

# Abuse of Dominance in Digital Platforms: An Analysis of Indian Competition Jurisprudence

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**Abstract:** An ongoing debate in competition jurisprudence today is with respect to the enforcement of competition law in digital markets. Digital markets are newer markets in context of which traditional tools of competition law have to be understood and applied. Though the challenges of competition enforcement in digital markets are manifold, this paper focusses on the assessment of dominance and abuse in platform markets, particularly in light of the 2019 Supreme Court judgement in the Uber matter. The Supreme Court's opinion that loss-making pricing can be an indicator of dominance is inconsistent with the Competition Commission of India's (CCI) views, which had cautioned against this circular interpretation of dominance and put the issue to rest. The author submits that conflicting interpretations such as these erode the certainty of the law. Competition laws can be flexible but not uncertain or unpredictable. The author identifies areas of concern in digital platforms that are yet unresolved and need to be addressed urgently by guidelines/amendments before the law on this issue becomes incoherent.

**Keywords:** competition law, digital economy, platform markets, dominance, abuse, predatory pricing

## 1. Introduction: Digital Economy and Platform Markets

Digital economy is an umbrella term used to describe a host of markets that operate using digital technologies (OECD, 2012). One of the first uses

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of the term ‘digital economy’ was by Don Tapscott in his book titled “The Digital Economy: Promise and Peril in the Age of Networked Intelligence” in 1995, which went on to become the New York Times business bestseller (Tapscott, 1995). In the decades that have passed, digital technologies have transformed the global business landscape. Key features of digital platforms include the provision of a wide range of markets, social networking sites, search engines, and payment systems (Dessemond, 2019). Digital markets differ from traditional/linear business models in various ways. In transaction platforms, firms are able to use price leverage on both sides of the market that they operate on, as compared to players who operate on one-sided markets and are constrained by a unidirectional price structure. In addition to lower costs (both fixed and variable), platforms have the potential of reaching out to a large number of customers in a shorter frame of time (Russo and Stasi, 2016).

Platform markets are also referred to as multi-sided markets. Simply speaking, multi-sided markets are those where firms act as platforms while selling different products/services to customers, and where demand from one group of customers is dependent on demand from the other (Singh and Mukherjee, 2020). In traditional markets, suppliers have to coordinate with buyers, whereas in multi-sided markets coordination is achieved through a platform and by sharing of data (Kaushik, 2019). Such markets thus generate what economists call “reciprocal positive externality between two distinct groups” (Bhattacharjea, 2018).<sup>1</sup> Uber, Amazon, PayPal, eBay, Airbnb are examples of multi-sided markets. However, multi-sided markets are not confined to digital platforms alone. Applying the same rationale, newspapers and credit card markets can be regarded as “offline” multi-sided markets (Wismer and Rasek, 2017).

In India, one of the first cases relating to two-sided markets was the *MCX-NSE case*,<sup>2</sup> where the CCI in its minority order, elaborated upon the concept of network effects. The CCI observed that network industries are different from traditional markets as they operate on network effects, which mean that the value of a platform increases with increase in the number of users. Further, costs and prices in network platforms may not follow trajectories similar to traditional markets, hence cannot, under all circumstances, be



analysed using traditional economic tools like normal supply-demand curves leading to determination of prices in the market.<sup>3</sup> Since multi-sided markets involve distinct consumer groups, market definition becomes more complex in such markets. Often, competition authorities find it challenging to demarcate such markets as most competition laws were drafted keeping in mind the traditional “one-sided” market logic, instead of “two-sided”.

This paper focusses on competition law implications in three crucial aspects of platform markets: market definition, assessment of dominance and predatory pricing. These have emerged as areas of concern in India and worldwide.

## **2. The Concept of Relevant Market in Competition Law**

Relevant market is the filter that demarcates the area of commerce within which a firm’s behaviour is analysed by competition authorities. While regarding relevant market to be an economic concept applied in competition enforcement, it is important to bear in mind that the term has to be interpreted through the lens of the law, for legal certainty.<sup>4</sup> According to Section 2(r) of the Competition Act, 2002, “*relevant market means the market which may be determined by the Commission with reference to the relevant product market or the relevant geographic market or with reference to both the markets*”. Defining the relevant product and geographic market is the first step in deciding dominance. Section 19 (6) and Section 19 (7) of the Act lay down the parameters of defining the relevant geographic and product markets, respectively.<sup>5</sup> Like other competition laws across the world, the Competition Act, 2002, focusses on “substitutability” as a test for defining the relevant market. An important tool for determining substitutability is the “Small but Significant, Non-Transitory Increase in Price” test or the SSNIP test. Simply put, SSNIP evaluates whether, for a small, yet significant price rise (of about 5% to 10%), the consumers of a particular product would shift their choices to another product.<sup>6</sup> If so, then the two products can be considered to be part of the same market. This test is also known as the “Hypothetical Monopolist” test – one which reveals whether “a relevant market is worth monopolizing” (Raychaudhuri, 2019).

Notwithstanding the tests available, inaccurate demarcation of the relevant market is one of the commonest mistakes that can be made in competition analysis. The conundrum of accurate determination of the relevant market is even more with respect to digital markets. To illustrate, we can take the example of Amazon which has a dual role as a market and an online retailer, where its own products compete with other merchants using the Amazon market place. How would the relevant market(s) be determined in such cases? A further problem with two-sided markets is that there being distinct groups of consumers on either side with interdependent demand, it is more challenging to apply the SSNIP test while considering the profits in one or both sides of the market, and assessing on which side the hypothetical monopolist would raise its price.<sup>7</sup> The Amazon “hybrid platform” has raised concerns both in Europe and in the US. The European Commission has recently initiated proceedings against Amazon, for alleged violations of Articles 101<sup>8</sup> and 102<sup>9</sup> of the Treaty on the Functioning of the European Union (TFEU).<sup>10</sup>

### **3. Dominance and Predatory Pricing: The Concepts**

#### **(a) Dominance**

The Competition Act, 2002, defines ‘dominant position’ as a “*position of strength, enjoyed by an enterprise, in the relevant market, in India, which enables it to (i) operate independently of competitive forces prevailing in the relevant market; or (ii) affect its competitors or consumers or the relevant market in its favour.*”<sup>11</sup> Section 4(1) of the Competition Act, 2002, provides that “*No enterprise or group shall abuse its dominant position.*” Section 4 (2) states that “*There shall be an abuse of dominant position under sub-section (1), if an enterprise or a group (a) directly or indirectly, imposes unfair or discriminatory (i) condition in purchase or sale of goods or service; or (ii) price in purchase or sale (including predatory price) of goods or service.*”<sup>12</sup> In cases involving abuse of dominance, the key focus of competition authorities is to ensure that the application of the law does not curb efficiency. Firms may gain market power through efficient production or distribution methods, technological and other innovations and better entrepreneurial efforts. Hence, it is not dominance per se which is frowned upon, but abuse of dominance, through forms of conduct specified in statutes.

The legal requirements for determining dominance may vary from country to country. For instance, some jurisdictions infer *prima facie* dominance through large market shares, whereas some countries do not stipulate market share thresholds.<sup>13</sup> In India, Section 19(4) of the Competition Act, 2002 lists factors which can be considered by the Commission while determining dominance, including market shares, size and resources of the enterprise, size of competitors, dependence of consumers on the enterprise, etc.<sup>14</sup> Though market shares are an important indicator of dominance, the law in India (both legislation and precedent) does not stipulate any market share threshold. The Commission can take into account all or any of the factors laid down in Section 19 (4) and cases reveal that it is usually a cumulation of factors which are assessed.<sup>15</sup> In Europe, Article 102 of the TFEU lays down the law with regard to abuse of dominant position in the internal market.<sup>16</sup> Dominance was defined by the European Court of Justice in the *United Brands case*<sup>17</sup> as “*a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, of its customers and ultimately of its consumers*”.

Enforcement of the law relating to dominance and abuse across jurisdictions is also influenced by larger policy goals. An oft voiced (and debatable) criticism of European law has been with its leaning towards the protection of ‘competitors’ rather than the protection of ‘competition’ in the market, in contrast with the United States law which has focussed more on protecting competition, rather than competitors (Duca, 2020; European Commission, 2005). This was reflected in the controversial Microsoft decision<sup>18</sup> where the Assistant Attorney General for Antitrust of the Department of Justice stated that “*in the United States, the antitrust laws are enforced to protect consumers by protecting competition, not competitors.*”<sup>19</sup> However, with recent developments in the law in Europe and global consolidation of competition guidelines, this debate has become somewhat redundant.

## **(b) Predatory Pricing**

Simply speaking, predatory pricing means below-cost pricing with the intention of driving competitors out of the market – the rationale being that once competition is eliminated, the predator can monopolise the market and

recoup losses sustained during the period of predation. Cases on predatory pricing can be traced back to the early 1900s when the courts in the US were faced with issues of predatory pricing<sup>20</sup> as a violation of the Sherman Act, 1890. However, for many decades, there was no clarity in the US as to what constituted a predatory price (Moisejevas, 2017). Till the 1970s, the success rates for plaintiffs were fairly high as small businesses were sought to be protected against predation by large firms, as theoretically only a firm with sufficient reserves could engage in predation (Leslie, 2013). This attitude underwent a change in the 1970s with the influence of the Chicago School, which was sceptical about predatory pricing being a rational and sustainable business strategy. This was reflected in decisions like *Matsushita v. Zenith*<sup>21</sup> where the US Supreme Court declared that “*there is a consensus among commentators that predatory pricing schemes are rarely tried and even more rarely successful*”.<sup>22</sup> The tide turned with the decision in the *Brooke Group case*<sup>23</sup>, where the US court laid down the first two-pronged test for predation. Firstly, prices, to be regarded as predatory should be below “an appropriate measure of costs” (cost here is considered to be Average Variable Cost [AVC] as per the Areeda-Turner Test<sup>24</sup>) and secondly, there should exist a “dangerous probability, of recouping the investment in below-cost prices” (the recoupment test).

In Europe, the first landmark case on predatory pricing was *AKZO v. Commission*,<sup>25</sup> where the Commission did not strictly follow the Areeda Turner test. In *AKZO*, the Commission held that a price would be considered predatory when (a) it is below AVC price, or (b) price is above AVC but there is an intention to eliminate rivals (predatory intent).<sup>26</sup> This could be proved through documentary as well as circumstantial evidence. Recoupment of losses is not an essential criterion in Europe. This was reiterated in the *Wanadoo case*, where the Court held that “demonstrating that it is possible to recoup losses is not a necessary precondition for a finding of predatory pricing”.<sup>27</sup>

In India, Section 4 of the Competition Act, 2002 defines predatory price as “*a price, which is below the cost, as may be determined by regulations, of production of the goods or provision of services, with a view to reduce competition or eliminate the competitors*”. Cost concepts are further elaborated in the Determination of Cost of Production Regulations, 2009 adopted by the CCI.<sup>28</sup> According to the Regulations, cost will generally be taken to mean “AVC as a proxy

for marginal cost”. However, the Commission may, “depending on the nature of the industry, market and technology used, consider any other relevant cost concept such as avoidable cost, long run average incremental cost, market value”.<sup>29</sup> Thus, in India AVC is used as the accepted measure of cost, barring exceptional cases. Though the Indian law does not use the term recoupment and the CCI is technically not required to prove the same, cases decided by the CCI have considered the concept. The CCI has identified three conditions for predation. Firstly, that the prices of the goods or services are below the cost of production; secondly, this low price is charged with the “object of driving out competitors from the market”; and thirdly, there is significant planning to “recover the losses if any after the market rises again and the competitors have already been forced out”.<sup>30</sup>

#### **4. Conundrum of Assessing Dominance and Abuse in Platform Markets: The Cab Aggregator Disputes**

On 3<sup>rd</sup> September 2019, the Supreme Court of India reopened investigation into the Uber matter by dismissing an appeal filed by Uber against the order of the erstwhile Competition Appellate Tribunal (COMPAT).<sup>31</sup> Before discussing the order of the Apex Court and its ramifications on competition law, it is important to traverse the length of the disputes, at least briefly. From 2015, the Commission has been faced with a number of allegations about Ola and Uber whose businesses are based on the aggregator model. This model is a classic example of a two-sided platform which benefits two or more parties. The companies do not own any vehicles but use the Internet and a smartphone-based application to connect drivers with customers seeking taxi rides. Out of the fare paid by the passenger, Ola and Uber retain a percentage and the rest is paid to the driver, who earns more money with the number of trips completed. Cases filed against these companies included allegations of abuse of dominance by means of predatory pricing and other anti-competitive behaviour.

The CCI’s orders in the Ola and Uber cases reflect the challenges faced in regulating platform markets. The CCI rejected the claims in almost all the cases, primarily on the ground that Ola and Uber did not enjoy dominance in the market. The decisions of the Commission evoked much debate. Since, there are numerous disputes with similar allegations, for the sake of brevity the author will focus on the key points of the CCI’s decision in Case

No. 25, 26, 27 & 28 of 2017 [*Meru v. Ola/Uber - Hyderabad, Mumbai, Kolkata and Chennai cases*] where the CCI clubbed together a number of complaints against Ola and Uber while dismissing them on 6<sup>th</sup> June 2018.<sup>32</sup> The author will then move on to analyse the order given by the COMPAT in an appeal filed by Meru against Uber on a similar matter [*Meru v. Uber - Delhi case*].<sup>33</sup> Finally, the author will discuss the judgement of the Apex Court on the Uber dispute and its ramifications on the law relating to dominance and abuse in platform markets.

#### **4.1 Meru v. Ola/Uber - Hyderabad, Mumbai, Kolkata and Chennai Cases**

##### **Key Issues and Findings**

###### **➤ The Determination of the Relevant Market**

The Commission's determination of the relevant market in these cases was similar to those made in earlier cases, on the same subject.<sup>34</sup> The Commission defined the relevant product market as the market for 'Radio Taxi services'<sup>35</sup> by considering factors such as "convenience of time saving, point-to-point pick and drop, pre-booking facility, ease of availability even at obscure places, round the clock availability, predictability in terms of expected waiting/ journey time, etc." The Commission stated that for a category of commuters, radio taxis were not substitutable with other modes of road transport like auto-rickshaws, sub-urban railway and metro and private transport.<sup>36</sup> With regard to the geographic market, the Commission noted that radio taxi services were a highly localised service as a commuter would generally rely on local transport within the city, instead of going beyond it. Thus, the geographical markets were Hyderabad, Mumbai, Kolkata and Chennai, respectively.<sup>37</sup>

###### **➤ The Issue of Dominance**

There were three important issues raised with respect to dominance. It was alleged that the companies were dominant individually by virtue of possessing high market shares. Secondly, they could be regarded as collectively dominant and thirdly, they could be regarded as dominant as a group owing to the existence of common investors.

With respect to the first issue, the Commission noted that the market share calculation relied upon was based on the market research conducted by a private research company, Tech Sci. Without going into the authenticity of the market research report, the Commission relied on its earlier orders and opined that *“high market shares by themselves may not be indicative of dominance. Though market share is theoretically an important indicator for lack of competitive constraints, it is not a conclusive indicator of dominance. Further, there cannot be any objective criteria for determining market share thresholds and a standard time-period as an indicia of dominance to apply in all cases, especially when under the scheme of the Act, no numerical threshold for presumption of dominance has been prescribed.”*<sup>38</sup> Thus, the CCI rejected allegations of dominance in the market by Ola and Uber on the basis of market shares.

With regard to collective dominance, the Commission reiterated its earlier stance<sup>39</sup> and stated that the provisions of Section 4 of the Act clearly provide for dominant position by only one enterprise or one group. *“The usage of words ‘operate independently’ appearing in the aforesaid definition clearly shows that the concept of ‘dominance’ is meant to be ascribed to only one entity. Further, the underlined words in the above explanation indicates that the whole essence of Section 4 of the Act lies in proscribing unilateral conduct exercised by a single entity or group, independent of its competitors or consumers. In the presence of more than one dominant entity, none of those entities would be able to act independent of one another.”*<sup>40</sup>

With regard to the third issue, it was alleged that Ola and Uber were dominant as a group owing to the shareholding by common investors like “SoftBank, Tiger Global Management LLC, Sequoia Capital and Didi Chuxing”.<sup>41</sup> Shareholding by common investors could indicate deeper pockets. The CCI considered whether the existence of common investors in Ola and Uber could erode competition between the two firms. According to the CCI, the two main concerns arising out of common ownership would be, firstly, increase in price and decrease in quality (which being unprofitable for the companies, could be beneficial for the investors) and secondly, “coordinated effects” where there could be incentives given to collude and earn collusive profits.<sup>42</sup> The CCI observed that common ownership may lead to *“softening of competition”*. However, in absence of clear evidence in this regard, an adverse finding could not be made on *“conjectures and apprehensions”*.<sup>43</sup>

On the basis of the above observations, the CCI opined that the dominance of Ola and Uber could not be established. In the absence of dominance, the question of abuse would not arise. Hence, the CCI held that there was no *prima facie* case to order an investigation into the matter. It is also interesting to note that while dismissing the case, the CCI did not go into an elaborate discussion on platform markets and the role of network effects, as it had already done so in earlier cases.<sup>44</sup>

### ➤ Predatory Pricing in Platform Markets

Though predatory pricing was not discussed in this case, it is important to know the CCI's observation with respect to predatory pricing in an earlier case on a related matter which was discussed in the instant case. *Fast Track Call Cab Pvt. Ltd. and Meru Travel Solutions Pvt. Ltd. v. ANI Technologies Pvt. Ltd.*<sup>45</sup> [*Meru v. Ola - Bengaluru*] was a dispute relating to abuse of dominance by Ola in the Bengaluru market. While assessing dominance, the CCI elaborately discussed the dynamics of platform markets. The CCI stated that "*the strength of network effects thus becomes a key factor in the determination of dominance in such market*".<sup>46</sup> However, the CCI clarified that both Ola and Uber were competing vigorously in the market and it could not be said that Ola having the largest network could deter the entry of Uber. Thus, the network effects, in this case, were not strong enough to act as a barrier to entry.<sup>47</sup>

With regard to predatory pricing, an interesting argument was brought before the CCI, relying upon the *MCX-NSE* case<sup>48</sup>, that such pricing could be an indicator of dominance. The CCI opined that conduct of an enterprise "*can only be used as a complement rather than a substitute for comprehensive analysis of market conditions*".<sup>49</sup> Even non-dominant firms and new entrants could engage in practices like below-cost pricing and loyalty discounts to get a foothold over the market. If this interpretation of dominance was accepted then even a new entrant who shifted consumer base in its favour could be held dominant. To prevent such errors, the factors listed in the Act should be followed for the assessment of dominance.<sup>50</sup> At the same time, the Commission expressed its reservations on the low prices charged by Ola observing that such prices may not necessarily be from cost efficiency, but could also be from private equity funding. However, there was no clear evidence which demonstrated that access to such funding was not equitable.<sup>51</sup>



## 4.2 Meru V. Uber [Delhi case]: The COMPAT and Supreme Court Orders

In 2016, Meru filed an appeal against the order of the Commission in Case No. 96 of 2015 in a similar matter, wherein allegations of dominance and predatory pricing against Uber were dismissed by the Commission on the ground of lack of evidence demonstrating Uber's dominance in the radio taxi service market in Delhi.<sup>52</sup> The COMPAT was of the view that the order of the CCI was erroneous, on several grounds. Firstly, the COMPAT found fault with the determination of the relevant geographic market by the CCI.<sup>53</sup> The CCI had determined the geographic market as Delhi, as opposed to Delhi-NCR. The COMPAT did not regard this as logical, as it was fairly easy for customers to move *"from one point in NCR to another point calling taxis on telephone/internet platforms."*<sup>54</sup> Thus, demarcation of Delhi as a separate geographic market seemed *prima facie* unjustified.

Secondly, the CCI had considered conflicting research reports on market shares in an earlier radio taxi case and concluded that there was no clear proof of dominance in the instant case. However, according to the COMPAT, the very existence of conflicting research reports about the market should have indicated that the matter needs to be investigated.<sup>55</sup> Further, the COMPAT clarified that market shares in statistical terms are not the only criterion for assessing dominance which indicates a "position of strength". Dominance, especially in non-traditional markets, cannot be judged by market shares alone. It *"should be seen in the context of overall picture as it exists in the radio taxi service market in terms of status of funding, global developments, statements made by leaders in the business, the fact that aggregator based radio taxi service is essentially a function of network expansion and there was adequate indication from the respondent that network expansion was one of the primary purpose of its business operation."*<sup>56</sup> The CCI in its own jurisprudence had gone beyond the market share criterion for assessing dominance. Thus, dismissal on the ground of market shares did not appear to be coherent law. Accordingly, the COMPAT ordered that the matter be referred to the Director General of the CCI for investigation.<sup>57</sup>

Uber filed an appeal before the Supreme Court.<sup>58</sup> The Supreme Court while upholding the order of the COMPAT, relied on data produced in the complaints and stated that *"it can be seen that Uber was losing Rs. 204 per trip*

*in respect of the every trip made by the cars of the fleet owners, which does not make any economic sense other than pointing to Uber's intent to eliminate competition in the market."*<sup>59</sup> The brevity of this order is remarkable as, according to the Supreme Court, *prima facie* loss making pricing could affect competitors and the relevant market in the appellant's favour thereby indicating dominance under Section 4 of the Competition Act, 2002. Hence, this situation would warrant a detailed investigation of the market in question.

## 5. Comments and Analysis

The Supreme Court order is reminiscent of the order passed by the CCI in the *MCX-NSE*<sup>60</sup> case, one of the first cases on platform markets. In the MCX case, an argument had been made that exclusionary conduct in the form of predatory pricing itself demonstrates the economic strength of an enterprise. The CCI's order noted that the zero transaction fee charged by NSE while incurring huge losses indicated that NSE was in a dominant position.<sup>61</sup> However, this interpretation of dominance had been explicitly rejected by the CCI in the *Meru v. Ola Bengaluru* case, for the inconsistencies in competition jurisprudence that it would create.

With the judgement of the Supreme Court, the law seems to have come full circle. Once again, the two ingredients of Section 4 – dominance and abuse – appear to have been merged as the latter can now be regarded as indicative of the former. Instead of assessing whether the enterprise enjoys dominance in accordance with the factors listed in Section 19(4) and then moving on to determining whether the alleged conduct amounts to abuse, the Supreme Court has adopted a circular approach by considering the conduct of the enterprise as an indicator of dominance. The author submits that this approach is problematic. Conduct of the enterprise cannot be used in isolation, or as a substitute for comprehensive analysis of market conditions, to indicate dominance. Assessment of market power requires holistic analysis of all relevant factors.

The reasoning of the Supreme Court that loss making pricing can affect the relevant market in the appellant's favour thereby indicating dominance, goes against established propositions of law. As pointed out in the *Meru v. Ola Bengaluru* case,<sup>62</sup> if the interpretation of dominance is based on "the ability to affect consumers/competitors/relevant market" it has to be borne in mind that in most markets there will be enterprises which have varying

degrees of market power by virtue of which they can affect consumers, competitors or the relevant market in their favour. Interpreting dominance in this manner could mean that a new entrant who has a new idea, product or technology that challenges the status quo in a market and shifts consumer base in its favour, maybe erroneously regarded as dominant.<sup>63</sup> This is of particular concern in markets characterised by network effects, where there may be aggressive competition in the early stages of the network creation, till the market settles in favour of an enterprise. While it is true that strong network effects can result in “tipping” or transformation of a market with several providers into a highly concentrated market, it is also true that market leadership is precarious and transient in the initial stages of evolution of such markets, and such market leadership is not the same as dominance. It is to prevent such anomalies in assessing dominance that the Act lays down a holistic framework and lists various factors including the relative strength of competitors, entry barriers and countervailing power for determining dominance. The judgement of the Supreme Court is therefore inconsistent with Section 19(4) of the Act which outlines the factors to be considered in the assessment of dominance.

This interpretation of dominance by the Supreme Court also results in lowering the threshold of intervention by competition authorities. The author submits that this is potentially dangerous as it could create a situation of over-intervention where competition law moves towards controlling dominance, rather than abuse. Though in the instant case, the Supreme Court has only ordered an investigation, it has ordered so on the ground that loss making pricing can indicate dominance. It would be difficult to circumvent this interpretation of dominance in future cases until the law on this point is modified.

This line of reasoning may be assessed in light of some of the latest developments on digital markets. A report prepared by the Federal Ministry for Economic Affairs and Energy, Germany, in 2018, states that the present rules on abuse of dominance are insufficient for digital markets. It suggests lowering of the thresholds of market power for intervention in case of platform markets. That is, instead of always defining market before assessing dominance, the courts in certain cases can infer dominance if unilateral conduct results in an exclusionary effect and is not effectively curbed by the laws. However, the report cautions that such intervention

may be warranted only if there is a substantial probability of tipping, or if there is non-coordinated parallel behaviour in a tight oligopoly leading to foreclosure, or if there is any abuse of “conglomerate market power” which may significantly endanger competition even below the market dominance threshold, or in cases of intermediation power and information asymmetries (Schweitzer et al., 2019).

Another report prepared by the Stigler Center (2019) suggests that it becomes more important for antitrust lawyers to develop tools to explain to law courts behavioural biases in the creation of market power. Market power will depend upon what is regarded by consumers as substitutes, and whether there is “competition on the platform between complements, or competition between platforms, or competition between a platform and potential or nascent competitors regarding possible future markets”. Regarding predatory pricing, the report says that digital markets often operate on zero marginal costs which make it difficult for the test of prices below AVC or incremental cost, to work in such markets. The law so far has been interpreted to protect competitors who are equally efficient, which puts firms who have not reached that level of efficiency at a disadvantage.

The Inception Impact Assessment of the New Competition Tool, 2020 by the European Commission speaks of the difficulty in cases where platforms acquire market dominance through “strong network effects, zero pricing and data dependency, as well as market dynamics favouring sudden and radical decreases in competition (‘tipping’) and ‘winner-takes-most’ scenarios”. It states that the present laws cannot effectively tackle certain situations such as “monopolisation strategies by non-dominant companies with market power” (European Commission, 2020). Upon a review of the existing jurisprudence on digital markets, it is clear that the road ahead for India is muddy. Assessment of competition law violations in digital markets requires the development of additional tools/guidelines.

## **6. Conclusion and Suggestions: Developing a Framework for Regulating Competition in Digital Markets**

In the last few years, a number of reports have been published by antitrust authorities and independent experts all over the world, providing an interesting mix of suggestions on how digital markets can be better

regulated by competition authorities. Some of the suggestions have been discussed above. In India, the CCI conducted a detailed *Market Study on E-Commerce* which is the first report of its kind that provides an insight into the dynamics of digital markets (CCI, 2020). In addition, the Consumer Protection (E-Commerce) Rules, 2020 were notified in July 2020 by the Indian Government. These Rules are applicable to electronic retailers registered in India or abroad but offering goods and services to consumers in India. However, Section 3 (b) of the Rules clarifies that the definition of e-commerce is restrictive as *“e-commerce entity means any person who owns, operates or manages digital or electronic facility or platform for electronic commerce, but does not include a seller offering his goods or services for sale on a marketplace e-commerce entity”*.<sup>64</sup>

None of the existing Indian laws/regulations holistically address competition issues in digital markets. In view of the rapid growth of digital markets, there is an urgent need for framing of guidelines with respect to the same. Though it would not be possible for the author to give detailed suggestions in this paper, a review of reports/guidelines of other jurisdictions, some of which have been discussed here, could be the starting point of the exercise.

## Suggestions

While giving suggestions it becomes important to revisit the objectives of the law. One of the main quandaries in competition law is with respect to balancing false positives with false negatives. The Chicago School, in the 1970s, felt that avoiding false positives (good conduct judged to be bad) is more beneficial to society than avoiding false negatives (anti-competitive conduct judged to be good). This was based on the reasoning that false positives are more difficult to correct whereas false negatives can be corrected by market forces. However, this logic may not be tenable in today's market conditions. Under-enforcement of the law is likely to be costlier now, as the market power of large, technology-based digital platforms is more durable. In digital markets, false negatives are more likely to occur than earlier, due to the evolution of newer forms of anti-competitive conduct. Similarly, false positives may be less common than earlier due to more advanced econometric tools for assessing anti-competitive behaviour and market power. Thus, there is need for the law to

recalibrate the balance between the two. This could be done by developing economic tools required for understanding and assessing the dynamics of such newer markets, and also by amendment to the law (Stigler Center, 2019, p.73-74).

## **I. Developing Additional Tools for Competition Assessment**

At the outset, it may be important to develop new tools/mechanisms for competition assessment in digital markets. A caveat here is that the suggestions given by the author are by no means exhaustive. Digital markets are constantly evolving and require analysis on a case to case basis. However, some general mechanisms could be developed for better understanding and assessment of such markets. These include:

- Development of tools for the definition of markets where a large part of the sales takes place through barter transactions, and to assess the quality-adjusted price paid for a good or service in a barter transaction with a zero, or near zero monetary price (Stigler Center, 2019, p.75). In digital markets payments through barter are common. For instance, customers share their personal information and preferences. The platforms then indulge in targeted advertising and sales on the basis of the information received. Thus, if digital markets are making profits, it can be inferred that information has a market price and is more valuable than the cost of the services. There is economics literature which has modelled this issue and is able to define a data mark-up.<sup>65</sup>
- Mechanisms to evaluate potential competition from new firms and future innovators and entrants. In digital markets, due to high concentration levels, network effects and control over data, it becomes difficult to dislodge a firm once it becomes dominant. Hence, attention needs to be given to entry conditions and the likelihood of innovation. The Stigler Center suggests the development of tools to assess how market conditions may affect the likelihood of innovation (Stigler Center, 2019, p.75). The European Commission report states that in order to encourage the entry of firms and help them in attracting consumers, it is important to ensure that multi-homing and switching are possible (Cr  mer, Montjoye, and Schweitzer, 2019).

- Defining two, interrelated markets, in case of platform markets. Market definition is complex in platforms which are multisided. Since users on different sides of a platform may have divergent interests, defining a single two-sided market in all cases may obscure the analysis (Stigler Center, 2019, p.75).
- Mechanisms to address and evaluate how technology platforms are able to take advantage of consumer biases and affix consumers to their platform by making it difficult for them to switch to alternatives. The European Commission report suggests that even where consumer harm cannot be measured, practices indulged in by firms aimed at reducing competition on the face of it should be prohibited in the absence of evidence of consumer welfare (Crémer, Montjoye, and Schweitze, 2019, p.3). The recent Google decisions in the EU have addressed various strategies adopted by digital platforms to affix consumers to their platforms and these cases provide valuable insight into behavioural economics and the understanding of consumer choices and biases.<sup>66</sup>
- Using market structure based competition tools to rectify problems that cannot be effectively addressed under the existing law. The Inception Impact Assessment of the New Competition Tool, 2020 of Europe proposes that the Commission may intervene in the absence of dominance *“when a structural risk for competition or a structural lack of competition prevents the internal market from functioning properly”* (Crémer, Montjoye, and Schweitze, 2019, p. 2-3). Structural risks for competition denote situations where the features of the market in question (like network effects, absence of multi-homing and lock-ins) and the behaviour of the firms operating in such markets can potentially threaten competition. Such intervention may be horizontal in scope or limited to particular sectors where market definition is difficult within traditional frameworks, like digital markets. Here, even without a finding of dominance, the Commission may impose behavioural and if needed, structural remedies. The Commission may even recommend legislative action/regulation. However, there will be no finding of infringement. Nor will there be any imposition of fines, or damage claims in such cases.

This approach could also be considered in India, at least as an interim arrangement, till there is more clarity on the nuances of market definition and market power in digital markets.

## II. Amendment to the Law by Changes to Existing Legal Principles

- The law relating to predatory pricing needs to be broadened in scope. Predatory pricing laws have been shaped in a manner so as to avoid over enforcement. The recoupment test for instance imposes a very high threshold of holding a firm guilty of such behaviour. In case of digital platforms, the “below AVC” test is also dated as the marginal cost for goods or services can be close to zero. Hence, the law is required to be modified so as to suitably deal with anti-competitive practices in such markets.
- The requirement of burden of proof on the plaintiff/informant may be relaxed or even shifted to the defendant in sophisticated digital markets where the defendant has greater knowledge and more access to relevant information. The European Commission report recommends erring on the side of disallowing conduct which is likely to be anti-competitive and shifting the burden of proof on the defendant to demonstrate competitiveness in such cases (Crémer, Montjoye, and Schweitze, 2019, p.51).
- The standard of proof also needs to be reviewed. In digital platforms, there may be risk of under enforcement of the law if courts insist on a high degree of probability of harm. The European Commission report states that EU cases have made room for relaxation of the standard of proof (Crémer, Montjoye, and Schweitze, 2019, p.42). European courts have held that there is no need to demonstrate concrete proof of anti-competitive effects. It is sufficient to show that the practice in question “potentially excludes competitors”<sup>67</sup> or “tends to restrict competition”.<sup>68</sup> Similarly, circumstantial or indirect evidence should be allowed in cases where the propositions in question are not observable and direct evidence is difficult to present. In the US, the American Express case held that indirect evidence may be proof of market power along with *some evidence of harm to competition*, as opposed to “*proof of actual detrimental effects on competition*”.<sup>69</sup> A similar approach could be followed in India.



- The concept of “intermediation power” may be recognised, in addition to buyer-seller power. Germany’s Competition Law Reform of 2020 suggests the amendment of Section 18 of the Act<sup>70</sup> (which defines market dominance) to be supplemented by a new paragraph 3b in the following form: *“When assessing the market position of an undertaking acting as an intermediary on multi-sided markets, account should be taken in particular of the importance of the intermediary services it provides for access to supply and sales markets”*. Other reforms suggested in the context of digital markets are (a) lowering the threshold for third-party access to data and (b) prohibiting firms with superior market power (which may not yet be dominant) to obstruct multi-homing so as to prevent “tipping” of the market. Such amendments may also be considered in India.

In conclusion, it may be said that there is an urgent need for reforms with respect to the application of competition law to digital markets in India. There are also several related issues which need to be considered in such markets, like consumer protection, privacy and data protection. In view of the complex nature of such markets, it is desirable that the regulators and policymakers opt for reforms which are flexible enough to address the unique circumstances of each case while keeping a broad yet certain framework within which to use discretion. This could be a middle path between the two extremes of having rigid rules (which are not possible or desirable in evolving markets) and no guidelines at all (which is the present scenario) leading to incoherent jurisprudence. Such reforms could be in the form of developing additional tools/mechanisms for competition assessment and by way of amendments to the law, as outlined above.

## Endnotes

<sup>1</sup> See also Hagiu (2006).

<sup>2</sup> MCX Stock Exchange Ltd. v. National Stock Exchange of India Ltd. & Ors., Case No. 13 of 2009 (CCI).

<sup>3</sup> *Ibid.* See Minority Order, available at [http://www.cci.gov.in/sites/default/files/MCXDissentOrder240611\\_0.pdf](http://www.cci.gov.in/sites/default/files/MCXDissentOrder240611_0.pdf).

<sup>4</sup> See generally, Robertson (2019).

- <sup>5</sup> The Competition Act, 2002, § 19(6) provides that *“The Commission shall, while determining the relevant geographic market, have due regard to all or any of the following factors, namely: – (a) regulatory trade barriers; (b) local specification requirements; (c) national procurement policies; (d) adequate distribution facilities; (e) transport costs; (f) language; (g) consumer preferences; (h) need for secure or regular supplies or rapid after-sales services.”* Section 19 (7) provides that *“The Commission shall, while determining the relevant product market, have due regard to all or any of the following factors, namely: – (a) physical characteristics or end-use of goods; (b) price of goods or service (c) consumer preferences; (d) exclusion of in-house production; (e) existence of specialised producers; (f) classification of industrial products.”*
- <sup>6</sup> For a detailed discussion on the SSNIP test and its limitations, see Sharma (2011).
- <sup>7</sup> See generally Filistrucchi et al. (2014).
- <sup>8</sup> The Treaty on the functioning of the European Union (1958), Title VII, Chapter 1, §1, Article 101 prohibits *“all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market.”* Any agreement or decision prohibited under the said article would be automatically void unless they fall under the exceptions listed in Art. 101(3).
- <sup>9</sup> *Infra* Note 16.
- <sup>10</sup> *Opening of Proceedings against Amazon*, Case AT 40462(2017), European Commission, [https://ec.europa.eu/competition/antitrust/cases/dec\\_docs/40462/40462\\_6210\\_9.pdf](https://ec.europa.eu/competition/antitrust/cases/dec_docs/40462/40462_6210_9.pdf).
- <sup>11</sup> The Competition Act, 2002, §4- Explanation.
- <sup>12</sup> The Competition Act, 2002, §4.
- <sup>13</sup> See generally Anderson et al. (n.d.).
- <sup>14</sup> The Competition Act, 2002, § 19(4) provides that *“The Commission shall, while inquiring whether an enterprise enjoys a dominant position or not under section 4, have due regard to all or any of the following factors, namely: – (a) market share of the enterprise; (b) size and resources of the enterprise; (c) size and importance of the competitors; (d) economic power of the enterprise including commercial advantages over competitors; (e) vertical integration of the enterprises or sale or service network of such enterprises; (f) dependence of consumers on the enterprise; (g) monopoly or dominant position whether acquired as a result of any statute or by virtue of being a Government company or a public sector undertaking or otherwise; (h) entry barriers including barriers such as regulatory barriers, financial risk, high capital cost of entry, marketing entry barriers, technical entry barriers, economies of scale, high cost of substitutable goods or service for consumers; (i) countervailing buying power; (j) market structure and size of market; (k) social obligations and social costs; (l) relative advantage, by*

*way of the contribution to the economic development, by the enterprise enjoying a dominant position having or likely to have an appreciable adverse effect on competition; (m) any other factor which the Commission may consider relevant for the inquiry."*

- <sup>15</sup> See *Dr. L.H. Hiranandani Hospital v. CCI & Ramakant Kini*, Appeal No. 19 of 2014; See also COMPAT order Appeal No. 19 of 2014, p.28 *"At the outset, it may be clarified that market share of an enterprise is only one of the factors that decides whether an enterprise is dominant, or not, but that factor alone cannot be decisive proof of dominance. Also, the Act has not prescribed any market share threshold for determining dominance of an enterprise in the relevant market."* See also *Re M/s ESYS Information Technologies Pvt Ltd v. Intel Corporation (Intel Inc) & Ors.*, Case No. 48 of 2011 (CCI).
- <sup>16</sup> The Treaty on the functioning of the European Union (1958), Title VII, Chapter 1, §1, Art. 102: *"Any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in: (a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions; (b) limiting production, markets or technical development to the prejudice of consumers; (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts."*
- <sup>17</sup> *United Brands Company and United Brands Continental BV v. Commissioner of the European Communities*, Case 27/76 (1978), E.C.R. 1978-00207.
- <sup>18</sup> *Microsoft Corp. v. Commission of the European Communities*, Case T-201/04 (2007), E.C.R. 2007 II-03601.
- <sup>19</sup> U.S. Department of Justice, Assistant Attorney General for Antitrust, Thomas O. Barnett, issues statement on European Microsoft Decision (Sep. 17, 2007), [https://www.justice.gov/archive/atr/public/press\\_releases/2007/226070.htm](https://www.justice.gov/archive/atr/public/press_releases/2007/226070.htm).
- <sup>20</sup> See *Standard Oil Co. of New Jersey v. United States*, 221 U.S. 1 (1911); *United States v. American Tobacco Company*, 221 U.S. 105 (1911), which were some of the first cases of predation.
- <sup>21</sup> *Matsushita Electric Industrial v. Zenith Radio*, 475 U.S. 574 (1986).
- <sup>22</sup> *Ibid.* P. IV(a).
- <sup>23</sup> *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993).
- <sup>24</sup> See *Areeda and Turner* (1975).

- 25 AKZO Chemie BV v. Commission of the European Communities, Case C-62/86 (1991), E.C.R.1991 I-03359.
- 26 *Ibid.*
- 27 France Télécom SA v. Commission of the European Communities, Case C-202/07 (2009) 4 C.M.L.R. 25, at 113. Recently, however, the EU is considering the use of recoupment tests when analysing predatory pricing cases. *See* Mehta (2008). He mentions that EU recently has also been considering the use of recoupment tests when analysing predatory pricing cases.
- 28 The Competition Commission of India (Determination of Cost of Production) Regulations, 2009 (No. 6 of 2009).
- 29 *See Ibid.*§3.
- 30 M/s Transparent Energy Systems Pvt. Ltd. v. TECPRO Systems Ltd., Case No. 09 of 2013 (CCI) at 23. *See also Supra* Note 3.
- 31 Uber India Systems Pvt. Ltd. v. Competition Commission of India & Ors., Civil Appeal No. 641 of 2017 (SC).
- 32 Meru Travel Solutions Pvt. Ltd. v. ANI Technologies Pvt. Ltd. & Ors., Case No. 25, 26, 27 & 28 of 2017 (CCI).
- 33 Meru Travel Solutions Pvt. Ltd. v. Uber India Systems Pvt. Ltd. & Ors., Case No. 96 of 2015 (CCI).
- 34 Fast Track Call Cab Pvt. Ltd. & Meru Travel Solutions Pvt. Ltd. v. ANI Technologies Pvt. Ltd., Case No. 6 & 74 of 2015 (CCI); Meru Travel Solutions Pvt. Ltd. v. Uber India Systems Pvt. Ltd. & Ors., Case No. 81 of 2015 (CCI); M/s Mega Cabs Pvt. Ltd. v. ANI Technologies Pvt. Ltd., Case No. 82 of 2015 (CCI); Mr. Vilakshan Kumar Yadav & Ors. v. ANI Technologies Pvt. Ltd. & Ors., Case No. 21 of 2016 (CCI), etc.
- 35 Except Kolkata, where the market was for radio taxis and yellow taxis.
- 36 *Supra* Note 33 at 38.
- 37 *Supra* Note 32.
- 38 *Ibid.* at 41.
- 39 Fast Track Call Cab Pvt. Ltd. & Meru Travel Solutions Pvt. Ltd. v. ANI Technologies Pvt. Ltd., Case No. 6 & 74 of 2015 (CCI).
- 40 *Supra* Note 34 at 42.
- 41 Meru Travel Solutions Pvt. Ltd. v. ANI Technologies Pvt. Ltd. & Ors., Case No. 25, 26, 27 & 28 of 2017 (CCI) at 44.

- <sup>42</sup> *Ibid.* at 46.
- <sup>43</sup> *Ibid.* at 53.
- <sup>44</sup> Fast Track Call Cab Pvt. Ltd. & Meru Travel Solutions Pvt. Ltd. v. ANI Technologies Pvt. Ltd., Case No. 6 & 74 of 2015 (CCI).
- <sup>45</sup> *Ibid.*
- <sup>46</sup> *Ibid.* at 90.
- <sup>47</sup> *Ibid.* at 93.
- <sup>48</sup> *Supra* Note 3.
- <sup>49</sup> Fast Track Call Cab Pvt. Ltd. & Meru Travel Solutions Pvt. Ltd. v. ANI Technologies Pvt. Ltd., Case No. 6 & 74 of 2015 (CCI) at 97.
- <sup>50</sup> *Ibid.*
- <sup>51</sup> *Ibid.* at 122.
- <sup>52</sup> Meru Travel Solutions Pvt. Ltd. v. Competition Commission of India & Uber India Systems Pvt. Ltd., Appeal No. 31 of 2016 (COMPAT).
- <sup>53</sup> *Ibid.* at 11.
- <sup>54</sup> *Ibid.* at 12.
- <sup>55</sup> *Ibid.* at 15.
- <sup>56</sup> *Ibid.* at 16.
- <sup>57</sup> *Ibid.* at 20.
- <sup>58</sup> Uber India Systems Pvt. Ltd. v. Competition Commission of India & Ors., Civil Appeal No. 641 of 2017 (SC).
- <sup>59</sup> *Ibid.* at p. 3.
- <sup>60</sup> *Supra* Note 2.
- <sup>61</sup> *Ibid.* at 10.47.
- <sup>62</sup> Fast Track Call Cab Pvt. Ltd. & Meru Travel Solutions Pvt. Ltd. v. ANI Technologies Pvt. Ltd., Case No. 6 & 74 of 2015 (CCI).
- <sup>63</sup> *Ibid.* at p. 97.
- <sup>64</sup> The Consumer Protection (E-Commerce) Rules, 2020 (India).
- <sup>65</sup> See Bergemann, Bonatti and Smolin (2018).
- <sup>66</sup> See Fletcher (2019). See also Hourihan and Finn (2019).

- <sup>67</sup> Post Danmark A/S v. Konkurrencerådet (Post Danmark II) Case C-23/14, EU:C:2015:651, at 66.
- <sup>68</sup> Tomra and Others v. Commission Case C-549/10 P, EU:C:2012:221, at 68.
- <sup>69</sup> Ohio, et al. v. American Express Company, et al. 138 S. Ct. at 2289.
- <sup>70</sup> Act against Restraints of Competition, (Competition Act – GWB), [http://www.gesetze-im-internet.de/englisch\\_gwb/englisch\\_gwb.pdf](http://www.gesetze-im-internet.de/englisch_gwb/englisch_gwb.pdf)

## References

- Anderson, R., Daniel, T., Heimler, A. and Jakob, T. (n.d.). Abuse of Dominance. *A framework for the design and implementation of Competition Law and Policy*. World Bank and OECD, available at: <http://www.oecd.org/daf/competition/prosecutionandlawenforcement/27123114.pdf>.
- Areeda, P. and Turner, D.F. (1975). Predatory Pricing and Related Practices Under Section 2 of the Sherman Act. *Harvard Law Review*, Vol.8, No.4, pp. 697, 716-717.
- Bergemann, D., Bonatti, A. and Smolin, A. (2018, January). The Design and Price of Information. *American Economic Review*, 108 (1): 1-48.
- Bhattarcharjea, A. (2018). Predatory Pricing in Platform Competition: Economic Theory and Indian Cases. In Bharadwaj, A., Devaiah, V. H., and Gupta, I. (eds.) *Multi-Dimensional Approaches Towards New Technology: Insights on Innovation, Patents and Competition*, p. 218. Available at: <https://link.springer.com/content/pdf/10.1007%2F978-981-13-1232-8>.
- CCI (2020). *Market Study on E-Commerce in India: Key Findings and Observations*. Competition Commission of India, [https://www.cci.gov.in/sites/default/files/whats\\_newdocument/Market-study-on-e-Commerce-in-India.pdf](https://www.cci.gov.in/sites/default/files/whats_newdocument/Market-study-on-e-Commerce-in-India.pdf).
- Crémer, J., Montjoye, Y.-A.de, and Schweitzer (2019). *Competition Policy for the Digital Era*. European Commission, p. 6, <https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>
- Dessemond, EbruGökçe (2019, December). Restoring Competition in “winner-took-all” digital platform markets. *UNCTAD Research Paper*

- No. 40. Available at: [https://unctad.org/en/PublicationsLibrary/ser-rp-2019d12\\_en.pdf](https://unctad.org/en/PublicationsLibrary/ser-rp-2019d12_en.pdf).
- Duca, B.S. (2020). Scope of Article 102 TFEU: Protection of competition or Protection of Competitors? *European Union Law Working Paper No. 46*, pp. 3-69. Stanford-Vienna Transatlantic Technology Law Forum, [https://law.stanford.edu/wp-content/uploads/2020/06/duca\\_eulawwp46.pdf](https://law.stanford.edu/wp-content/uploads/2020/06/duca_eulawwp46.pdf).
- European Commission. (2005). DG Competition Discussion Paper on the application of Article 82 of the Treaty to exclusionary abuses. Available at: <https://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf>.
- European Commission. (2020). *Inception Impact Assessment*. Ref. Ares (2020)2877634 - 04/06/2020, p.2 (2020), <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12416-New-competition-tool>.
- Fletcher, A. (2019, January). The EU Google Decisions: Extreme Enforcement or the Tip of the Behavioral Iceberg? *CPI Antitrust Chronicle*, Competition Policy International, <https://www.behavioural-science.ac.uk/documents/cpi-fletcher.pdf>.
- Filistrucchi, L., Geradin, D., Damme, E.V. and Affeldt, P. (2014). Market Definition in Two-Sided Markets: Theory and Practice. *Journal of Competition Law and Economics*, 10(2): 293-339, <https://doi.org/10.1093/joclec/nhu007>.
- Hagiu, A. (2006). Multi-sided platforms: From Micro-foundations to Design and Expansion strategies. *Working Paper No. 07-094*, Harvard Business School, <https://www.hbs.edu/faculty/publication%20files/07-094.pdf>.
- Houriha, R. and Finn, J. (2019). Google and the six billion dollar fine(s): We have the technology, but do we have to rebuild the competition rules? *Kluwer Competition Law Blog*, 18 April 2019, available at: <http://competitionlawblog.kluwercompetitionlaw.com/2019/04/18/google-and-the-six-billion-dollar-fines-we-have-the-technology-but-do-we-have-to-rebuild-the-competition-rules/>

- Kaushik, A. (2019). Working Paper on Competition Law and Digital Economy: Identifying Emerging Challenges. *Working Paper No. 52*, Centre for WTO Studies, <http://wtocentre.iift.ac.in/workingpaper/WorkingPaper52.pdf>.
- Leslie, C.R. (2013, November). Predatory Pricing and Recoupment. *Columbia Law Review*, 113(7): 1695-1771, <https://www.law.uci.edu/faculty/full-time/leslie/PredatoryPricing.pdf>.
- Mehta, U.S. (2008). Predatory Pricing: Lessons for developing countries. Briefing Paper No. 3/2008. CUTS Center for Competition, Investment and Economic Regulation, available at: [https://cuts-ccier.org/pdf/Predatory\\_Pricing-Lessons\\_for\\_Developing\\_Countries.pdf](https://cuts-ccier.org/pdf/Predatory_Pricing-Lessons_for_Developing_Countries.pdf).
- Moisejevas, R. (2017). Predatory Pricing: A Framework for analysis. *Baltic Journal of Law & Politics*, 10(1): 124-155, <https://content.sciendo.com/view/journals/bjlp/10/1/article-p124.xml?language=en>.
- OECD. (2012). *The Digital Economy*. Directorate for Financial and Enterprise Affairs Competition Committee, Organisation for Economic Co-Operation and Development. Available at: <http://www.oecd.org/daf/competition/The-Digital-Economy-2012.pdf>
- Raychaudhuri, T. (2019, November 30). Predatory Pricing and Market Determination in Non-Traditional Markets: An analysis of recent cases decided by the Competition Commission of India. *National Law Conclave on Law as an instrument of Social Transformation: Issues, Challenges and Emerging Trends*, University of North Bengal, West Bengal, India.
- Robertson, V.H.S.E. (2019). The Relevant Market in Competition Law: A Legal Concept. *Journal of Antitrust Enforcement*, Vol. 7, Issue 2, pp. 158-176.
- Russo, F. and Stasi, M. L. (2016, June 20). Defining the Relevant Market in the Sharing Economy. *Internet Policy Review*, Vol. 5, Issue 2, <https://doi.org/10.14763/2016.2.418>.
- Schweitzer, H., Haucap, J., Kerber, W. and Welker, R. (2019). *Modernizing the Law on Abuse of Market Power in the Digital Age*. Report for the Federal Ministry for Economic Affairs and Energy (Germany), pp.4-5, available at: [https://www.researchgate.net/publication/328204203\\_](https://www.researchgate.net/publication/328204203_)



Modernising\_the\_Law\_on\_Abuse\_of\_Market\_Power\_Report\_for\_the\_Federal\_Ministry\_for\_Economic\_Affairs\_and\_Energy\_Germany/citation/download

- Singh, S. and Mukherjee, S. (2020, March 06). Insights into Platform Markets and Abuse of Dominance: Innovation versus Competition in India. Paper presented at the CCI National Conference on Economics of Competition Law, New Delhi, India, [https://www.cci.gov.in/sites/default/files/whats\\_newdocument/Papers.pdf](https://www.cci.gov.in/sites/default/files/whats_newdocument/Papers.pdf)
- Sharma, K. (2011, May-June). SSNIP Test: A Useful Tool, Not a Panacea. *Competition Law Reports*, pp. 188-192. Competition Commission of India, [http://www.cci.gov.in/sites/default/files/presentation\\_document/SSNIPTestKKSharma260711.pdf](http://www.cci.gov.in/sites/default/files/presentation_document/SSNIPTestKKSharma260711.pdf)
- Stigler Center (2019). *Committee for the study of the digital platforms, Market Structure and Antitrust subcommittee Report*. George J. Stigler Center for the Study of the Economy and the State and The University of Chicago Booth School of Business, p.8, <https://som.yale.edu/sites/default/files/CompetitionDigitalPlatformsStigler19.pdf>.
- Tapscott, D. (1995). *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*. 1st ed. McGraw-Hill Education.
- Wismer, S. and Rasek, A. (2017, November). Note on Market Definition in Multi-sided Markets. Organisation for Economic Co-operation and Development, <http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WD%282017%2933/FINAL&docLanguage=En>.