive benefits to consumers.[232] Indeed, in *AGL*, French J argued that a section 50 judgment should not 'rest upon speculation' inherent in most predictions made under extreme uncertainty.[233]

The 'error cost' approach, espoused by Easterbrook's 1984 article,[234] presents a traditional framework for assessing antitrust decision-making under uncertainty. This framework suggests that institutional decision rules should be designed to minimise the impacts of incorrect decision-making on consumer welfare. A Chicagoan error cost framework suggests that conservative non-intervention is a reasonable solution. It reasons that the cost of an anti-competitive transaction that proceeds (type II error) is limited because any supranormal profits generated will induce entry, which erodes market power. This analysis also suggests that the cost of preventing a pro-competitive transaction (type I error) is much higher, because this permanently deprives consumers of the pro-competitive effects of the merger. Decision rules should therefore err on the side of non-intervention.[235]

However, the above logic seems at odds with the features of digital markets discussed in Part II. For example, the Stigler Report notes that 'rapid self-correction in markets dominated by large digital platforms is unlikely'[236] and argues that erroneous non-intervention can 'condemn an industry to monopoly'.[237] Kwoka posits that strong network externalities can entrench digital incumbents such that type II errors can generate irreversible competitive harms.[238] In fact, Nobel laureate, Jean Tirole, espouses the reverse position to the Chicago School, arguing that 'we should err on the side of competition [that is, intervention], while recognising that we will make mistakes in the process'.[239]

Additionally, a merger regime that defaults to non-intervention under uncertainty may be particularly harmful because, as the Court noted in *United States v Microsoft Corp* ('*Microsoft*'), it creates incentives for firms 'to take more and earlier anti-competitive action'.[240] The Court in *Microsoft* further argued (albeit in relation to monopolisation provisions) that an optimal antitrust rule should not default to near-universal non-intervention in the face of uncertainty because this will 'allow monopolists free reign to squash nascent, albeit unproven, competitors at will'.[241] While most acquisitions may individually present improbable or insignificant risks to competition, a decision rule which defaults to universal non-intervention under uncertainty will generate almost certain cumulative competitive

232 Jennejohn (n 182) 171–2, 208. See also Australian Competition and Consumer Commission, 'Merger Guidelines 2008' (n 45) 2 [1.1]–[1.2].
233 *AGL* (2003) 137 FCR 317, 416–17 [348].
234 Frank H Easterbrook, 'The Limits of Antitrust' (1984) 63(1) *Texas Law Review* 1.
235 Bryan and Hovenkamp, 'Startup Acquisitions, Error Costs and Antitrust Policy' (n 29) 334–6.
236 'Stigler Report' (n 7) 31.
237 Ibid 16.
238 'Kwoka Testimony' (n 54) 12. See also 'Joint Statement on Merger Control Enforcement' (n 8) 2 [5].
239 Interview with Jean Tirole (Allison Schrager, Quartz, 27 June 2018) <https://qz.com/1310266/nobel-winning-economist-jean-tirole-on-how-to-regulate-tech-monopolies/>. See also Holmström et al (n 46) 4.
240 253 F 3d 34, 79 (Per Curiam) (DC Cir, 2001) ('*Microsoft*'), quoted in Hemphill and Wu (n 208) 1891. See also Thomas G Wollmann, 'Stealth Consolidation: Evidence from an Amendment to the Hart-Scott-Rodino Act' (2019) 1(1) *American Economic Review: Insights* 77, 78.
241 *Microsoft*, 253 F 3d 34, 79 (DC Cir, 2001).

harms.[242] In *AGL*, French J opposed overly demanding interpretations of section 50 which 'allow all acquisitions to proceed save those with the most obvious, direct and dramatic effects on competition'.[243] However, it is unclear whether the current judicial understanding of section 50 will prevent mergers with even the most dramatic potential effects on competition if they are tainted with the uncertainty inherent to dynamic digital markets. These concerns were echoed by the ACCC, the CMA and the Bundeskartellamt in their recent joint statement, which cautioned against Chicagoan decision rules that favour inaction when faced with uncertainty:

> [U]ncertainty as to the future should *not necessarily mean that potentially anticompetitive mergers are cleared because of that uncertainty* … When faced with uncertainty, it is therefore important that agencies are willing to challenge the presumption … that mergers are generally efficiency-enhancing and should only be restrained where there is certainty that serious detriment will result.[244]

Rod Sims has suggested that while Australia's current merger control regime is inadequate, the radical uncertainty intrinsic to digital merger analysis complicates the development of more appropriate decision rules.[245] Commentators have nonetheless proposed numerous alternative decision rules to remedy perceived deficiencies in existing merger law. While some recommendations introduce various presumptions which simply recalibrate each party's prospects of success in merger litigation,[246] this Part will focus on the 'balance of harms' proposal which fundamentally redefines how courts deal with uncertainty.

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242 Wollmann (n 240) 77.

243 *AGL* (2003) 137 FCR 317, 416–17 [348].

244 'Joint Statement on Merger Control Enforcement' (n 8) 2–3 [8]–[9] (emphasis added).

245 In 2019, in his discussion of digital platform acquisitions of nascent competitors, Sims questioned whether section 50 'is sufficient to capture acquisitions where the likelihood of a lessening of competition may be low or uncertain', highlighting that there are 'considerable uncertainties about how nascent firms are likely to evolve': 'Sims Competition Law Conference Speech 2019' (n 24). In 2020, Sims highlighted that the importance of a careful consideration of the potential competitive harms that may arise amid widespread industry consolidation would grow in 'a more digital world'. He noted that Australia's current merger laws 'cannot prevent all inappropriate increases in market power' because potential harms are often framed as 'theoretical', but he acknowledged that the way in which a merger control regime 'draw[s] the line on which mergers proceed and which should not is complex': 'Sims National Press Club Speech 2020' (n 25).

246 For example, there have been proposals to reverse the onus of proof in digital merger litigation. See 'Stigler Report' (n 7) 98–9; 'Kwoka Testimony' (n 54) 7, 12. See also Digital Competition Expert Panel, 'Furman Report' (n 4) 101 [3.101]–[3.103]. Additionally, in August 2021, the ACCC proposed several changes to Australian merger law. These proposals include a statutory recalibration of the definition of 'likely' in section 50 to 'a possibility that is not remote', a provision that deems certain acquisitions involving merger parties with substantial market power to substantially lessen competition, and a 'tailored test' that would lower the probability of competitive harm that would need to be established to prohibit acquisitions by specific digital platforms: Rod Sims, 'Protecting and Promoting Competition in Australia' (Speech, Competition and Consumer Workshop 2021, 27 August 2021) <https://www.accc.gov.au/speech/protecting-and-promoting-competition-in-australia>.

1 The 'Balance of Harms' Approach May Prevent Anti-competitive Digital Start-Up Acquisitions, but It Is Incompatible with Australian Merger Law

Several overseas commentators have advocated for 'a more economic approach'[247] which prohibits mergers with a 'negative net expected value'[248] on competition. That is, unlike the 'balance of probabilities' standard, which only considers the likelihoods of each hypothetical future, the proposed 'balance of harms' approach considers both the likelihood and the *magnitude* of competitive harms or benefits arising from each hypothetical future. Proponents argue that the 'balance of probabilities' standard dismisses low-probability suggestions that a digital start-up may develop into an extremely valuable competitive constraint in the counterfactual, but maintain that the 'balance of harms' test can appropriately account for this outcome.[249]

Perhaps because the 'balance of harms' was developed in response to UK jurisprudence,[250] it is arguably incongruous with the logic of Australian merger law. The existing UK approach to the 'balance of harms' involves a mathematical comparison on probabilities, as the threshold is met if future harms are 'more likely than not'.[251] However, the Australian standard of proof for section 50 does not directly deal with mathematical probabilities. The Australian 'balance of probabilities' standard merely reflects the extent to which the court must be satisfied of the existence of the fact in issue (that the impugned acquisition would have the effect, or be likely to have the effect, of substantially lessening competition in any market).[252] Although the fact in issue in section 50 includes an ostensibly probabilistic notion of 'likely', even low-probability future occurrences can trigger this 'likely' requirement if it presents a 'commercially relevant' chance.[253] The only types of events that fail to establish this factual requirement are '*speculative*'.[254] While the 'balance of harms' approach seeks to lower the 'probability threshold' for high-impact hypotheticals, it would be inimical to established principles of Australian competition law to lower the 'likely' threshold and allow contraventions to be based on speculation.[255] In this sense, the Australian approach is concerned with the extent to which an alleged harm is well-founded, rather than the

247 Digital Competition Expert Panel, 'Furman Report' (n 4) 99 [3.88]. See also C Frederick Beckner III and Steven C Salop, 'Decision Theory and Antitrust Rules' (1999) 67(1) *Antitrust Law Journal* 41.

248 Jennejohn (n 182) 178.

249 Digital Competition Expert Panel, 'Furman Report' (n 4) 99 [3.88]–[3.92].

250 See ibid.

251 'CMA Quick Guide' (n 212) 7–8 [2.20]. See also *Office of Fair Trading v IBA Healthcare Ltd* [2004] 4 All ER 1103, 1120 [46] (Sir Andrew Morritt V-C).

252 In *Vodafone* [2020] FCA 117, Middleton J noted that 'probability of the correctness of a particular proposition of fact … cannot depend completely upon such a mechanical meaning of probability': at [29], quoting *Jones v Sutherland Shire Council* [1979] 2 NSWLR 206, 227–8 (Mahoney JA) ('*Jones*'). See also *Briginshaw* (1938) 60 CLR 336, 361–2 (Dixon J); Stephen Gageler, 'Alternative Facts in the Courts' (2019) 93(7) *Australian Law Journal* 585, 589–90.

253 *Vodafone* [2020] FCA 117, [10] (Middleton J); *AGL* (2003) 137 FCR 317, 416–17 [348] (French J), citing *Rural Press Ltd v Australian Competition and Consumer Commission* (2003) 216 CLR 53, 71 [41] (Gummow, Hayne and Heydon JJ).

254 *Pacific National II* (2020) 277 FCR 49, 121–2 [261] (Middleton and O'Bryan JJ) (emphasis added).

255 See *AGL* (2003) 137 FCR 317, 416–17 [348] (French J).

mathematical probability of its occurrence. The 'balance of harms' approach is therefore arguably inconsistent with Australian jurisprudence on section 50.

Notwithstanding jurisdictional differences, the 'balance of harms' approach may also be unworkable because it requires courts to identify possible future occurrences and attach a probability and an 'impact value' to each. There are numerous conceptual problems with this approach.

First, as argued in *Vodafone*,[256] a mathematical probability cannot sensibly be ascribed to occurrences where the set of possible future events is incapable of meaningful definition. This is arguably the case in unpredictable digital markets.

Second, the 'balance of harms' approach allows decision-makers to place substantial weight on high-impact but *improbable* counterfactuals. This may invite speculative theories of significant harm.[257] Such uncertainty in merger litigation may chill generally pro-competitive merger activity.[258]

Third, even if an appropriate range of possible outcomes is identifiable, this approach demands a level of precision far beyond the capabilities of contemporary empirical analysis. Commentators have highlighted that the '"expected" impact' of a merger is 'too complicated to compute',[259] especially in markets defined by dynamism or innovation.[260] Critics have also highlighted that this approach is too sensitive to small deviations assigned probabilities. For example, while probabilities of 0.01% and 0.1% may be difficult to distinguish, this represents a tenfold difference in probability which can significantly affect the test's outcome.[261]

Fourth, the competitive benefits and harms from different hypothetical futures may possess such different qualities that they cannot be quantitatively compared. This challenge is evident in merger authorisations, which require fact-finders to determine the net public benefit arising from a merger, thereby applying a similar balancing exercise to the 'balance of harms' test. In one merger authorisation case, the Court stated: 'many of the benefits and detriments will be *incommensurable and possibly unmeasurable*'.[262] Courts and tribunals have therefore rejected an arithmetic approach to net public benefit calculation (which is problematically adopted by the 'balance of harms' test) in favour of an 'instinctive synthesis'

256 *Vodafone* [2020] FCA 117, [29] (Middleton J), quoting *Jones* [1979] 2 NSWLR 206, 227–8 (Mahoney JA). This characterises an environment of radical or Knightian uncertainty. See Svetiev, *Experimentalist Competition Law* (n 149) 132. See generally Knight (n 26).

257 Lécuyer (n 12) 44 [12]; RBB Economics (n 231) 3.

258 Jennejohn (n 182) 171–2, 208. See also Australian Competition and Consumer Commission, 'Merger Guidelines 2008' (n 45) 2 [1.1]–[1.2].

259 'Crémer Report' (n 36) 3. See also James Baker, 'Rebalancing the Scales: Is a New Framework Needed to Assess Antitrust Risk?', *Frontier Economics* (Web Page, October 2019) 2–3 <https://www.frontier-economics.com/media/3522/rebalancing-the-scales.pdf>.

260 Jennejohn (n 182) 178–9; Baker (n 259) 2–3.

261 See Baker (n 259) 2. See also Daniel A Crane, 'Rethinking Merger Efficiencies' (2011) 110(3) *Michigan Law Review* 347, 390, quoted in Jennejohn (n 182) 172–3.

262 *Australian Competition and Consumer Commission v Australian Competition Tribunal* (2017) 254 FCR 341, 345 [7] (Besanko, Perram and Robertson JJ) ('*Tabcorp Appeal*') (emphasis added). See also *Re Qantas Airways Ltd* [2004] ACompT 9, [209] (Goldberg J, Member Latta and Prof Round).

approach.[263] Indeed, the 'single evaluative judgment'[264] required by section 50 ostensibly accommodates an 'instinctive synthesis' rather than a mathematical calculation of the chance of harm.

The 'balance of harms' test recognises that dynamic markets are characterised by uncertainty. It supposes that a proper evaluation of competitive harm in these markets requires courts to consider less specific evidence to ensure that they account for more uncertain risks. Notwithstanding its *technical* problems, the *rationale* underlying the 'balance of harms' test may be compatible with Australian jurisprudence on section 50.

2 The 'Balance of Harms' Test Could Be Reworked for an Australian Context

Middleton J's brief restatement in *Vodafone* of the orthodox judicial approach to the 'balance of probabilities' may illuminate the extent to which judges *could* consider more uncertain risks through less specific evidence in merger litigation.[265] His Honour highlights that this standard is established in the *Evidence Act*[266] and should be applied in accordance with the *Briginshaw* principles.[267] His Honour quotes Justice Gageler's extra-curial commentary of *Briginshaw* to assert that the standard requires fact-finders to reach an '"actual persuasion" that the fact in issue actually exists'.[268]

Briginshaw highlights that whether an 'actual persuasion' exists depends on the 'nature and consequence of the facts to be proved'.[269] The *Evidence Act* reflects the common law position by establishing that, in deciding whether it is satisfied to the requisite standard, the court must consider the nature and subject-matter of proceedings and the gravity of allegations, but may consider any other relevant factors.[270] Courts have accepted that fact-finders may therefore require stronger evidence to be satisfied on the balance of probabilities in relation to more serious or inherently unlikely allegations.[271] Justice Gageler's article adds that an 'actual persuasion' implicitly requires fact-finders to account for the 'human [and] social cost' of erroneous fact-finding.[272]

Courts' insistence on precise factual evidence of counterfactuals to establish a section 50 contravention is arguably incongruous with the true social cost of erroneous fact-finding in nascent digital acquisition situations. As explored in Part

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263 *Tabcorp Appeal* (2017) 254 FCR 341, 345 [7], 358 [68] (Besanko, Perram and Robertson JJ); *Tabcorp Authorisation* [2017] ACompT 5, [33] (Middleton J, Member Latta and Dr Abraham).

264 *Vodafone* [2020] FCA 117, 19 [65] (Middleton J). See also *Pacific National I* [2019] FCA 669, [1277] (Beach J); *Metcash* (2011) 198 FCR 297, 341 [227] (Yates J).

265 *Vodafone* [2020] FCA 117, [31]–[32].

266 *Evidence Act 1995* (Cth) s 140.

267 *Briginshaw* (1938) 60 CLR 336.

268 Gageler (n 252) 591, quoted in *Vodafone* [2020] FCA 117, [32].

269 *Briginshaw* (1938) 60 CLR 336, 361–2 (Dixon J). See also *Qantas Airways Ltd v Gama* (2008) 167 FCR 537, 574 [128] (Branson J).

270 *Evidence Act 1995* (Cth) s 140(2).

271 *Neat Holdings Pty Ltd v Karajan Holdings Pty Ltd* (1992) 110 ALR 449, 450 (Mason CJ, Brennan, Deane and Gaudron JJ) ('*Neat Holdings*'). See also *Morley v Australian Securities and Investments Commission* (2010) 247 FLR 140, 175–6 [745]–[746] (Spigelman CJ, Beazley and Giles JJA).

272 Gageler (n 252) 592.

II, in cases involving acquisitions of nascent digital competitors, there is increasing (albeit sometimes ambiguous) theoretical evidence that the consequences for consumer welfare of 'type II' errors are much more severe than those of 'type I' errors. Further, economic evidence suggests that competitive harms arising from start-up acquisitions in digital markets is not 'inherently unlikely'.[273] This favours the interpretation that courts should demand less certain evidence of harm to reach the required level of satisfaction that a contravention exists in nascent digital acquisition scenarios.

The 'subject-matter' of digital merger litigation also disfavours the maintenance of demanding evidentiary requirements in these cases.[274] Justice Gageler's article suggests that a heightened degree of satisfaction is required to 'impose *liability*'[275] due to 'our conception of justice according to the rule of law'.[276] However, section 50 is not concerned with guilt[277] or liability. Section 50 functions as a 'risk management policy'[278] within an Act that exhibits beneficial[279] consumer-focused objects.

Therefore, rather than demanding especially compelling evidence to be satisfied on the balance of probabilities that a contravention has occurred, courts should be open to considering less specific evidence of competitive harm in nascent digital acquisition litigation. This would ostensibly invite fact-finders to consider the 'lower-probability but high-impact' hypotheticals contemplated by the 'balance of harms' test.[280] It is, however, unclear whether courts would be prepared to adopt this approach, which represents a significant departure from their traditional expectations of highly specific evidence in merger litigation.

3 Decision Rules in Isolation Struggle to Deal with Radical Uncertainty

An 'error cost' analysis of *ex ante* merger decision rules assumes that courts have two options (intervention or non-intervention), and one option is provably 'correct'. However, such a framework is arguably inappropriate under conditions of radical uncertainty. Many digital mergers affect multiple dimensions of 'competition' in ambiguous ways such that the net effect of the transaction is of

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273 See, eg, 'Kwoka Testimony' (n 54).

274 *Evidence Act 1995* (Cth) s 140(2)(b).

275 Gageler (n 252) 590 (emphasis added).

276 Ibid.

277 Cf *Neat Holdings* (1992) 110 ALR 449, 450 (Mason CJ, Brennan, Deane and Gaudron JJ).

278 *AGL* (2003) 137 FCR 317, 416–17 [348] (French J) quoted in *Pacific National II* (2020) 277 FCR 49, 116 [245] (Middleton and O'Bryan JJ). See also Higgins (n 102) 89–90.

279 *Competition and Consumer Act 2010* (Cth) section 2 highlights that the object of the Act is to 'enhance the welfare of Australians through the promotion of competition'. This gives further credence to the argument that the 'subject-matter' of *CCA* section 50, for the purposes of *Evidence Act* section 140(2)(b), is to benefit consumers rather than to impose liability on persons in contravention of the provision. Analogously, in *Qantas Airways Ltd v Gama* (2008) 167 FCR 537, Branson J noted that 'anti-discrimination legislation should be regarded as beneficial and remedial legislation', and the court should take the beneficial nature of the legislation into account for the purposes of *Evidence Act* section 140(2)(b) in determining whether it is satisfied to the requisite standard: at 575–6 [134], quoting *Macedonian Teachers' Association of Victoria Inc v Human Rights and Equal Opportunity Commission* (1998) 91 FCR 8, 29 (Weinberg J).

280 Digital Competition Expert Panel, 'Furman Report' (n 4) 93 [3.59]. See also 'Sims Competition Law Conference Speech 2019' (n 24).

'indeterminate competitive significance'.[281] These *ex ante* rules can also misbehave under the conditions of extreme uncertainty which characterise many digital markets, because one-off interventions may dynamically alter market dynamics in unpredictable and unintended ways.[282]

In *Vodafone*, Middleton J identifies that under current merger laws, for an uncertain fact, 'whatever its underlying probability, a disputed … fact once found is a fact which is taken to exist'.[283] Under conditions of extreme uncertainty, this 'all or nothing'[284] and once-and-for-all approach to decision-making does not help firms or regulators dynamically resolve uncertainty or achieve a 'good' market outcome. The existing merger control regime privileges *known* risks and possesses few mechanisms to uncover or resolve unknown problems.[285] It may therefore be a distraction for merger regimes to focus on recalibrating their one-off decision rules (for instance, by adding new presumptions to correct for an apparent judicial bias towards Chicagoan thinking)[286] if these rules fail to resolve unpredictable problems which emerge in digital markets after the decision is made.

B Broader Institutional Structures around Section 50 Could Assist in Navigating Uncertainty Problems

A merger control regime is defined not only by its statutory provisions and the decision rules interpreting these provisions, but also by the regulatory architecture through which parties interact. As discussed above, traditional rule-based merger regimes are often incapable of providing a nuanced approach to radical uncertainty. This invites inquiry into alternative institutional governance designs structures that better respond to highly dynamic and uncertain environments.

One particularly promising framework is experimentalist governance, which is designed explicitly to cope with radical uncertainty. This approach to institutional design departs from one-off decision-making by allowing firms and regulators to recursively and collaboratively craft flexible remedies. By testing provisional solutions to uncertain problems, participants can discover and adapt to novel problems in real time by updating their solutions.[287] Effective collaboration is sustained through formal routines of reciprocal information exchange, which mitigates problems of information asymmetry which may otherwise stifle the joint problem-solving process.[288] In contrast, traditional regimes that require courts and regulators to make one-off *ex ante* decisions based on uncertain market predictions are unable to respond to unexpected challenges that emerge *ex post*. Experimentalism aims to ensure that problems that are identified *ex post* (after

281 Svetiev, *Experimentalist Competition Law* (n 149) 56.
282 Ibid 20.
283 *Vodafone* [2020] FCA 117, [31].
284 Gageler (n 252) 590.
285 Svetiev, *Experimentalist Competition Law* (n 149) 55.
286 See, eg, 'Stigler Report' (n 7) 98–9; 'Kwoka Testimony' (n 54). See also Digital Competition Expert Panel, 'Furman Report' (n 4) 101 [3.101]–[3.103].
287 Charles F Sabel and Jonathan Zeitlin, 'Experimentalist Governance' in David Levi-Faur (ed), *The Oxford Handbook of Governance* (Oxford University Press, 2012) 169.
288 Jennejohn (n 182) 183.

a *provisional* solution is developed) can be addressed in the next iteration of collaborative problem-solving.

Moreover, experimentalist governance can be used to address uncertainty in the meaning of 'competition'. As discussed in Part III(A), courts have understood 'competition' through abstract notions such as 'rivalrous behaviour'.[289] However, Svetiev observes that competitive rivalry 'can be defined in many ways', yet competition policy remains uncertain as to the kind of rivalry that a market should ideally exhibit.[290] Digital markets continue to introduce novel ways in which firms and consumers interact, but the form of competition that should be preferred in the market is *ex ante* indeterminate. Novel tensions between competing conceptualisations of 'competition' may arise in digital markets (for instance, between short-term price competition and long-term innovation competition), which will generate further uncertainties as to the meaning of 'competition'. However, this ambiguity favours experimentalist governance as merger policy objectives can be adjusted to reflect evolving market conditions.[291]

Effective experimentalist governance requires a 'deliberative polyarchy', where no participant acts as a 'final decider'.[292] A 'final decider' undermines the iterative experimentalist process by unilaterally imposing a solution on all participants. Courts therefore play a more limited role in experimentalist governance. Rather than definitively vindicating rights, courts oversee accountability mechanisms which penalise parties that obstruct the recursive problem-solving process. These accountability mechanisms may, for instance, require parties to report on their performance or subject their solutions to review by similarly situated parties.[293]

1 Some Aspects of Australian Merger Control Facilitate Experimentalism, Other Aspects Constrain It

It is beyond the scope of this article to delineate the design of a fully experimentalist Australian merger regime. However, some ostensibly experimentalist mechanisms can be identified in Australia's existing merger regime. The ACCC's informal merger review process, which is not legislatively underpinned, exhibits experimentalist characteristics as it has been shaped over time by the ACCC's and merger parties' experiences. This process is designed to be 'flexible, transparent and efficient',[294] with firms encouraged to collaborate with the ACCC well before completing a merger.[295]

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289 *Vodafone* [2020] FCA 117, [48] (Middleton J), quoting *QCMA* (1976) 25 FLR 169, 188 (Woodward J, Member Shipton and Prof Brunt).

290 Svetiev, *Experimentalist Competition Law* (n 149) 18–19.

291 Ibid 127; Jennejohn (n 182) 184, quoting JB Ruhl, 'Regulation by Adaptive Management: Is It Possible?' (2005) 7 *Minnesota Journal of Law Science and Technology* 21, 28.

292 Sabel and Zeitlin (n 287) 170. See also Svetiev, *Experimentalist Competition Law* (n 149) 21.

293 Svetiev, *Experimentalist Competition Law* (n 149) 14–15.

294 Australian Competition and Consumer Commission, 'Informal Merger Review Process Guidelines' (Guideline, September 2013) 7 [2.3] <https://www.accc.gov.au/publications/informal-merger-review-process-guidelines-2013> ('Informal Merger Review Guidelines').

295 Ibid 7–8 [2.5].

The ACCC has embraced the informality of its merger review process by introducing substantive flexibility into its analysis. For example, while the ACCC's 1999 Merger Guidelines focused heavily on concentration metrics and price-output constraints,[296] the 2008 Guidelines exhibit 'an increased emphasis on … competitive theories of harm … which facilitates a more integrated analysis'.[297] The informal merger review process further enhances the prospects for experimentalism by inviting merger parties to contribute to the ACCC's flexible investigatory process.

The process through which merger parties can offer court-enforceable undertakings[298] to the ACCC also exhibits experimentalist features.[299] The ACCC encourages merger parties to 'discuss the proposed form and content of [undertakings] with the ACCC'.[300] The collaborative development of undertakings invites reciprocal information exchange between the ACCC and merger parties. This process also facilitates peer review and monitoring by providing opportunities for interested parties and the public to review both proposed[301] and finalised undertakings.[302] Even finalised undertakings are somewhat flexible, as the ACCC may consent to withdrawals or variations of undertakings.[303]

However, the ACCC's own stance on undertakings constrains experimentalism. While experimentalist governance would involve remedies which require frequent monitoring and adjustment, the ACCC has expressed a preference for one-off structural divestments over behavioural undertakings to avoid the need for constant supervision.[304] However, effective structural divestments in unpredictable digital markets would require significant monitoring given the amorphousness of digital product boundaries. Shapiro suggests that the strong network externalities inherent in digital markets frustrate the effectiveness of one-off structural remedies because

296 Australian Competition and Consumer Commission, 'Merger Guidelines' (June 1999) 22–3 [5.4]–[5.6], 60–1 [5.175]–[5.177] <https://www.accc.gov.au/system/files/15%E2%80%93ACCC%2C%20merger%20guidelines%2C%20June%201999.pdf>.

297 Australian Competition and Consumer Commission, 'Merger Guidelines 2008' (n 45) 1. Cf United States Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines (19 August 2010) 1 <https://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf>, quoted in Jennejohn (n 182) 197.

298 *Competition and Consumer Act 2010* (Cth) s 87B.

299 Cf *Council Regulation (EC) No 1/2003 of 16 December 2002 on the Implementation of the Rules on Competition Laid Down in Articles 81 and 82 of the Treaty* [2003] OJ L 1/1, art 9. See Svetiev, *Experimentalist Competition Law* (n 149) 61–2.

300 Australian Competition and Consumer Commission, 'Informal Merger Review Guidelines' (n 294) 20–1 [3.3].

301 Ibid 21 [3.9].

302 Ibid 22 [3.15].

303 *Competition and Consumer Act 2010* (Cth) s 87B(2).

304 See Australian Competition and Consumer Commission, 'Merger Guidelines 2008' (n 45) 59 [11]; 'Sims Competition Law Conference Speech 2019' (n 22); Tim Grimwade, 'How to Obtain Approval for Difficult Mergers & Acquisitions – And How You Won't' (Speech, Lexis Nexis Trade Practices Conference, 18 October 2006) 8–9; Australian Competition and Consumer Commission, 'Court Dismisses ACCC Proceedings Opposing Rail Freight Consolidation' (Media Release 70/19, 15 May 2019) <https://www.accc.gov.au/media-release/court-dismisses-accc-proceedings-opposing-rail-freight-consolidation>.

such markets 'drift back toward winner-takes-most anyhow'.[305] If Australian merger control seeks efficacy in rapidly-evolving digital markets, it may need to embrace behaviour modification remedies which are subject to more intense monitoring and adjustment over time.

The role of the judiciary as the 'final decider' in the Australian merger regime, where courts vindicate merger parties' rights once-and-for-all, presents a prominent constraint on experimentalist institutional design. This thwarts incentives for collaborative and innovative problem-solving. Since Australian courts do not give deference to the ACCC's arguments,[306] the ACCC's ability to experiment with sophisticated and flexible remedial tools is constrained by the judiciary's reliance on established precedent. This restricts the capacity of merger institutions to improve their practices by learning from the implementation of non-traditional solutions. This contrasts the UK and European Union regimes, where judiciaries defer to regulators' administrative decisions.[307] In these jurisdictions, merger parties have strong incentives to collaboratively design remedies with regulators. For example, as Svetiev observes, the 'very light-touch review standard' adopted by the European General Court with respect to commitment decisions encourages merger parties and regulators to jointly address competition concerns through commitments.[308] Additionally, since regulators in these jurisdictions are relatively unconstrained by judicial precedent, they have the flexibility to explore novel analytical tools.[309]

Further, the Australian regime lacks structures for reciprocal information exchange beyond the negotiation of enforceable undertakings, thereby limiting opportunities for experimentalist problem-solving. It broadly requires merger parties to share information with the ACCC but not vice versa.[310] Without fluid two-way communication, firms and regulators may lack comprehensive and real-time knowledge of market dynamics, constraining their ability to promptly adjust merger remedies in response to evolving market conditions.[311]

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305 Carl Shapiro, 'Antitrust in a Time of Populism' (2018) 61 *International Journal of Industrial Organization* 714, 744.

306 *Pacific National II* (2020) 277 FCR 49, 145 [349] (Middleton and O'Bryan JJ).

307 *Tobii AB plc v Competition and Markets Authority* [2020] CAT 1, [49] (Chairman Malek, Members Dollman and Ridyard); *Morningstar Inc v European Commission* (General Court (Eighth Chamber), T-76/14, ECLI:EU:T:2016:481, 15 September 2016) [41]. For a brief overview of the difference between court and administrative decision making, see also Rhonda L Smith and Deborah Healey, 'Unilateral Conduct Analysis: Focus on Harm in Multiple Guises' in Deborah Healey, Michael Jacobs and Rhonda L Smith (eds), *Research Handbook on Methods and Models of Competition Law* (Edward Elgar Publishing, 2020) 204, 211.

308 Svetiev, *Experimentalist Competition Law* (n 149) 133–4. See also Jennejohn (n 182) 186–7.

309 Svetiev, *Experimentalist Competition Law* (n 149) 134.

310 See generally Australian Competition and Consumer Commission, 'Informal Merger Review Guidelines' (n 294). Cf Jennejohn (n 182) 175.

311 Jennejohn (n 182) 175.

V CONCLUSIONS

The European Commissioner for Competition, Margrethe Vestager, recently spoke of the challenges faced by merger regimes when designing laws and institutions to manage the uncertain risks presented by the digital economy.[312] She acknowledged that the European Commission was unsure whether to 'reinterpret the rules [it] has already, or to … add new rules'[313] to best encourage digital innovation while preventing anti-competitive nascent acquisitions. The Australian merger regime faces similar questions about the design of its merger laws.

This article argues that section 50, as currently interpreted by courts, poorly responds to the uncertainties created by the economic characteristics of digital markets, thereby inadequately promoting innovation in digital markets. A focus only on the recalibration of one-off decision rules is arguably misguided because these rules are unlikely to provide nuanced responses to dynamic uncertainty. This suggests the need to engage with innovative designs for Australian merger institutions which are more responsive to unexpected developments in dynamic digital markets, such as those of experimentalist governance. Some aspects of the existing institutional architecture which surrounds section 50 adopts an experimentalist approach. However, the essentially adversarial nature of Australian merger control, which allows courts to make once-and-for-all decisions about uncertain and unknown risks, fundamentally constraints experimentalism.

This article aims to stimulate critical debate about the ability of Australian merger law to address the challenges likely to emerge in a future defined by amorphous digital markets. A well-considered and iterative rethinking of Australian merger law will allow merger institutions to proactively guide the development of digital markets for the benefit of consumers, rather than leaving the fate of these markets up to chance.[314] Rod Sims recently underscored the need for vigorous debate about the ability of Australian merger law to address nascent competition concerns. As Sims emphasised, 'the importance of these issues will only grow in … a more digital world'.[315]

312 'Vestager Speech' (n 1).
313 Ibid.
314 See also ibid.
315 'Sims National Press Club Speech 2020' (n 25).