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COMPETITION LAW LIMITS ON RIDE SHARING ENTERPRISES – TAKING INTO ACCOUNT THE EXPERIENCE IN INDIA

*Max Huffman**

ABSTRACT *New economy competition policy is on the forefront of enforcers' minds across the globe, with numerous competition agencies engaged in competition advocacy efforts regarding the sharing economy generally or ride sharing specifically. In a sharing economy firm, extra-firm contracting may be as efficient as that occurring intra-firm. By reducing search and transaction costs, the sharing economy enables transactions that could not occur in a pre-internet economy. The sharing economy grew strongly in developed economies, all of which were burdened with legacy permitting systems such as taxicab medallions or zoning regulations and other oversight limiting public lodging. The promise in economies with substantial development ahead of them is much greater. However, with highly diffuse suppliers and consumers contracting through enterprises with substantial market presence, areas of competition policy concern include conspiracies, exercises of bargaining power, and productive agreements that may nonetheless limit competition and thereby require careful analysis of overall competitive effects. Finally, there is the possibility of an agreement creating both efficiencies and threatening competitive consequences, which must be evaluated holistically to appreciate its overall impacts. No clear competition law violation will exist in all cases. However, continual attention to areas of concern will be warranted for the foreseeable future.*

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I. INTRODUCTION

The sharing economy has changed how we work and transact globally.¹ New economy competition policy is on the forefront of enforcers’ minds across the globe. In the European Union (‘the EU’) and the United Kingdom (‘the UK’), detailed reports on competition and market structure in digital markets spell out enforcement priorities.² The United States (‘the US’) Federal Trade Commission produced a detailed sharing economy report in 2016³ and created its ‘Technology Enforcement Division’ to investigate, among other things, digital platform markets.⁴ The Organisation for Economic Cooperation and Development (‘the OECD’) has made digital markets, and sharing economy enterprises specifically, the foci of its competition forum,

¹ See, Niam Yaraghi and Shamika Ravi, ‘The Current and Future State of the Sharing Economy’ (Brookings India Impact Series, 2017) 4 <https://www.brookings.edu/wp-content/uploads/2016/12/sharingeconomy_032017final.pdf> accessed 9 December 2019.

² Jacques Crémer, Yves-Alexandre de Montjoye and Heike Schweitzer, *Competition Policy for the digital era: Final report* (European Commission Directorate General for Competition, 2019) <<http://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>> accessed 9 December 2019; Jason Furman et al, *Unlocking Digital Competition: Report of the Digital Competition Expert Panel* (Competition and Markets Authority, 2019) <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf> accessed 9 December 2019.

³ Federal Trade Commission, *The “Sharing” Economy: Issues Facing Platforms, Participants, and Regulators* (2016) 11 <https://www.ftc.gov/system/files/documents/reports/sharing-economy-issues-facing-platforms-participants-regulators-federal-trade-commission-staff/p151200_ftc_staff_report_on_the_sharing_economy.pdf> accessed 3 July 2019 (FTC Report).

⁴ Federal Trade Commission, ‘FTC Technology Enforcement Division’ (2019) <<https://www.ftc.gov/about-ftc/bureaus-offices/bureau-competition/inside-bureau-competition/technology-enforcement-division>> accessed 9 March 2020; Federal Trade Commission, ‘FTC’s Bureau of Competition Launches Task Force to Monitor Technology Markets’ (Press Release, 2019) <<https://www.ftc.gov/news-events/press-releases/2019/02/ftcs-bureau-competition-launches-task-force-monitor-technology>> accessed 9 December 2019.

and enforcers around the globe have contributed their insights and experience to those programs.⁵ As of this writing, the United Nations Conference on Trade and Development (‘UNCTAD’) is coordinating a book project on the digital economy, including the sharing economy. Competition agencies in several jurisdictions have drafted their own or contracted out reports on the implications of the sharing economy for competition and consumer protection.⁶ According to a 2019 International Competition Network survey, at least 10 competition agencies around the globe, including both the oldest and best funded (such as the US Federal Trade Commission) and the newer/less wealthy (such as the Croatia Competition Agency AZTN and Panama’s Competencia), had engaged in competition advocacy efforts regarding the sharing economy generally or ride sharing specifically.⁷

The Competition Commission of India (‘the CCI’) has given close attention to these markets, by way of conducting a recent market study on e-commerce, including attention to the platform economy (excluding ride-sharing),⁸ and contributing reports to last year’s OECD roundtable⁹ and to a recent UNCTAD meeting.¹⁰ As the Chairperson of the CCI noted in a recent speech,

[W]e are witnessing the emergence of the “digital economy”. The dawn of this new economy has brought with it alterations in the contours of market, transformations in the ways of doing business, ways of communication, and of transactions. Digital technology is transforming markets at an unprecedented scale and pace. Business models, market access mechanisms, ways of communication and transactions are all being reshaped by digital mediation. The ongoing shift of markets

⁵ See, for example, Directorate for Financial and Enterprise Affairs Competition Committee, Organisation for Economic Co-operation and Development, *Taxi, ride-sourcing and ride-sharing services* (DAF/COMP/WP2(2018)1, 2018) <[https://one.oecd.org/document/DAF/COMP/WP2\(2018\)1/en/pdf](https://one.oecd.org/document/DAF/COMP/WP2(2018)1/en/pdf)> accessed 9 December 2019 (OECD Report).

⁶ Australian Competition and Consumer Commission, *The Sharing Economy and the Competition and Consumer Act* (2015) <<https://www.accc.gov.au/system/files/Sharing%20Economy%20-%20Deloitte%20Report%20-%202015.pdf>> accessed 9 December 2019.

⁷ International Competition Network Advocacy Working Group, ‘Report on ICN Members Recent Experiences (2015-2018) in Conducting Competition Advocacy in Digital Markets’ (2019) <content/uploads/2019/06/AWG_AdvDigitalMktsReport2019.pdf> accessed 9 December 2019.

⁸ Competition Commission of India, *Market Study on e-Commerce in India* (2020) <https://www.cci.gov.in/sites/default/files/whats_newdocument/Market-study-on-e-Commerce-in-India.pdf> accessed 9 December 2019.

⁹ See, note by India in Directorate for Financial and Enterprise Affairs Competition Committee (n 5).

¹⁰ Intergovernmental Group of Experts on Competition Law and Policy, *Emerging issues before CCI relating to Digital Economy – Contribution by The Republic of India* (2019) <https://unctad.org/meetings/en/Contribution/ciclp18th_cont_India.pdf> accessed 9 December 2019 (UNCTAD Submission).

towards a digital platform-centric configuration has opened up new opportunities while also posing new challenges for both market participants and regulators.¹¹

Individuals transact with individuals, through sharing economy enterprises, for service contracts on a one-off basis; each service contract is an atom in any definable service market.¹² With highly diffuse suppliers and consumers contracting through enterprises with substantial market presence, areas of competition policy concern are many. These include conspiracies governing competitively sensitive subjects such as price, output, and quality; exercises of bargaining power conferred by a dominant position, including both the ability to establish a supra-competitive price and the ability to discriminate in price among similarly situated consumers; and productive agreements that may nonetheless limit competition and thereby require careful analysis of overall competitive effects.

Conspiracy, productive agreement, and abuse of dominance are unlikely to arise together. The competitive concern that emerges appears to depend on how we define the structure of a sharing economy enterprise. If we identify a centralised, single firm, with substantial market presence, pricing, output, and quality decisions, including differences in offerings as among similarly situated consumers, this presents a concern for abuse of dominance. As an example, a ride-sharing enterprise that acquires 50% or more of the share for ride hailing in a particular market and is determined by operation of law to employ its drivers and to sell services to consumers in competition with taxi operators, might readily be considered to have dominant market position.¹³ This abuse of dominance may be manifested upstream as well as in the labour input market, in which individual suppliers compete for transactions and lack bargaining power vis-à-vis the enterprise.¹⁴

If, by contrast, we identify a nearly infinitely diffuse set of suppliers, combined in a loose alliance for marketing and distribution purposes, with the sharing economy enterprise filling the role of a joint agent, decisions on

¹¹ Ashok Kumar Gupta, 'Opening Remarks' (Antitrust Global Seminar Series, New Delhi, 8 February 2019) para 7 <http://www.cci.gov.in/sites/default/files/speeches/Opening_Remarks.pdf?download=1> accessed 9 December 2019.

¹² See, Mark Anderson and Max Huffman, 'The Sharing Economy Meets the Sherman Act: Is Uber a Firm, a Cartel, or Something In Between?' (2017)(3) *Columbia Business Law Review* 859 (outlining six defining features of the sharing economy).

¹³ This would be the case if ride sharing drivers were treated as employees, as they recently have been held to be by the Cour de Cassation in France. See, *Judgment n°374 (19-13.316)* ECLI:FR:CCAS:2020:SO00374 (Courde Cassation, Chambre sociale).

¹⁴ See, Julian Nowag, 'UBER between Labour and Competition Law' (2016) 3 *Lund Student EU Law Review* 95 (identifying the Scylla and Charybdis of abuse of dominance and anti-cartel prohibitions facing sharing economy enterprises).

price, output, and quality reached through the enterprise represent agreements among competitors.¹⁵ This is the form of sharing economy enterprise that ride sharing enterprises purport to be – and, in markets including the US, have largely succeeded in being treated as.¹⁶ Such agreements among suppliers tend to be treated, on their face, as violations of competition law, with criminal penalties in those jurisdictions that impose them and substantial fines elsewhere.¹⁷ The strength of this rule is such that agreements are considered void *ab initio* or on a *per se* basis (with the choice of Latin phrases jurisdiction dependent).

Finally, there is the possibility of a productive venture, an agreement creating both efficiencies and threatening competitive consequences, which must be evaluated holistically to appreciate its overall impacts. This is where courts' treatment of ride sharing enterprises can be expected to be evaluated. Regulators and courts will be reluctant to allege and to find hard core cartel agreements buried in what many consider to be innovative twists on production and employment, which may promise substantial welfare gains – with benefits perhaps distributed among a new class of entrepreneurs, historically dependent on others for employment opportunities.

On a broad analysis of competition policy concerns arising in ride sharing, no one claim stands out as the obvious competition harm. Several possible claims exist, however, depending on the structure of the enterprise, the particular jurisdiction's laws governing both competition and employment, and the strength of the market in which it is situated. The nature of the competition law concerns calls to mind the adage, "*where there is smoke, there is fire*"; while no clear competition law violation will exist in all cases, continual attention to areas of concern will be warranted for the foreseeable future.

II. ANTITRUST PRINCIPLES OF SINGLE FIRMS

The structure of sharing economy enterprises calls into question the legal rules and economic understanding surrounding the business firm. In an

¹⁵ *ibid.*

¹⁶ United States National Labor Relations Board – Office of the General Counsel, *Uber Technologies, Inc Cases 13-CA-163062, 14-CA-158833, and 29-CA-177483* (Advice Memorandum, 2019) 3 <<https://apps.nlr.gov/link/document.aspx/09031d4582bd1a2e>> accessed 9 December 2019 ("*Applying the common-law agency test, we conclude that the UberX and UberBLACK drivers were independent contractors*"); *See contra*, California Assembly Bill No. 5 2019 <https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB5> accessed 9 December 2019 (broadening the definition of 'employee' under California state law).

¹⁷ *See*, Anderson and Huffman (n 12) 902-04.

old-economy enterprise, the firm is easily defined as a centrally owned and organised enterprise that owns its own capital stock and employs its labour force, subject to well established laws governing the employment relationship. The old economy firm achieves efficiency benefits from integration that decrease as its scale becomes unwieldy. In a free market economic system, where the law favours competition to centralised planning, the firm is permitted to grow organically without intervention from regulators. As a matter of economic policy, including competition policy, the firm (once defined) is less likely to be restricted in its intra-firm operations. This has relevance to an analysis of the antitrust consequences of the sharing economy, which presents ambiguity as to the definition of a firm, by adopting attributes of old-economy firms, both in terms of labour force and capital stock.

A. The Law – United States and India

The concept of the single firm is the barrier between competition law theories based on agreement and those based on single-firm dominance. In the US, this is a distinction between Section 1 and Section 2 of the Sherman Antitrust Act, 1890 (**‘the Sherman Act’**).¹⁸ Multiple firms are rarely challenged under Section 2 (although a claim of conspiracy to monopolise is theoretically possible).¹⁹ India’s Competition Act, 2002 (**‘the Competition Act’**) likewise follows this structure, outlawing certain agreements in Section 3 and certain activities by dominant firms in Section 4.²⁰

The single firm-multiple firm divide breaks down in the presence of a ‘collective dominance’ theory, which the EU has nominally followed and which is expressly included in many national competition laws.²¹ Under a collective dominance theory, more than one firm collectively making up a dominant share of the market can be challenged for conduct that otherwise serves as the basis for liability for an individually dominant firm. In this manner, it is closely comparable to a theory of harm based on ‘tacit collusion’ or

¹⁸ 15 USC, ss 1, 2.

¹⁹ See, 15 USC, s 2 (outlawing “*combin[ing] or conspire[ing]... to monopolize*”. See generally, Joseph P Bauer et al, *Kintner’s Federal Antitrust Law* (first published in 1980, Anderson Publishing Company 2013) 16-154 (the offense of conspiracy under s 2 is superfluous because the same facts will support a violation of s 1, which is an easier claim to prove).

²⁰ The Competition Act 2002, ss 3, 4. Most, if not all competition law systems around the globe follow a similar structural divide between agreements and single-firm dominance. See, for example, the Treaty on the Functioning of the European Union, arts 101, 102; the Anti-Monopoly Law of the People’s Republic of China, arts 13, 17.

²¹ In India, collective dominance is not recognised as a basis for liability under s 4 of the Competition Act. See, *Dish TV India Ltd v Hathway Cable and Datacom Ltd* 2014 SCC OnLine CCI 35.

‘oligopoly conduct’, which causes consternation in the US system but does not present a basis for a violation of the US antitrust laws.²² Collective dominance theory erodes the distinction between concerted and unilateral conduct, but as a practical matter is uninteresting in the context of the sharing economy. The ‘concert’ in the sharing economy is so thickly populated that no theory of joint action, other than express collusion, might provide a basis for liability under any competition law system.

Thus, the unilateral conduct-concerted conduct divide is a worldwide phenomenon in applying competition principles to the sharing economy. Concert, if it exists, is a function of individual competitors reaching agreement through the sharing economy enterprise, using the technology platform as a meeting place for reaching an agreement on price, output, or other facet of competition. In an ordinary market, concert among thousands or millions of highly diffuse providers would be exceedingly unlikely. However, the ease of transactions made possible by a sharing economy works equally well in terms of coordinating a conspiracy among horizontal competitors.

Dominance, if it exists, should never be a function of a single supplier in a sharing economy market achieving dominant share. Instead, it should be a function of the sharing economy enterprise achieving dominance by locking up a substantial share of the matches between suppliers and consumers. Dominance is likely to be measured in terms of the number of matches between suppliers and consumers transacting on the particular technology platform. For example, in ride sharing, if in a particular month in a particular geographic location there are 1 million matches, the dominant firm might have 500,000, or whatever proportion the particular jurisdiction determines triggers status as a dominant firm under its laws.

B. Single Firm Analysis under the Competition Act

There is limited authority on single firm analysis under India’s Competition Act. The Competition Act is more explicit than US law in its distinguishing of single entities from associations of enterprises for purposes of cartel claims. The Competition Act includes a definition of ‘enterprise’, and defines the concerted conduct prohibition as handling agreements involving “*an enterprise or association of enterprises.*”²³ This formed the core of the defendants’ argument in *National Insurance Co. Ltd. v. CCI*, ultimately

²² See, Ioannis Kokkoris, ‘The Development of the Concept of Collective Dominance in the ECMR’ (2007) 30 *World Competition* 419, 420.

²³ The Competition Act 2002, ss 1, 3.

failing to convince the court that four competing insurers and their regulator could not be considered together as a single enterprise.²⁴

One author analysed the development of the single enterprise doctrine under the competition law of India, dating to the Monopolies and Restrictive Trade Practices Act, 1969.²⁵ Jain details the progressive definition of ‘enterprise’ in a series of revisions to the competition laws, including the degree to which that definition encompasses government entities. Jain then explains, in depth, the 2017 *National Insurance Companies* decision. In Jain’s interpretation, the court in *National Insurance Companies* noted the individual board management of the respective defendants and the lack of regulatory involvement in the management of the companies. The case thus reflects a determination that the enterprises and their regulator were not operating together as a single entity.

It is possible that the broad definition of enterprise in Section 1 of the Competition Act requires Indian courts to reach further than a court or regulator in the US would. An argument that a cartel might be a single entity with its regulator would be frivolous under US law.²⁶ The broader definition of an enterprise in India could perhaps be traced to the nationalisation of insurance in 2002 (the same year the Competition Act took effect), which presented a unique single entity problem.²⁷ In spite of that nationalisation, the broad enterprise definition in the Competition Act – covering departments of government – reached the individual cartellists.²⁸ The court’s analysis on the merits of the single entity question is entirely consistent with the US approach. Such a recognition of the lack of common purpose – what Anderson has called the sharing of profits and losses – both among the cartellists and between the cartellists and the regulator, is in keeping with the US approach to the single entity doctrine.²⁹

Thus, while the law in India is not well developed, we see strong analogues between the single entity analysis in India and that in the US, where

²⁴ *National Insurance Co Ltd v Competition Commission of India* (2017) Comp LR 1, paras 5, 12 (*National Insurance Company*).

²⁵ Chirayu Jain, ‘Single Economic Entity Doctrine in India’ (2017) <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3184957> accessed 9 December 2019.

²⁶ Though an analogy might be made to a state action or regulatory immunity defense in US law. cf *Parker v Brown* 1943 SCC OnLine US SC 4 : 87 L Ed 315 : 317 US 341 (1943) (US Supreme Court holds that a state-mandated cartel is exempt from antitrust challenge); *Credit Suisse Securities (USA) LLC v Billing* 2007 SCC OnLine US SC 59 : 551 US 264 (2007) (securities laws preclude antitrust claims in case of ‘clear repugnance’).

²⁷ *National Insurance Company* (n 24) para 12.

²⁸ *National Insurance Company* (n 24) para 13 [citing s 2(h) of the Competition Act].

²⁹ cf Mark Anderson, ‘The Enigma of the Single Entity’ (2014) 16 University of Pennsylvania Journal of Business Law 497, 526-47 (explaining conflicting single entity decisions).

the law has been developed over many decades of experience with a variety of common ownership situations. The analysis in the following subpart describes the importance of the single entity question to deciding the application of competition law principles in ride sharing.

C. The Antitrust Firm in the Sharing Economy

Anderson and I discuss the sharing economy and its impact on theories regarding the antitrust firm in our 2017 article, ‘The Sharing Economy Meets the Sherman Act: Is Uber a Firm, a Cartel, or Something in Between?’.³⁰ There, we identify the central tension in a legal theory built on transaction costs in extra-firm contracting: antitrust law favours intra-firm conduct because it is easy to coordinate and to manage efficiently, and that efficiency promises benefits to consumers.³¹ Extra-firm contracting offers less central control and reduced efficiencies, so coordination is more likely to result in consumer harm.³² In a modern platform industry, however, extra-firm contracts can be concluded as efficiently as can intra-firm contracts in traditional industry structures, with similarly substantial coordination of operations among contracting parties. The benefits flowing from intra-firm contracts are no longer unique.

Anderson and I go further than merely observing that extra-firm contracting may be as efficient as that occurring intra-firm. We contend that by reducing search and transaction costs, the sharing economy “enable[s] transactions that could not occur in a pre-internet economy.”³³ The central innovation in platform-based contracting is to eliminate the transaction costs that previously made one-off contracts impossible. The result is that nearly infinitely diffuse competitors – in the case of ride sharing, both drivers (competing for customers) and passengers (competing for rides) – are able to centralise their operations to achieve efficiencies of scale, while remaining competitors with regard to much of what they do.³⁴ These areas of remaining competition include “*matters such as where to operate, what parts of the day to offer services, and . . . when to service or replace the vehicles.*”³⁵

Ride sharing drivers compete in other ways, both articulable and less so, including cleanliness, friendliness, driving ability, and provision of additional products or services (such as a bottle of water in the cup-holder). Passengers

³⁰ See, Anderson and Huffman (n 12).

³¹ See generally, Anderson and Huffman (n 12) 888.

³² Anderson and Huffman (n 12) 888-89.

³³ Anderson and Huffman (n 12) 882.

³⁴ Anderson and Huffman (n 12) 883-84.

³⁵ Anderson and Huffman (n 12) 884.

also compete, through whatever they can do to maximise their ratings to make drivers more inclined to respond to their summons. In theory, these ratings competitions should allow a nearly infinite number of facets of competition among drivers and passengers alike. It is even possible to imagine a form of price competition, based on tipping (by passengers) or discounting (by drivers). Practically speaking, however, objective facets of competition are greatly limited in service of the efficiency of commodification.

By reflecting both the central operational control of a single firm and the highly competitive nature of a market characterised by sole proprietorships, sharing economy firms, including ride sharing enterprises, are ambiguous in their competition policy implications. Anderson and I diagrammed the problem as shown in Figure 1.

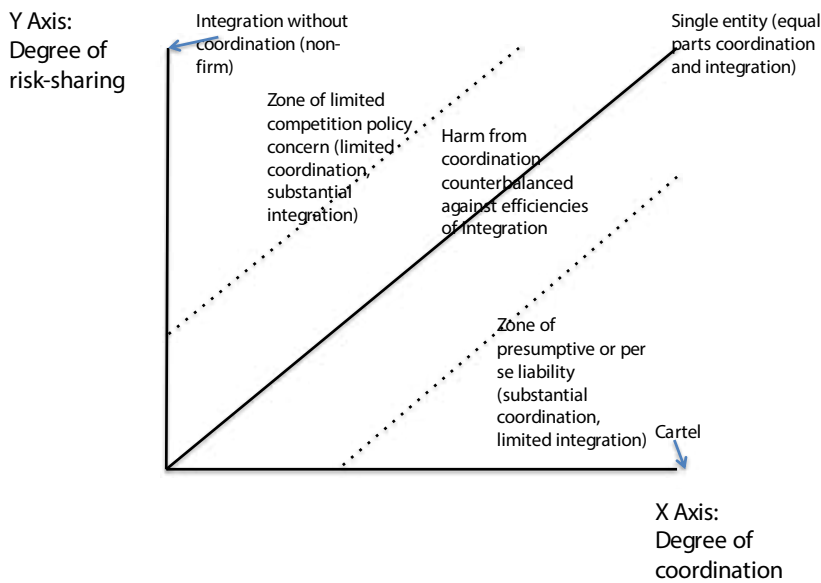


Figure 1

The figure demonstrates that efficiency increases as erstwhile competitors move upward along the Y-axis toward greater risk sharing, a concept detailed in the US Supreme Court’s *Copperweld* decision as one driven by the sharing of profits and losses.³⁶ Under the current state of law in most jurisdictions, competition law recognises either a single entity or multiple

³⁶ *Copperweld Corp v Independence Tube Corp* 1984 SCC OnLine US SC 147 : 81 L Ed 2d 628 : 467 US 752 (1984), 768-72 (coordinated activity between parent company and

competitors, a binary categorisation that can mean the difference between liability or immunity.³⁷ Studying the sharing economy shows that risk sharing is instead a matter of degree, with integration sufficient to achieve single firm efficiencies only at the far reach (the high point on the Y-axis) and disintegration sufficient to prevent any efficiencies from being realised at the extreme low point on the Y-axis. Sharing economy enterprises are arrayed along the Y-axis according to their particular terms.

Anderson and I analysed the state of several leading enterprises at the time of our 2017 publication,³⁸ but with variations in terms of service, any such array is subject to substantial change. (For example, between the drafting and publication of our 2017 article, one important term of service – tipping – changed in the Uber enterprise, leading to a different bargaining dynamic).³⁹

The X-axis on Figure 1 is well understood in all competition law systems, showing the degree of coordination among competitors. At the extreme (far right) point, coordination reflects a cartel agreement; at the far-left point, there is a lack of coordination reflective of full competition; and in the middle, there is coordination on less sensitive matters such as information sharing. Developed competition policy systems have long appreciated that this is a sliding scale of coordination,⁴⁰ although the binary per se/rule of reason distinction remains in both statutory enactments and common law interpretations.

Anderson's and my significant contribution to the analysis of the antitrust firm, based on our study of the sharing economy, was that each agreement should be analysed both in terms of its place on the X-axis and its place on the Y-axis, rather than deciding ab initio that a particular enterprise was either exempt from scrutiny for all cases (because a single firm) or was subject to scrutiny in all cases (because a multiplicity of competitors). The pricing term in a normal sharing economy enterprise, most notably the price per ride that all ride sharing drivers agree to charge, would be a price fix – but

wholly-owned subsidiary must be viewed as that of a single enterprise for the purpose of Sherman Act s 1 analysis; single enterprise incapable of conspiracy).

³⁷ Anderson and Huffman (n 12) 917.

³⁸ Anderson and Huffman (n 12) 927.

³⁹ Anderson and Huffman (n 12) 874.

⁴⁰ See, for example, *California Dental Association v Federal Trade Commission* 1999 SCC OnLine US SC 51 : 143 L Ed 2d 935 : 526 US 756 (1999) (no categorical line between restraints giving rise to intuitively obvious inference of anticompetitive effects; inquiry should look to restraints' circumstances, details and logic).

because of the sharing of risk among the erstwhile competitors under the Uber umbrella, it should be subject to rule of reason scrutiny.⁴¹

Due largely to the features Anderson and I analysed in 2017, the sharing economy grew strongly in developed economies, all of which were burdened with legacy permitting systems such as taxicab medallions or zoning regulations, and other oversight limiting public lodging. However, the promise in economies with substantial development ahead of them is much greater, also for the reasons we describe. Either, or both, of (1) a lack of historic permission for private enterprise, and (2) the failings of centralised economic direction, have left many economies without competitively attractive offerings in industries affected by the sharing economy. At the same time, these economies have substantial pent-up entrepreneurial supply waiting to be unleashed through activity that can arbitrage restrictions on entrepreneurship. Sharing economy enterprises can capitalise on this untapped supply with the technical improvements allowing the efficiency of integrated ownership, producing entire industries that may have been lacking.

III. RIDE SHARING MARKETS – UNITED STATES AND INDIA

Ride sharing has a venerable history around the globe as a non-market or grey-market alternative to taxis and car ownership. Examples include carpooling by commuters. ‘Slugging’ is a form of carpooling found in Washington DC (USA) that involves lines of commuters waiting at known pick-up locations for rides on the major highways either south or north of town, enabling drivers to take advantage of the High Occupancy Vehicle lanes and avoid congestion, with a history dating at least to the Arab oil embargo. The phrase ‘gypsy cabs’ refers to unlicensed (and therefore law violating) taxicabs in the US. According to sharing economy enterprise Wikipedia, other terms – ‘black cabs’ in China, ‘white cards’ in Hong Kong, ‘taxi pirate’ or ‘pirrataxi’ (Mexico, Scandinavia), among others – are in use around the world, demonstrating the worldwide ubiquity of the practice.⁴² Ride sharing is also the best known example of a sharing economy enterprise, with Uber (US), Ola (India), Didi (China), Grab (Vietnam), and other app-based enterprises achieving massive scale in a short period of time.

⁴¹ Anderson and Huffman (n 12) 927-29. Anderson and I concluded that the quick-look rule of reason was appropriate for Uber, although that conclusion is likely relaxed in light of permissive app-based tipping.

⁴² ‘Illegal Taxicab Operation’ (*Wikipedia*, 2019) <https://en.wikipedia.org/wiki/Illegal_taxicab_operation> accessed 26 May 2019. When writing about the sharing economy, I am more willing than in ordinary scholarship to rely on Wikipedia, itself a sharing economy enterprise, for easily verifiable factual observations.

In economies with substantial room for growth, such as that in India, the sharing economy has particular promise. Early development of a robust transportation infrastructure is likely one of the strongest explanations for the success in US economic development in the 19th and 20th centuries. Ride sharing allows for that transportation infrastructure to grow in a grass roots manner in economies not yet so developed. In addition, infrastructure growth presents substantial danger for corruption when managed centrally, the threat of which is reduced when the growth happens at the grass roots level. In light of these observations, it should not be a surprise that the ride sharing industry in India is characterised by a large number of competitors and, by all appearances, substantial competitiveness.

A. Taxis and Ride Sharing – United States

The US ride sharing market has achieved substantial penetration into consumer transportation generally, with reports that 36% of people in the US had used a ride sharing app in 2018.⁴³ Survey results also show that 97% of US consumers have heard of ride sharing services.⁴⁴ Uber and Lyft are a functional oligopoly nationwide in matching services, with Uber at 64% share and Lyft at 33% share (approximate figures) of a market presumably based on rides taken.⁴⁵ Market share, as determined by the number of drivers on an app, is 87.6% for Uber and 75.1% for Lyft, reflecting substantial ‘multi-homing’ (whereby one driver offers services on more than one app). According to a news report summarising one survey, another metric, business travel receipts, shows a substantial but narrowing gap between Uber and Lyft, with Uber at 79% and Lyft at 21% of the share of business travel receipts (apparently in the US).⁴⁶

On a worldwide basis, determined by the amount of investment in their enterprises prior to initial public offerings (in January 2019), Uber was first with \$24 billion in investment, with Chinese firm Didi following closely with \$21 billion, Southeast Asian firm Grab third with \$7.1 billion, Lyft fourth with \$5 billion, and Indian firm Ola Cabs fifth with \$3.4 billion.⁴⁷

⁴³ ‘Ridesharing services in the US – Statistics & Facts’ (*Statista*, 2019) 14 <<https://www.statista.com/study/54807/ridesharing-services-in-the-us/>> accessed 20 July 2019.

⁴⁴ (n 43) 19.

⁴⁵ (n 43) 11. Statista fails to explain the basis for its market share calculations.

⁴⁶ Wolf Richter, ‘Uber and Lyft are gaining even more market share over taxis and rentals’ (*Business Insider*, 30 July 2018) <<https://www.businessinsider.com/uber-lyft-are-gaining-even-more-market-share-over-taxis-and-rentals-2018-7>> accessed 9 December 2019.

⁴⁷ ‘Lyft’ (*Statista*, 2019) 7 <<https://www.statista.com/study/58248/lyft/>> accessed 9 December 2019.

In terms of global revenue, Lyft's – drawn from Canada and the US only – was \$2.18 billion in 2018.⁴⁸ Lyft gave 551 million rides in North America in 2018.⁴⁹ Uber's worldwide revenue, drawn from North America as well as other continents (and thus not a good comparison to Lyft, in terms of relevant market share), was \$11.3 billion in 2018.⁵⁰ Uber gave 5.3 billion worldwide rides in 2018.⁵¹

Local share of ride sharing enterprises in the US is more textured than the national or worldwide comparisons disclose. In terms of consumer spend (on an average per-person basis), San Francisco is the largest local ride-sharing market in the US, followed by Boston, New York, Washington D.C., and Philadelphia.⁵² In these five largest markets, the closest competition is in San Francisco, with Lyft customers averaging \$89 monthly spend and Uber customers averaging \$110 monthly spend. In every case, the monthly average spend on Uber exceeds Lyft, with the greatest distinction – \$95 versus \$55 – in Boston.⁵³

Relative to traditional taxis, ride sharing has made substantial inroads. One news source, drawing data from a provider of business travel expense management services, notes an increase from the first quarter of 2014 to the second quarter of 2018 in the share of business travel ground transportation receipts from 8% (2014) to 70.5% (2018).⁵⁴ This 70.5% statistic leaves the remainder of the market divided among rental cars and traditional taxis, whose share decreased over the same period from 55% to 22% (rental cars) and 37% to 5% (taxis).⁵⁵

Ride sharing is not yet profitable for the leading US enterprises, at least in terms of traditional accounting metrics of profit. According to the Lyft registration statement for its 2019 Initial Public Offering, “*We have incurred net losses each year since our inception and we may not be able to achieve or maintain profitability in the future. We incurred net losses of \$682.8*

⁴⁸ (n 47) 12, 37.

⁴⁹ (n 47) 13.

⁵⁰ ‘Uber Technologies’ (*Statista*, 2019) 13 <<https://www.statista.com/study/54895/uber-technologies/>> accessed 9 December 2019.

⁵¹ (n 50) 16.

⁵² (n 50) 10. Based on an average of transactions from 50,000 users in each locality, this is an imperfect statistic for purposes of determining market share, which might be better analysed in terms of total spend or total rides in a particular locality.

⁵³ (n 50) 10.

⁵⁴ Michael Goldstein, ‘Dislocation and its Discontents: Ride Sharing’s Impact on the Taxi Industry’ (*Forbes*, 8 June 2018) <<https://www.forbes.com/sites/michaelgoldstein/2018/06/08/uber-lyft-taxi-drivers/#4b601fec59f0>> accessed 9 December 2019 (summarising a study by business travel software firm Certify); Richter (n 46).

⁵⁵ *ibid.*

million, \$688.3 million and \$911.3 million in 2016, 2017 and 2018, respectively.”⁵⁶ Uber, likewise, disclosed, “We have incurred significant losses since inception, including in the United States and other major markets. We expect our operating expenses to increase significantly in the foreseeable future, and we may not achieve profitability.”⁵⁷ Despite that, recent news reports suggest stock price increases for both companies based on earnings by Uber meeting expectations.⁵⁸ There is also the question of whether the data being gathered on riders, which cannot be meaningfully represented in accounting metrics, might nonetheless represent value that in hindsight will demonstrate profitability even today.

In the US, ride sharing represents a substantial share on a per-user basis of the overall sharing economy use. In 2018, 66 million adults in the US used a sharing economy service. 16 million used sharing economy lodging services. 18 million used ride sharing.⁵⁹ Another prominent sharing economy use model, coworking spaces, had much less penetration in 2018, with less than a million individual users.⁶⁰

B. Taxis and Ride Sharing – India

In the 2016 ‘Report of the Committee Constituted to Propose Taxi Policy Guideline to Promote Urban Mobility’, the Indian Ministry of Road Transport and Highways took an express position favouring a permissive regulatory scheme to liberalise the shared mobility industry.⁶¹ The Report reflects a response to the perceived failure of public transport infrastructure to stem private car ownership and use and attendant congestion and pollution.⁶² It seeks to establish a national policy limiting regulatory impediments to the growth of cab aggregators, while expressly permitting regulation

⁵⁶ See, ‘Form S-1 Registration Statement – Lyft, Inc’ (1 March 2019) 21 <<https://www.sec.gov/Archives/edgar/data/1759509/000119312519059849/d633517ds1.htm>> accessed 9 December 2019.

⁵⁷ See, ‘Form S-1 Registration Statement – Uber Technologies, Inc’ (11 April 2019) 12 <<https://www.sec.gov/Archives/edgar/data/1543151/000119312519103850/d647752ds1.htm>> accessed 9 December 2019.

⁵⁸ Ryan Browne, ‘Traders are finally realizing the value of companies like Uber and Lyft, Russian rival says’ (CNBC, 6 June 2019) <<https://www.cnbc.com/2019/06/06/market-realizing-value-of-ride-share-firms-like-uber-lyft-yandex-cfo.html>> accessed 9 December 2019.

⁵⁹ ‘Sharing Services in the US’ (Statista, 2019) 6-8 <<https://www-statista-com.proxy.ulib.uits.iu.edu/study/56029/sharing-services-in-the-us/>> accessed 9 December 2019.

⁶⁰ *ibid* 28.

⁶¹ Ministry of Road Transport and Highways, *Report of the Committee Constituted to Propose Taxi Policy Guideline to Promote Urban Mobility* (2016) <<https://smartnet.niuu.org/sites/default/files/resources/Taxi%20Policy%20Guidelines.pdf>> accessed 9 December 2019.

⁶² Ministry of Road Transport and Highways (n 61) 8.

designed to ensure safety, consumer protection, and fair terms of service (including pricing).⁶³

At the same time, by defining ride sharing enterprises as part of the taxi market, India sought to close the regulatory gap the enterprises sought to exploit – not being treated as taxi services because their sole literal service was providing a transaction platform.⁶⁴

i. Many firms

The Indian taxi market stood at around \$6.4 billion in 2016, and is forecast to grow at a compound annual rate of 13.7% during 2017-2022, to reach \$14.3 billion. Surging demand for taxi services in India can be attributed to changing lifestyles of travellers and increasing disposable income of consumers, especially in Tier-I and Tier-II cities. The market is witnessing increasing traction as taxis offer hassle free travel experience to customers in addition to various other tangible and intangible offerings such as booking convenience through mobile applications, air conditioning, educated and skilled drivers, multiple payment options, 24x7 customer support, electronic fare meters, GPS-enabled vehicles, etc.⁶⁵

Uber Technologies Inc. and Ola (ANI technologies Pvt. Ltd.) are spending heavily to expand pooled rides, a category considered the next big growth driver for both cab hailing firms. Pooled rides account for 25-30% of overall trips on Ola and Uber in key cities such as Mumbai, Delhi and Bengaluru.⁶⁶ Both firms have either dropped fares or are running promotions for ride sharing to attract new customers. For instance, Uber has capped carpooling fares at ₹49 for the first 8 km in Delhi, Bengaluru and Chennai. Ola is offering Share Pass, a subscription-based service launched in November 2018 that provides carpooling at a flat fare, and at a steep discount. Ola is also offering a Share Pass for five trips at ₹1. Usually, the firm offers a five-ride pass for ₹149, while the ones for 20 and 40 rides costs ₹249 and ₹349 per month, respectively, for the first 8 km. Ola recently reported that more than 20

⁶³ Ministry of Road Transport and Highways (n 61) 5-7.

⁶⁴ OECD Report (n 5) 2-3.

⁶⁵ 'India Taxi Market By User Segment (Individuals, Corporate & Tourist), By Payment Mode (Cash, Online Payment & Mobile Wallets), By Vehicle Type (Premium/Luxury, SUV/MPV, Hatchback & Sedan), By Taxi Type (Radio, Regular, Self-Driving), Competition Forecast & Opportunities, 2012 – 2022' (*TechSci Research*, October 2017) <<https://www.techsciresearch.com/report/india-taxi-market/1450.html>> accessed 9 December 2019.

⁶⁶ See, for example, Manish Singh, 'Uber Reaches 500 Million Rides in India, Reveals Interesting Statistics' (*Gadgets 360*, 3 August 2017) <<https://gadgets.ndtv.com/apps/news/uber-india-500-million-rides-uberpool-driver-rider-statistics-1733047>> accessed 9 December 2019.

million carpool rides had been pre-sold through its Share Pass subscription offering.⁶⁷

India's growing transportation industry has even attracted foreign players such as Tripda, which launched in India in 2014. "We are focused on long distance carpooling and inter-city rides and hope that India will be among our top three markets apart from Brazil and USA in less than a year" said Nitish Bhushan, country manager of Tripda in India. The company had planned to expand to Mumbai next in order to sign on commuters on the Mumbai-Pune highway,⁶⁸ but saw its operations shut down in 2015.

BlaBlaCar is mostly preferred for long-distance inter-city travel while Ola/Uber are preferred for shorter distances. In general,

With BlaBlaCar, the car owners have the opportunity to share their long-distance ride with passengers traveling on the same route. Owners do this by specifying the itinerary and price for the ride. Interested co-travellers can coordinate with the car owner through a private messaging system of BlaBlaCar or over the phone. The co-travellers then pay their contribution to the owners directly.⁶⁹

ii. Ola and Uber

According to fact-finding by the Director General for Competition, Ola is the largest provider of app-based ride sharing in India. Ola is a domestic firm with operations dating to 2010.⁷⁰ It describes itself as a taxi aggregator and not a taxi company. In this way, it follows the business model of Uber.⁷¹ Uber is second in market presence to Ola, having begun operations in India in 2013.⁷² Although the business model differs from 'radio taxis',

⁶⁷ Sayan Chakraborty, 'For Ola and Uber, India's shared taxi market is the next battleground' (*Livemint*, 6 June 2017) <<https://www.livemint.com/Companies/zurwJmatKucNvacjRm-wxLK/Shared-rides-the-next-battleground-for-Ola-Uber.html>> accessed 9 December 2019.

⁶⁸ Payal Ganguly and Aditi Shrivastava, 'Startups offering ride-shares set to gain as taxi aggregators face roadblocks across states' *Economic Times* (Mumbai, 16 December 2014) <https://economictimes.indiatimes.com/small-biz/startups/startups-offering-ride-shares-set-to-gain-as-taxi-aggregators-face-roadblocks-across-states/articleshow/45531225.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst> accessed 9 December 2019.

⁶⁹ Archana Oberoi, 'How BlaBlaCar works: Business Model and Revenue Streams' (*Daffodil*, 13 March 2019) <<https://insights.daffodilsw.com/blog/how-blablacar-works-business-model-and-revenue-streams>> accessed 9 December 2019.

⁷⁰ OECD Report (n 5) 2.

⁷¹ *Fast Track Call Cab (P) Ltd v ANI Technologies (P) Ltd* 2017 SCC OnLine CCI 36, paras 7-12.

⁷² OECD Report (n 5) 2.

which own their cars rather than operate platforms where drivers and riders interact, the Director General concluded the Ola was a substitute for radio taxis. However, despite greater than 60% market share, Ola was not a dominant player due to substantial competition from Uber and an eroding market share.⁷³

Ola and Uber each provide substantial competitive constraint on the other's possible dominance. Evaluating allegations of abuse of dominance by Ola, the CCI held that market share is an inadequate measure of competitive position in the market for cab aggregators.⁷⁴ Fierce competition by Uber and a lack of switching costs, including the presence of multi-homing (consumers using brands interchangeably), rendered Ola's substantial share in the particular city in question unconvincing. According to the CCI's OECD report, there are cases involving group ownership arguments through which Ola's and Uber's shares might be aggregated for the purpose of determining dominance.⁷⁵

Because the existing investigations and litigation in India regarding ride sharing turn on questions of dominance, the Anderson-Huffman analysis of the sliding scale of integration, and its interplay with the degree of coordination, is not readily applied.

IV. ANTITRUST FOR A WORLD OF SELF EMPLOYMENT

Ride sharing is the most prominent application of sharing economy technologies and enterprise structures, but the world of self-employment is not limited to ride sharing. Instead, the possibility of low-to-zero transaction cost contracting raises the possibility of revolutionising nearly any services market. As I describe above, these markets will be populated by a functional infinity of suppliers and of consumers, each lacking any bargaining power vis-à-vis each other. This leaves three areas of likely concern for antitrust inquiry: (1) conspiracy among individual suppliers, either en masse through the sharing economy enterprise as intermediary or in isolated localised sub-markets; (2) abuse of dominance by the enterprise itself, harming either competitors (and thus competition) or consumers or suppliers on either side of the platform; and (3) mergers or consolidations involving enterprises.

⁷³ OECD Report (n 5) paras 9, 12-13, 22-23.

⁷⁴ OECD Report (n 5) 6.

⁷⁵ OECD Report (n 5) 7.

A. Market Definition

The first step in any antitrust analysis of sharing economy enterprises will be that of market definition. The enterprise, as that concept is used here and in prior scholarship, is comprised of a functionally infinite number of suppliers, a matching service (platform) and a seeming infinity of transactions among suppliers and consumers. Courts and commentators have struggled with whether the market is best understood to be: (1) the service in which the enterprise operates (e.g., ride sharing enterprises in the taxi market); (2) a narrower market specific to the sharing economy nature of the enterprise (e.g., a market for app-based ride sharing); or (3) a market for matching suppliers with consumers. If the definition is the third, there are at least two markets in sharing economy enterprises – the market for matching and the market for supplying rides. Which market is used will influence the subsequent analysis of antitrust theories.

The correct answer, for most antitrust analyses, is to treat the enterprise as straddling two markets – one for matching and one for services. The matching market is populated by sharing economy platforms, and in most jurisdictions, is likely to be oligopolistic or monopolistic. The matching market has natural monopoly characteristics, with high up-front costs (developing the app, developing an installed user base) and lower marginal costs (selling the app after achieving market penetration).⁷⁶ Further, the matching market boasts both direct and indirect network effects, whereby increased use of an app heightens its value to all users, making it more likely that a new user will opt for the existing app rather than a new entrant.⁷⁷ The matching market is also the market in which entry barriers are greatest, because of the need to enter at scale to compete against substantial positive network externalities enjoyed by existing firms.⁷⁸

The services market will be populated by sharing economy enterprises as well as old-economy firms and in some cases, even individual entrepreneurs.

⁷⁶ See generally, N Gregory Mankiw, *Principles of Microeconomics* (6th edn, Southwestern 2012) 302 (natural monopoly where the high up-front costs are continually diluted by increased use).

⁷⁷ See, Jean-Charles Rochet and Jean Tirole, 'Two-Sided Markets: An Overview' (2004) Institut d'Economie Industrielle Working Paper <http://web.mit.edu/14.271/www/rochet_tirole.pdf> accessed 9 December 2019; Carl Shapiro and Hal Varian, *Information Rules: A Strategic Guide to the Network Economy* (1st edn, HBS Press 1999) 173-226 (discussing the phenomenon of network effects and their importance as entry barriers); David Evans and Richard Schmalensee, *Matchmakers: The New Economics of Multisided Platforms* (1st edn, HBR Press 2016) 21, 22, 25 (defining direct and indirect network effects and the resulting 'first mover advantage').

⁷⁸ Evans & Schmalensee (n 77).

Thus, a sharing economy enterprise in a ride sharing market competes with taxis, while a sharing economy enterprise in a lodging market competes with hotels. How to understand the services market is a more complicated question, depending on whether the enterprise is treated as a single entity or as a contract relationship among atomistic suppliers and the platform.

India defines app-based ride sharing enterprises as ‘cab aggregators’, a regulatory classification that encompasses Uber, Ola, and like enterprises. A cab aggregator is “*a digital intermediary or market place for a passenger to connect with a driver for the purpose of transportation.*”⁷⁹ This reflects an approach that highlights the role of the platform, rather than the enterprise in its entirety, in the market definition process. There is not a comparable announcement on a nationwide basis of how markets will be defined in the US, likely because of the lack of public investigation of sharing economy industries and the failure of private litigation to reach the highest-level court. For example, in its 2016 report on the sharing economy, the US Federal Trade Commission did not make an effort to define possible antitrust markets.⁸⁰

B. Dominance

From the perspective of competition policy, most of the interest worldwide in sharing economy markets has been in the area of abuse of dominance, with Ola or Uber the target of a private or public enforcement action. Dominance as a theory might be argued in either a market for matching (the service provided by the platform) or a market for the service provided by the enterprise (e.g., taxi services). Under the latter market definition, courts in the US have correctly been reluctant to find dominance, based on the ease of entry into ride sharing and insufficient evidence of dominant market share.⁸¹

Dominance is an odd theory of harm in the sharing economy space for a host of reasons. These include: (1) small firms (relative to old economy analogies); (2) ease of switching; (3) seeming ease of entry; and (4) localised markets.

⁷⁹ (n 9).

⁸⁰ See generally, FTC Report (n 3).

⁸¹ See, for example, *Philadelphia Taxi Association v Uber Technologies* 886 F 3d 332 (2018), 341-42 (3d Cir) (no “*dangerous probability of achieving monopoly power*” in the presence of low entry barriers and no allegations of market share); *DeSoto Cab Co v Uber Technologies Inc* 2018 US Dist LEXIS 226261, 20-27 (ND Cal) (dismissing monopolisation claims under US law on the basis of a lack of barriers to entry and a lack of a dangerous probability of recouping losses incurred through monopolisation).

i. Small firms

Initially, the firms serving as platforms in sharing economy enterprises may not themselves be impressively large, relative to old-economy counterparts. The service providers are not treated as employees except in jurisdictions where an employment relationship is decreed by law. The platform does not own the vehicles, or other capital assets used to provide services – a fact that may be changing as firms like Uber experiment with self-driving vehicles. Uber's market valuation immediately after its initial public offering was \$75 billion, a substantial sum but less impressive for a competitor to taxis in 65 countries and 600 cities worldwide.⁸² In the absence of large size, a ride sharing platform's competitive advantage relies largely on technological advantage, including the quality of the software deployed and the use of data to enhance transaction efficiency.

ii. Switching

Switching between sharing economy enterprises is relatively simple for both consumers and suppliers. This is because signing up for an app requires single digit minutes and involves merely entering basic personal information and payment details. Evidence suggests that both consumers and suppliers 'multi-home', using more than one platform either to provide or to consume services. Multi-homing and other factors ensuring ease of switching are regularly cited as evidence that sharing economy enterprises lack market power sufficient to give rise to theories of abuse of dominance.⁸³ In the absence of a lock-in effect from joining an app, of the sort that consumers experience in signing up for a particular technological standard (whether operating system, music streaming format, or the like), it is difficult to state a theory under which even substantial market share is likely to lead to a price or quality effect.

iii. Easy entry

Entry has been assumed to be easy in app-based markets because: (1) existing world-beating firms owe their start to small cadres of thinly-capitalised entrepreneurs; (2) the existing technology industry is populated by extremely high-valued firms, such as Google, Amazon, Apple, and Microsoft, each flirting with \$1 trillion in market capitalisation, who can enter or fund entry on a

⁸² Mansoor Iqbal, 'Uber Revenue and Usage Statistics (2019)' (*Business of Apps*, 10 May 2019) <<http://www.businessofapps.com/data/uber-statistics/>> (accessed 9 December 2019).

⁸³ Yaraghi and Ravi (n 1) 19 (differentiating sharing economy enterprises from social networks because of the lack of lock-in effects).

whim; and (3) private venture capital is available to fund promising start-up enterprises. A 2017 analysis of the sharing economy in India supports the ease of entry hypothesis, noting “*new start-ups being registered every week which offer new products and services using digital platforms.*”⁸⁴

A counterpart to the ease of entry story is the combination of network effects and the treasure trove of data held by first movers. These factors are frequently cited as evidence that start-ups will not be able to penetrate existing markets. There is reason to believe these facts are not as important as they might seem. Data for sharing economy markets can be expected to have localised value. Thus, data from US consumers is unlikely to be valuable when marketing to consumers in India (and vice versa). Even within a country, at least one as large and economically and culturally diverse as India or the US, data from one local market may not be meaningful in a different local market. As possible proof of this claim, Uber’s success has largely been in western markets, with regional competitors Ola (India), Yanex (Russia), Didi (China), and Grab (Vietnam) out-competing, and in three of those examples, actually eliminating the competitive threat from Uber.

iv. Localised markets

Much of the story regarding dominance in the sharing economy relates to the sheer worldwide or nationwide scope of the leading firms.⁸⁵ Another approach suggests that dominance may be best viewed as a function of local rather than worldwide markets. Ride sharing enterprises have characteristics of both: (1) nationwide or worldwide, and (2) localised, markets.⁸⁶ In support of the broader geographic market definition, consumers might be expected to choose among competing sharing economy enterprises based in part on geographic reach, including worldwide brand penetration – making sheer scale a competitive feature. In support of the narrower market definition, consumers can, and do, ‘multi-home’, selecting among competitors at a local level. For example, a world traveller might have an Uber app, a Didi app, a Grab app, and an Ola app, all on the same smartphone, and select the one best suited to the particular geography on a given day. Which effect – preference for broad reach or preference for local options – outweighs which is ambiguous. This undermines an argument that worldwide scale equates to dominance in any one locality.

⁸⁴ Yaraghi and Ravi (n 1) 5.

⁸⁵ For example, Hubert Horan, ‘Will the Growth of Uber Increase Economic Welfare?’ (2017) 44 *Transportation Law Journal* 33, 64-69.

⁸⁶ See, Francesco Russo and Maria Luisa Stasi, ‘Defining the Relevant Market in the Sharing Economy’ (2016) 5 *Internet Policy Review* 8-9 <<https://policyreview.info/node/418/pdf>> accessed 9 December 2019.

Features of sharing economy enterprises that serve to limit entry, including the scalability of data resources, are muted in the case of localised markets. This is because individual consumers are (primarily) local, so data regarding riders in one city necessarily excludes the conduct of riders in a different city. It is also because cultural, ethnic, religious, economic, or other differences between cities, states, or nations, render algorithms that facilitate competition in one place less valuable in another. As an example, an algorithm might predict the importance of having cars available at the airport, based on travel habits of the population on which the algorithm is based. If the population of another city has different travel habits, the algorithm will be of limited use. For that reason, sheer worldwide scale is of limited importance when competition is localised. This conclusion is bolstered by the reality of limits on the success of globally dominant players in specific geographic locales.⁸⁷

C. Agreement/Conspiracy

Conspiracy is and will remain an area of substantial concern in the context of the sharing economy, which at its core, reflects interconnected markets populated by a large number of individual participants. Anderson and I made this the central thrust of our 2017 article,⁸⁸ where we argued for a ‘quick look rule of reason’ approach to analysing the hub-and-spoke agreements among providers on a sharing economy enterprise. Those agreements, covering price, output, quality, choice, and innovation, strike at the heart of competitive concerns, but they also make possible a unique level of integration that approaches that of a single firm.

The question remains how to treat a theory of harm based on agreement, including: (1) whether the hub-and-spoke conspiracy approach will be followed; (2) what is the approach in a jurisdiction without a middle ground ‘quick look’ approach like that in the US; (3) what arguments might exist that undermine the necessity of coordination to achieve the integrative efficiencies? Another question relates to suppliers on a sharing economy enterprise, such as drivers in the case of ride sharing, seeking to organise as de facto employees, including whether such organisation itself presents a cartel problem.

i. Hub-and-spoke conspiracy

Hub-and-spoke conspiracy exists where horizontal competitors reach explicit or implicit agreement through an intermediary, perhaps without ever

⁸⁷ See, subpart B.iii, above.

⁸⁸ See, Anderson and Huffman (n 12)

communicating among themselves. Examples outside of the sharing economy include the *Apple e-Books* case in the US, where Apple was found to have served as the hub, orchestrating an e-Book pricing conspiracy among e-Book publishers.⁸⁹ The legal consequence, liability per se under Section 1 of the Sherman Act, was upheld on appeal.⁹⁰

According to its UNCTAD Submission, the CCI has also considered the possibility of a hub-and-spoke conspiracy in the context of a platform enterprise. Noting two examples of possible hub-and-spoke relationship cartels that were instead investigated as vertical agreements, the CCI summarised its view as follows: “*The CCI is however, aware that even if firms that are distributors do not directly communicate with each other, the fact that they use the supplier as an intermediary or backchannel medium to communicate should not exculpate them from any liability.*”⁹¹

The CCI’s summary reflects a correct understanding of the hub-and-spoke possibility in the sharing economy. However, when applied in the context of ride sharing, the CCI abandoned the hub-and-spoke concept in the absence of proof of communication between suppliers in a sharing economy enterprise. The CCI’s UNCTAD Submission described its investigation into the centrally established prices in the Uber enterprise.⁹² Quoting the CCI’s dismissal of the hub-and-spoke argument, the UNCTAD Submission concludes that Uber drivers’ “*acced[ing] to the algorithmically determined prices by the platform (Ola/Uber) . . . cannot be said to be amounting to collusion between the drivers.*”⁹³ The CCI would require an “*agreement between drivers inter-se to delegate this pricing power*”, a stronger showing than is required under US law – and a stronger showing than the UNCTAD Submission itself suggests the CCI would require.⁹⁴

The CCI’s approach in *Agrawal v. ANI Techs./Uber* may violate basic common law rules regarding what constitutes an agreement among

⁸⁹ *United States v Apple Inc* 952 F Supp 2d 638 (2013), 647 (SDNY) (agreement between Apple and publishers was at the root of a horizontal price restraint and thus warranted per se treatment; vertical actors need not be the dominant purchaser or supplier to be a traditional ‘hub’ in a hub-and-spoke conspiracy).

⁹⁰ *United States v Apple Inc* 791 F 3d 290 (2014), 298 (2d Cir) (affirming the district court’s use of per se treatment as appropriate where, (1) relevant restraint of trade was price fixing, not vertical agreement, (2) coordination was not necessary for the creation of retail e-book market, and (3) prices were set by collusion and not competition) (*Apple Inc*).

⁹¹ UNCTAD Submission (n 10) 3.

⁹² UNCTAD Submission (n 10) 3-4 [discussing *Samir Agrawal v ANI Technologies (P) Ltd* 2018 SCC OnLine CCI 86].

⁹³ UNCTAD Submission (n 10) 4 [quoting *Samir Agrawal v ANI Technologies (P) Ltd* 2018 SCC OnLine CCI 86].

⁹⁴ *See, Apple Inc* (n 90) 298; UNCTAD Submission (n 10) 3.

competitors, but it likely leads to a result that is consistent with optimal outcomes. I observe below that the Competition Act does not have an obvious analogue to the abbreviated rule of reason analysis Anderson and I argued for in 2017. In its lack, another mechanism is required to preserve the possibility of platform-based ride sharing without exempting entire industries from competition scrutiny. In *Agrawal*, the CCI recognised the ability of drivers to reach agreement on basic terms of service, including algorithmic price terms, without violating competition laws.

ii. Analysis in the absence of ‘quick look’

The quick look rule of reason serves as a middle ground between automatic illegality, or per se treatment, and the full rule of reason analysis that proves overly burdensome for most plaintiffs, whether public or private enforcers.⁹⁵ It is a procedural tool that permits effective prosecutions of facially harmful conduct while retaining in defendants the ability to defend against claims with evidence of pro-competitive benefits. The US approach to a middle ground might be described as a non-standard, “*an enquiry meet for the case.*”⁹⁶ Professor Cavanaugh describes the ‘quick look’ as “*tailor-made for restraints that bear a close family resemblance to price fixing, but are of the type with which courts have little experience or are idiosyncratic in nature.*”⁹⁷

Not every jurisdiction has such a procedural mechanism. In the EU, for example, Article 101 of the Treaty on the Functioning of the European Union (‘the TFEU’) distinguishes between automatically illegal conduct⁹⁸ and conduct exempt from automatic illegality, “*which contributes to improving the production or distribution of goods or to promoting technical or economic progress.*”⁹⁹ There is no explicit middle ground, although debates exist as to whether a ‘continuum’ approach that approximates the US system’s quick look analysis is emerging in application.¹⁰⁰

⁹⁵ *California Dental Association v Federal Trade Commission* 1999 SCC OnLine US SC 51 : 143 L Ed 2d 935 : 526 US 756 (1999).

⁹⁶ *ibid* 781 (describing the quick look rule of reason as “*an enquiry meet for the case*”).

⁹⁷ Edward Cavanaugh, ‘Whatever Happened to Quick Look?’ (2017) 24 *University of Miami Business Law Review* 39, 40.

⁹⁸ Treaty on the Functioning of the European Union, art 101(1).

⁹⁹ Treaty on the Functioning of the European Union, art 101(3); *See generally*, European Commission, *Guidelines on the application of Article 81(3) of the Treaty* (2004/C 101/08) [describing the analytical process for the Article 101(3) inquiry].

¹⁰⁰ Alexander Italianer, ‘Competitor Agreements under EU Competition Law’ (40th Annual Conference on International Antitrust Law and Policy, New York, 26 September 2013) 6 <https://ec.europa.eu/competition/speeches/text/sp2013_07_en.pdf> accessed 9 December 2019.

The Competition Act is closer in form to US antitrust law than to the TFEU. It prohibits agreements that “*cause[] or [are] likely to cause an appreciable adverse effect on competition within India.*”¹⁰¹ The Competition Act then exempts from that prohibition “*any agreement entered into by way of joint ventures if such agreement increases efficiency in production, supply, distribution, storage, acquisition or control of goods or provision of services.*”¹⁰² One author, however, argues that the delineation in India is explicit; for agreements not treated as illegal per se, liability requires “*conclusive [proof] on fact that they cause or are likely to cause an appreciable adverse effect on competition.*”¹⁰³

In the absence of a quick look approach, a tribunal evaluating ride-sharing agreements must make a determination of whether to treat the agreement on prices and other competitive terms under a per se rule or under a rule of reason – unless the agreement is not a matter of concern because it is considered to take place within the contours of a firm. Research does not uncover cases alleging conspiracy in any jurisdiction that have proceeded to the merits of the claim.¹⁰⁴ The CCI’s approach of declining to treat the Uber drivers’ vertical agreements with the platform as representing a horizontal conspiracy is a sort of middle ground, producing an outcome not terribly unlike one a quick look analysis might produce.

iii. Ride sharing without coordination

The crux of an argument sceptical of competition law intervention in ride sharing, in the face of the substantial concerns for anticompetitive coordination when individual providers reach agreement through the platform on terms of service including quality and price, is the benefit of ride sharing and the belief that coordination is essential to the functioning of a ride sharing market. It is that sort of argument that underlay Anderson’s and my advocacy for a quick-look rule of reason. A response is that even in light of the gains from ride sharing, there may be substantially less restrictive ways to accomplish those gains.

¹⁰¹ The Competition Act 2002, s 3(1).

¹⁰² The Competition Act 2002, s 3.

¹⁰³ Shruthi Anand, ‘Revisiting Per Se vs Rule of Reason in Light of the Intel Conditional Rebate Case’ (*The Centre for Internet and Society*, 4 October 2017) <<https://cis-india.org/internet-governance/blog/revisiting-per-se-vs-rule-of-reason-in-light-of-the-intel-conditional-rebate-case>> accessed 9 December 2019.

¹⁰⁴ One such allegation, in *Meyer v Uber Technologies Inc*, initially appeared ready to proceed to merits when the trial court held that the arbitration clause in the rider agreement was not enforceable. On appeal, the trial court decision was reversed, and the case was dismissed in favour of arbitration. 868 F 3d 66 (2017), 70, 80 (US Court of Appeals holding that the arbitration clause was enforceable).

Arguments exist that the degree of coordination present in an Uber-style ride sharing app is unnecessary to achieve the objectives of integration.¹⁰⁵ Uber's price and quality coordination, including everything up to rules regarding the kind and condition of the automobile and the driver's fitness for duty as well as the obvious price term, ensures that a passenger need not engage in the challenging process of searching for or of negotiating an individualised transaction. Fundamentally, Uber's coordination solves the three problems presented by anonymity – search costs, transaction costs, and trust. Of those, a ride-sharing economy enterprise would fail if it did not overcome the trust barrier – and if it did not fail, credible arguments would exist for regulatory intervention in any event. Search and transaction costs speak instead to the speed and ease of arranging a transaction. It is possible those parameters can be relaxed without undermining the enterprise in its entirety.

In fact, all cartel agreements serve the basic goals of reducing search and transaction costs. For example, an agreement to divide markets ensures consumers have access to only one supplier; an agreement to fix prices or quality ensures consumers need not devote time and energy to comparison shopping.¹⁰⁶ Competition necessarily increases costs of transacting in favour of improved transaction terms brought about by the competitive environment. The possibility that efficiency of search and transaction may overcome competitively determined transaction terms would upend core principles of economic policy based on competitive markets.

One could argue that a ride sharing enterprise should limit its ambitions to: (1) matching and (2) resolving the trust problem, but ignore the fixing of transaction terms. This would be an Uber-style app that would match rider with driver and offer a simple means to negotiate terms – necessarily slowing the process but ensuring competition on terms of service. A version of this argument would limit the area for competition to price, on a theory of consumer incapacity to evaluate quality, including safety, on an expedited basis. Such a ride-sharing enterprise would offer to consumers a menu of options including driver ratings and offer prices, letting the consumer select quickly the combination of rating and price that best matched his or her needs. Drivers, in turn, would bid on rides, presumably by setting a maximum discount rate from a baseline figure. It is ambiguous whether this reduction in

¹⁰⁵ Anderson and Huffman (n 12).

¹⁰⁶ Robert Lande, 'Should Predatory Pricing Rules Immunize Exclusionary Discounts?' (2006) *Utah Law Review* 863, 866; cf Daniel Crane, 'Rules versus Standards in Antitrust Adjudication' (2007) 64 *Washington and Lee Law Review* 49, 85-86 (observing that anti-trust conduct is beneficial until it tips into harmful behaviour).

coordination would bring with it the expense of the high, and efficient, level of integration ride sharing enterprises offer.

In fact, at least one enterprise, founded in Russia, follows this model. inDriver offers what it bills as a “*fully transparent model*” in which riders bid for a route and negotiation occurs before other terms of service are disclosed.¹⁰⁷ As of this writing, inDriver boasts substantial growth, with 24,000 users in more than 200 cities and 300 million rides completed.¹⁰⁸ News reports indicate that in Driver manages the complexity of real-time negotiation by app by allowing negotiation above an offered fare in 10% increments.¹⁰⁹ Passengers can also choose among competing bids while considering quality indicia including ratings, arrival time, and vehicle information.¹¹⁰

iv. Agreement through labour organisation

The coordination concerns discussed in this subpart relate to the phenomenon of a hub-and-spoke conspiracy, arranged by the platform, targeting consumers as the victim. There are other ways to identify conspiracies involving the suppliers on a sharing economy platform, both targeting consumers and targeting the platform. Receptivity to such claims will differ depending on a particular jurisdiction’s tolerance of labour interests as a justification for restraints on competition.

a. Labour conspiracy, consumer as victim

The most overt, and almost certainly universally illegal form of supplier conspiracy against consumers in the context of a sharing economy enterprise is a horizontal, off-platform agreement among suppliers to influence the terms of service. If such an agreement is orchestrated through the platform, it implicates the complex interaction between competitive harm and efficiencies discussed above. Where such an agreement is off-platform, it has characteristics of a pure supplier cartel and should be treated as such.

¹⁰⁷ Sasha Lekach, ‘Russian ride-hailing app comes to America with set-your-own-price scheme’ (*Mashable*, 4 December 2018) <<https://mashable.com/article/indriver-set-your-price-ride-hailing-apps/>> accessed 9 December 2019.

¹⁰⁸ ‘About us’ (*inDriver*, 2019) <https://indriver.com/en/about_us/> accessed 9 December 2019.

¹⁰⁹ Julie Walmsley, ‘Priceline Meets Uber In A Name-Your-Fare Ride Service Arriving In New York’ (*Forbes*, 4 December 2018) <<https://www.forbes.com/sites/juliewalmsley/2018/12/04/priceline-meets-uber-in-a-name-your-fare-ride-service-arriving-in-new-york/#8fc727068c9f>> accessed 9 December 2019.

¹¹⁰ ‘Ride-Hailing Service inDriver Enters US Market with New York City Launch’ (*PR Newswire*, 4 December 2018) <<https://www.prnewswire.com/news-releases/ride-hailing-service-indriver-enters-us-market-with-new-york-city-launch-300759288.html>> accessed 9 December 2019.

As an example, recent news reports from the US market suggest that drivers on platforms including Uber may be agreeing to manipulate the surge pricing algorithm, collectively turning off their apps to reduce the number of drivers in a particular locality to induce surge pricing, before turning the apps back on to take advantage of the price increase.¹¹¹ Instances of such conduct have been observed nationwide in the US, but appear to be more concentrated in locations where drivers gather – for example, in ride share lots on airport grounds.

This agreement, if provable, is a hard-core cartel seeking to manipulate prices on the basis of a known algorithm for price setting. It is comparable to the rate-fixing cartel carried out in the context of the LIBOR, whereby cartel members manipulated the rate through a concerted practice of false rate reporting.¹¹² Fair unanimity in treatment of cartel conduct among jurisdictions suggests this result will be the same in whatever jurisdiction is analysed.

b. Labour conspiracy, platform as victim

Another conspiracy concern is arising relating to the phenomenon of possible labour organisation outside of the ordinary legal structures for labour union conduct. According to a leading treatise on US antitrust law, competition law principles and labour organisation principles are in tension, and must be resolved by balancing between the goals of the respective fields of law.¹¹³ US law carve-outs for labour organisation exist in the context of collective bargaining and related activities by a labour union, as well as for a list of labour activities not involving union conduct.¹¹⁴ The carve-outs do not completely exempt employees from antitrust liability for conspiracy in violation of Section 1 of the Sherman Act.¹¹⁵ For example, trial lawyers were held to violate Section 1 by agreeing not to accept court-appointed representations below an agreed amount.¹¹⁶

¹¹¹ See, for example, Dalvin Brown, ‘Could Uber, Lyft drivers trick the apps to increase surge pricing? Experts say probably’ (*USA Today*, 15 May 2019) <<https://www.usatoday.com/story/tech/2019/05/15/uber-lyft-drivers-can-probably-manipulate-apps-charge-you-more/3678461002/>> accessed 9 December 2019.

¹¹² See, *Gelboim v Bank of America Corp* 823 F 3d 759 (2016), 770-71 (2d Cir) (The US Court of Appeals holding that LIBOR interest rate manipulation allegations stated antitrust claim under s 1 of the Sherman Act).

¹¹³ Earl W Kintner and Joseph P Bauer, *Federal Antitrust Law* (Anderson Publishing Company 1989) s 72.1.

¹¹⁴ *ibid* ss 72.1-72.7.

¹¹⁵ 15 USC, s 1.

¹¹⁶ *Federal Trade Commission v Superior Court Trial Lawyers Association* 1990 SCC OnLine US SC 11 : 107 L Ed 2d 851 : 493 US 411 (1990), 428-36 (finding per se illegal agreement under US law when lawyers who were unaffiliated in employment reached an agreement not to accept court appointed representations for less than an agreed fee). cf *National*

The approach to labour conspiracies in Europe is more permissive, under the general rule that employees, who are not ‘undertakings’, are necessarily outside the scope of Article 101 of the TFEU.¹¹⁷ This carve out for employees would not apply in the case of drivers reaching cartel agreements off-platform, with consumers as victims, as individuals acting in the capacity of sole proprietors meet the definition of an undertaking.¹¹⁸

The Competition Act expressly includes associations of ‘persons’ in its primary prohibition on agreements, distinct from the language of Article 101 of the TFEU and from the statutory exceptions in US law.¹¹⁹ In the absence of a labour exemption comparable to those found either in statute or as a matter of interplay between competing legal schemes, coordination by drivers to affect prices or terms of service offered either by the enterprise, or by consumers, presents a labour cartel concern under Indian competition law.

V. CONCLUSION

One attribute of the broad digitalisation of economic activity across the globe, the sharing economy has produced unique enterprise structures in a range of industries, most notably including ride sharing. Its effectiveness as an organisational structure is proved by its rapid worldwide spread and the development of a variety of free standing viable competitors at substantial scale in most distinct regions of the globe. The success of the sharing economy in supplanting old-world enterprise structures raises seemingly opposite questions – one, whether the sharing economy is somehow incompatible with socially acceptable economic structures, and two, whether the sharing economy should be seen as advancing most natural enterprise organisation. If the former, competition law might be a natural check on its growth and possible dominance. If the latter, competition law may need adjustment or at least careful application to avoid stifling a beneficial organisational structure.

Nowhere is the right answer to that question more crucial than in economies that are still on a rapid upward growth trajectory, like that in India.

Society of Professional Engineers v United States 1978 SCC OnLine US SC 69 : 5 L Ed 2d 637 : 435 US 679 (1978), 696 (holding that no-competitive bid agreement among professional engineers, orchestrated by the trade association of professional engineers, violated the Sherman Act).

¹¹⁷ *Albany International BV v Stichting Bedrijfspensioenfonds Textielindustrie* (1999) Case C-67/96 : (1999) ECR I-5751 : (2000) 4 CMLR 446, paras 213-217 (ECJ) [holding that individual employees were not ‘undertakings’ for purposes of then-TFEU art 85].

¹¹⁸ *ibid* para 214 [citing *Commission v Italy* (1998) Case C-35/96 ECR I-3851 (holding at para 55 that independent customs agents were ‘undertakings’ under then-TFEU art 85)].

¹¹⁹ The Competition Act 2002, s 3(1).