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Innovation against change

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ABSTRACT

There is presently an increased enthusiasm for competition law enforcement around the world, driven primarily by concerns about the power of digital platform companies. Against this background, this article identifies the emergence of a ‘techno-conservatism’ that invokes a ‘rhetoric of innovation’ to stymie the field’s ongoing shift towards a more interventionist paradigm. Drawing parallels between techno-conservatism and twentieth-century Chicago school conservatism, the article holds that appeals to innovation are a means of deterring enforcement against dominant companies in dynamic markets. This article contests the rhetoric of innovation, maintaining that it is possible to reconcile strong enforcement with care for innovation. It does so by raising three points. First, innovation often arises from smaller companies and deconcentrated markets. Secondly, many of the innovations associated with technology companies often have their origins in the public sector. Thirdly, innovation is not innately beneficial. It is not enough to defend dominance simply by pointing to ‘more innovation’; thought must also be given to the qualitative nature of that innovation. Taken together, these three ideas represent a useful framework with which to counter the rhetoric of innovation and defend the momentum building in competition law.

KEYWORDS: Competition law, innovation

JEL CLASSIFICATIONS: A11, B25, B52, K21, L11, L40, O30

1. INTRODUCTION

Competition law is presently undergoing a period of turbulence, and possibly transformation. Its scope was minimised through the latter part of the twentieth century and the first decade of the new millennium. Especially in the United States (US), and also to a certain extent in the European Union (EU) and other jurisdictions globally, social and political goals were jettisoned in favour of a narrow focus on price and output effects.¹ Enforcement was timid under the consumer welfare standard, guided by a deference to monopoly power. Aside from horizontal agreements, corporate behaviour was invariably held to be efficiency-enhancing rather than anticompetitive. The field’s traditional hostility to mergers and monopolistic practices was unwound. Leave large firms alone, it was argued, and consumers will

¹ See Eleanor M Fox, ‘Modernization of Antitrust: A New Equilibrium’ (1981) 66 Cornell L Rev 1140.

This exercise raises the following question: how should competition law deal with innovation? The underlying position of the article is that competition law should not aim to promote innovation in and of itself. The prevalent idea that competition law should be instrumentalised to achieve specific goals—originally static efficiency, increasingly dynamic efficiency—is a legacy of the Chicago revolution and it is one that should be left behind. Competition law should remember its pre-Chicago concerns and focus on dispersing concentrations of capital, protecting competitive market structures, and ensuring market access for small and medium-sized enterprises. As explored in the article, dynamism likely benefits from contestable, deconcentrated markets, but the field should reject any attempt to instrumentalise competition law for any particular purpose, whether that is innovation or something else. The article does not elaborate on this position—this would require another publication altogether—but it is the normative background against which it should be understood.⁶

The article is organised as follows. Section 2 explores the rhetoric of innovation and the techno-conservative argument that enforcement should be tempered by an overarching concern for dynamic efficiency. Drawing on examples from American antitrust jurisprudence, Section 2 also highlights selected instances in which innovation rhetoric has influenced enforcement practice and case law. Section 3 argues that innovation and robust competition law enforcement may be reconciled through engagement with the three ideas raised above. Section 4 concludes.

2. THE RHETORIC OF INNOVATION

The Chicago school's antitrust agenda was 'seen as little better than a lunatic fringe' when it first emerged in the 1950s and 1960s.⁷ Yet, within a few decades, the consumer welfare standard came to dominate the discipline, at first in the US and later in other jurisdictions worldwide.⁸ In seeking to insert consumer welfare as the lodestar of competition law, the Chicago school made various interrelated arguments that would undermine the field's traditional inhospitality towards concentrations of private economic power: economic bigness should be welcomed rather than contested due to the low prices and static efficiency gains that arise alongside bigness; competitive entry is a powerful means of disciplining incumbents and overcoming anticompetitive issues; a proper understanding of economics would inevitably lead to a non-interventionalist approach to enforcement; the success of the wider economy is innately tied to the success of powerful corporations, especially in the context of competition from foreign firms (at that time, West German and Japanese firms).⁹ While modified to emphasise innovation and dynamic efficiency rather than low prices and static efficiency, the rhetoric of innovation invokes these same arguments to deter ongoing changes in competition law and defend the permissive consumer welfare standard.

Themes of innovation and dynamic efficiency started to gain ground in competition law in the 1990s and early 2000s with the emergence of the 'new economy', based around the internet and digital technologies. The 1995 Antitrust Guidelines for the Licensing of Intellectual Property, issued jointly by the US Department of Justice (DOJ) and the Federal Trade Commission (FTC), was the first guidance document to explicitly mention innovation, coining the term 'innovation market' to describe 'markets for technology or markets for

⁶ For discussion of the case against goals in competition law, see Eleanor M Fox, 'Against Goals' (2013) 81 *Fordham L Rev* 2157.

⁷ Richard A Posner, 'The Chicago School of Antitrust Analysis' (1979) 127 *U Pa L Rev* 925, 931.

⁸ See Ariel Ezrachi, 'Sponge' (2017) 5 *JAE* 49.

⁹ For discussion of the consumer welfare revolution and the tenets of the Chicago school of antitrust, see Fox (n 1); Posner (n 7).

A further connection between Chicago school conservatism and techno-conservatism is a reliance on economics to justify normative positions. The use of economics to underpin subjective preferences is an archetypal rhetorical device, as identified by Diedre (formerly Donald) McCloskey, who initiated the sub-field of the rhetoric of economics in the 1980s.³⁰ In the latter part of the twentieth century, neoclassical price theory was the favoured epistemological source used to reject competition law enforcement. With the limits of this approach now apparent, techno-conservative often (correctly) declare that the tools of the Chicago school are unsuited to the nature of the modern economy. Instead, techno-conservatives ground their scholarship in a field that may be broadly conceived of as ‘innovation studies’, which spans economics and the adjacent disciplines of business and management.³¹

In highlighting the deficiencies of the neoclassical price theory framework, techno-conservatives share something with progressives who also criticise the narrowness of Chicago antitrust analysis.³² Crucially, however, the techno-conservative methodological critique is essentially cosmetic. Ultimately, the core argument remains the same whether it is based on neoclassical price theory or innovation studies—leave monopoly power alone. Petit and Teece, for instance, suggest that competition law looks to models of dynamic competition found in the field of technology management. Doing so, they maintain, would lead to ‘a better understanding of dynamic competition in general, and of organizational capabilities, business models, and ecosystems in particular, would result in a more careful approach to competition law that is currently poised to favor increased intervention towards Big Tech’.³³ Spulber offers a similar perspective, stating that ‘[i]ncorrect economic analysis of innovation competition risks impeding competition, mischaracterizing anticompetitive activities, and discouraging welfare-enhancing innovation’.³⁴ Likewise, Wright and Geoffrey Manne note that ‘innovations involve novel practices, and such practices generally result in monopoly explanations’ but ‘procompetitive virtues’ become apparent with ‘more nuanced economic understanding’.³⁵ Correspondingly, Wright and Manne chastise competition law enforcement as lacking in the requisite humility.³⁶

A final component of the rhetoric of innovation is that it ties the success of powerful firms to the wider success of the economy. In particular, innovation rhetoric trades on the broad positive connotations associated with the term ‘innovation’, and specifically the literature connecting innovation to economic growth, identified by Schumpeter and later formalised by Robert Solow and Philippe Aghion, amongst others.³⁷ Jan Rybnicek, for example, partially attributes faster economic growth in the US than in Europe to the fact that the former ‘is home to the most innovative companies’ and has a ‘greater focus on investment, innovation, and entrepreneurship’.³⁸ The rhetoric of innovation creates a narrative in which enforcement against Big Tech and other dominant companies would be disastrous for technological

³⁰ Donald N McCloskey, *The Rhetoric of Economics* (University of Wisconsin Press 1987). See also Arjo Klamer, Donald N McCloskey and Robert M Solow, *The Consequences of Economic Rhetoric* (CUP 1988); Edward M Clift, ‘The Rhetoric of Economics’ in Andrea A Lunsford, Kirt H Wilson and Rosa A Eberly (eds), *The SAGE Handbook of Rhetorical Studies* (SAGE Publications 2011).

³¹ Innovation studies was arguably initiated by Christopher Freeman with his 1974 book, *The Economics of Industrial Innovation*, in which Freeman observes a need to uncover the process of technological innovation that mainstream economic models neglect. Christopher Freeman, *The Economics of Industrial Innovation* (The MIT Press 1974).

³² For example, Lianos (n 4).

³³ Petit and Teece (n 15) 1170.

³⁴ Spulber (n 19) 6.

³⁵ Geoffrey A Manne and Joshua D Wright, ‘Innovation and the Limits of Antitrust’ (2010) 6 JCL&E 153, 165.

³⁶ *ibid.*

³⁷ See Robert M Solow, ‘A Contribution to the Theory of Economic Growth’ (1956) 70 *Quart J Econ* 65; Robert M Solow, ‘Technical Change and the Aggregate Production Function’ (1957) 39 *Rev Econ Stat* 312; Philippe Aghion and Peter Howitt, ‘Capital, Innovation, and Growth Accounting’ (2007) 23 *Oxf Rev Econ Policy* 79.

³⁸ Jan M Rybnicek, ‘Innovation in the United States and Europe’ in Wright and Ginsburg (eds) (n 24) 450, 457.

conservative economic thought.⁸² This portrayal serves corporate interests, creating a contrast between a clumsy, intrusive public sector, and a dynamic, wealth-creating private sector.⁸³ A more nuanced understanding of the innovation process is gained by rejecting the false dichotomy of the state versus the market. A perspective that emphasises only the firm is incomplete. Innovation is a collective enterprise, involving the interaction of a range of actors, including public sector actors.⁸⁴

Taking a 'system' approach to innovation is especially pertinent in the digital economy. Many innovations associated with the digital economy have their origins in the American 'developmental network state'.⁸⁵ Developmental network states—versions of which also exist in Europe and other countries worldwide—are intended to generate disruptive innovations that are unlike anything that has come before.⁸⁶ This may be contrasted with the 'developmental bureaucratic state'—found, for example, in East Asia in the second part of the twentieth century—that helps domestic firms to catch up with technologically-advanced foreign firms.⁸⁷ A developmental network state undertakes four tasks to help realise innovation. First, 'targeted resourcing', whereby the government identifies economic obstacles that might be usefully overcome through technological solutions, followed by the provision of resources to those working on such innovations. Second, 'opening windows', whereby the government encourages innovators to propose new innovations and receive support, in recognition that innovation should not be wholly state-directed. Third, brokering, which consists of technological brokering (combining different technical groups that have mutually beneficial knowledge) and business brokering (commercialising technological developments). Fourth, facilitation, which seeks to ease and encourage the adoption of new technologies, for example through ensuring compatibility with existing infrastructure.⁸⁸

The US developmental network state emerged during the Cold War and is closely associated with national security organisations, notably the Atomic Energy Commission, the National Aeronautics and Space Agency, and the Advanced Research Projects Agency (ARPA).⁸⁹ The work of ARPA is especially significant in the context of the rhetoric of innovation and its defence of Big Tech. ARPA was created in 1958 in response to the success of the Soviet Union's Sputnik mission in 1957, with the US fearful of not keeping up with its rival's technological advancements. ARPA took part of the US military's R&D budget and dedicated it to realising innovations from 'blue sky thinking'.⁹⁰ ARPA played a vital role in the creation in the development of many technologies underlying the computing revolution and the development of the digital

⁸² The concept of disembedding was famously articulated by Karl Polanyi in his work *The Great Transformation*, which centres on the demise of classical liberalism amidst the major traumatic events of the first half of the twentieth century: World War I, the Bolshevik Revolution, the Great Depression, the rise of fascism, and onset of World War II. Polanyi notes that the economic, social and political are all innately bound up in one another: 'The road to the free market was opened and kept open by an enormous increase in continuous, centrally organized and controlled interventionism'. Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (first published 1944, Beacon Press 2001) 146.

⁸³ See Mariana Mazzucato, *The Entrepreneurial State: Debunking Public vs. Private Sector Myths* (PublicAffairs 2015).

⁸⁴ See Peter B Evans, *Embedded Autonomy: States and Industrial Transformation* (Princeton University Press 1995).

⁸⁵ For further discussion of the developmental network state, see Block (n 81).

⁸⁶ *ibid.*

⁸⁷ For discussion of East Asian developmental bureaucratic states, see Chalmers Johnson, *MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925-1975* (Stanford University Press 1982); Ha-Joon Chang, 'The Political Economy of Industrial Policy in Korea' (1993) 17 *Camb J Econ* 131. For discussion of the developmental bureaucratic state more broadly, see Meredith Woo-Cumings (ed), *The Developmental State* (Cornell University Press 1999); Sean O'Riain, *The Politics of High-Tech Growth: Developmental Network States in the Global Economy* (CUP 2009).

⁸⁸ Block (n 81).

⁸⁹ On military Keynesianism, see John A Alic, *Trillions for Military Technology: How the Pentagon Innovates and Why It Costs So Much* (Palgrave Macmillan 2007); James M Cypher, 'The Origins and Evolution of Military Keynesianism in the United States' (2015) 38 *J Post Keynes Econ* 449.

⁹⁰ Mazzucato (n 83) 82.

value of an innovation is not easy or straightforward. Nevertheless, there should be greater interrogation of the desirability and direction of corporate innovation, which is an issue that competition law has so far failed to meaningfully engage with.¹¹⁰

Again, Arrow's scholarship is instructive. Arrow argues that when dominant companies innovate, they do so in an iterative manner, rather than in a way that is likely to bring about leaps in technological advancement.¹¹¹ Their innovation follows the already-established path, or else they risk diminishing the value of their existing assets and losing their entrenched market positions. Correspondingly, it is maverick, challenger firms that are likely to produce disruptive, path-breaking innovations, as it is these outsiders that need to create genuinely new products and markets in order to thrive.¹¹² The pharmaceutical industry is illustrative. Dominant pharmaceutical companies—'Big Pharma'—typically justify high drug prices on Schumpeterian grounds. High prices, and high profits, are necessary to make the investment in R&D required to generate new pharmaceuticals.¹¹³ Yet, most drugs developed by Big Pharma are so-called 'me too' drugs, only slight molecular variations of existing drugs. Of the 415 pharmaceuticals approved by the US Food and Drug Administration between 1998 and 2002, only 14 per cent were new innovations, 9 per cent represented functional improvements on existing drugs, and the remaining 77 per cent were me too drugs that delivered no functional improvement.¹¹⁴

A similar pattern may be observed in the digital economy too, where dominant companies are inhibiting radical innovation in favour of iterative innovation. The Big Tech companies innovate to protect and advance their business models and market dominance, producing 'sustaining' innovations that do not fundamentally change the existing technological paradigm. Significantly, they can use their dominance over the digital economy to impede the ability of mavericks to produce disruptive innovations. The innovative efforts of smaller technology companies are stymied by the need to make any new offering interoperable with Big Tech ecosystems.¹¹⁵ Ezrachi and Stucke highlight Apple's App Store as an example of such sustaining innovation. Ezrachi and Stucke note that, while Apple invests substantially into improving the experience of App Store users, app developers are allowed into the ecosystem only if they comply with its rules and would not be able to introduce a superior app store that would be compatible with the Apple ecosystem.¹¹⁶ Overall, Ezrachi and Stucke argue, the Big Tech companies 'make sure to only advance and allow innovation that does not disrupt their business models and profits Entrusting the Tech Barons to determine the scope and trajectory of digital innovation will undoubtedly leave us worse off'.¹¹⁷ Deferring

¹¹⁰ Deutscher and Makris make a similar point, critiquing the European Commission's decisions in major agrochemical mergers (*Bayer/Monsanto* and *Dow/DuPont*) on the basis that 'the impact of the mergers on the diversity, quality, and direction of innovation was not sufficient examined'. Deutscher and Makris (n 74) 354.

¹¹¹ Arrow (n 56).

¹¹² *ibid.* See also Thomas J Holmes, David K Levine and James A Schmitz Jr, 'Monopoly and the Incentive to Innovate When Adoption Involves Switchover Disruptions' (2012) 4 *Am Econ J Microecon* 1. Notably, in the same year that Arrow published his seminal work on innovation, economic historian John Habakkuk published a significant study that examined both the rate and direction of innovation in the US and Britain in the nineteenth century. HJ Habakkuk, *American and British Technology in the Nineteenth Century: Search for Labor Saving Inventions* (CUP 1962). More recent work has attempted to formally analysis the various factors that influence the direction of innovation, for example: Daron Acemoglu, 'Why Do New Technologies Complement Skills? Directed Technical Change and Wage Inequality' (1998) 113 *Q J Econ* 1055; Daron Acemoglu, 'Directed Technical Change' (2002) 69 *Rev Econ Stud* 781.

¹¹³ For work contesting even this quantitative relationship, see Oliver J Wouters, Lucas A Berenbrok and Meiqi He, 'Association of Research and Development Investments With Treatment Costs for New Drugs Approved From 2009 to 2018' (2022) 5 *JAMA Netw Open* 1.

¹¹⁴ Marcia Angell, *The Truth About Drug Companies: How They Deceive Us and What to Do About It* (Random House 2004) 75.

¹¹⁵ Daron Acemoglu, 'Antitrust Alone Won't Fix the Innovation Problem' (Project Syndicate, 30 October 2020).

¹¹⁶ Ariel Ezrachi and Maurice E Stucke, *How Big-Tech Barons Smash Innovation—and How to Strike Back* (Harper Business 2022).

¹¹⁷ *ibid* 2, 5. Michelle Meagher advances a similar perspective, stating that monopolists control 'the dissemination of ideas and the direction of research', and 'innovate in the direction of power and benefit to shareholders, not necessarily in the best

4. CONCLUSION

Innovation has become a central theme in competition law since the turn of the millennium. This article urges the field to adopt a more critical and reflexive stance towards the concept. While there is an important relationship between innovation and competition that is worth serious consideration, invoking innovation is a well-established means of deterring enforcement against dominant companies, especially in the digital economy.

The article identifies a rhetoric of innovation, composed of four interrelated arguments, that pervades competition law and impedes the field's move towards a stricter paradigm. First, that economic bigness should be welcomed due to dynamic efficiency gains that powerful firms are uniquely placed to deliver. Secondly, that competitive entry is sufficient to discipline incumbents and prevent anticompetitive issues. Thirdly, that competition law should be deferential to economics, as economics provides a neutral basis on which to make decisions. Fourthly, that the success of the wider economy is tied to the ability of dominant corporations to innovate undisturbed by government intrusion. This is old wine in new bottles. Techno-conservatives citing innovation are the intellectual and ideological successors of the Chicago school scholars who in previous generations pointed to low prices as a justification for concentrations of corporate power. Innovation has replaced low prices as the locus of the argument. Now that the field is finally confronting the failures of the Chicago revolution, this article warns against repeating the same mistakes.

The article rejects the rhetoric of innovation and highlights three points that demonstrate strong competition law enforcement can be reconciled with care for innovation: smaller companies and deconcentrated market structures are an important source of innovation; the private sector is not solely responsible for technological change, with the public sector playing an important role in producing innovation; and innovation is an ambiguous term, and that incumbents may distort the qualitative nature of innovation in a way that is not beneficial. Taken together, these three ideas represent a useful framework with which to counter the rhetoric of innovation and help ensure that amorphous innovation concerns do not derail the profound shift that competition law is undergoing.

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