Reliance Jio
Predatory Pricing or Predatory Behaviour?

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Reliance Jio is disrupting the working of India's telecommunications industry by taking on incumbents like Bharti Airtel, Idea Cellular and Vodafone which together control almost three-fourths of the market for mobile voice and data services. Although some of its services are "free," RJio's pricing may not be considered predatory even if its behaviour certainly is.

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On 1 September 2016, Reliance Jio Infocomm (RJio), which is part of Reliance Industries Limited (RIL), India's biggest private company headed by the country's richest man Mukesh Ambani, commercially launched services to transfer voice and data through the internet using fourth-generation (4G) telecommunications technology. RJio has stated that it hopes to have 100 million subscribers in the "shortest amount of time." Said to be the biggest "start-up" in the world with an investment of ₹1,50,000 crore the new entrant comes with substantial financial clout (Khanna and Pathak 2016).

RJio is expecting data rather than voice to be its primary source of revenue. This represents an important shift in the structure of an Indian telecom operator. Currently RJio's competitors such as Bharti Airtel, Idea Cellular and Vodafone earn the bulk (around three-fourths) of their revenues through voice services.

To what extent will RJio disrupt the telecom market in the country which is dominated by the top three incumbent players? Bharti, Idea and Vodafone together control close to three-fourths of the total market for telecom services in the country. The three have invested heavily in older second-generation (2G) and third-generation (3G) technological platforms (TRAI 2016a). At present, RJio is the only telecom operator in India with fully data-centric services, entirely based on voice over long-term evolution (VoLTE) technology, which allows voice to be transferred over an internet protocol (IP) network at much faster speeds in comparison to traditional networks using 2G and 3G technologies.

RJio's advertisements had Prime Minister Narendra Modi endorsing its offerings. RJio's products and services were called "revolutionary." Its competitors claimed that RJio was deploying what its competitors call "predatory pricing." Even if this may not be a legally accurate description, what is certain is that RJio's behaviour can be described as predatory—in keeping with practices followed by the Reliance Group over the decades.

RJio's Welcome Offer

RJio's most attractive offering is "unlimited voice calling" for all its subscribers. This offer comes with a selection of 10 data plans ranging from ₹149 for 300 megabytes (MB) of data to ₹4,999 for 75 gigabytes (GB) of data (Reliance Jio 2016). The cost of data to the consumer comes down progressively as tariffs go up. For example, the ₹1,499 tariff carries 20 GB of data making the average price of the package ₹74.95 per GB. With its ₹4,999 tariff, the average cost falls to ₹66.68 per GB. RJio is offering data in various forms, including at public WiFi hotspots or specific areas where computers and mobile phones can wirelessly connect to the internet through a facility called JioNet, which is expected to become operational in mid-2017.

During RIL's annual general meeting on 1 September, Ambani stated that while there is a digital revolution underway across the planet, this country was lagging behind others in terms of mobile broadband internet access. He claimed that RJio will be offering data to its customers at a low price of ₹50 per GB and that his new venture would put an end to voice call charges in India (RIL 2016).

Public perception of RJio's products and its pricing strategy is that these are "affordable" and "better" than those of its rivals. People across cities in India have waited in serpentine queues to buy a RJio SIM (subscriber identity module) card. Application forms which are supposed to be free have reportedly been sold in the black market, each for ₹100 (Zacharia 2016a). RJio has been able to reach out to over 1.5 million subscribers during its trial phase alone—a substantial portion of these subscribers are RIL employees, their family members and friends who began availing these services since December 2015.

Competitors React

In their first reactions to RJio's entry, its competitors sharply reduced the prices at which they were offering data services. State-run Bharat Sanchar Nigam Ltd (BSNL) decided to match RJio's offering "tariff by tariff" with the chairman of the public sector corporation, Anupam Shrivastava, stating that RJio's entrance posed an existential challenge ("a question of survival") for other telecom operators.

The entry of RJio will accelerate market consolidation and strategic alliances. Such alliances have already taken place and more are expected. Airtel and Aircel struck a 4G spectrum trading deal in July worth ₹3,500 crore (PTI 2016a). Reliance Communications (RComm) headed by Mukesh Ambani's younger brother Anil Ambani, and RJio arrived at an agreement in January to allow the latter to share the former's mobile towers by paying ₹12,000 per tower (Arun 2016) in addition to a spectrum sharing deal across 17 telecom circles (or geographical areas) (Reuters 2016). More recently, RComm and Aircel announced that they would merge—the merged entity would have assets worth ₹65,000 crore and an active subscriber base of 120 million, making it the fourth largest telecom operator in India (Gupta and Barman 2016). On 13 September, BSNL and RJio announced an agreement whereby BSNL customers with 4G-enabled handsets could use RJio's network while roaming outside their circles while RJio customers could use BSNL's 2G network to make voice calls (Sathe 2016). On 27 September, RComm announced that it had "virtually" merged with RJio (*Mint* 2016a).

RJio's competitors who dominate the lobbying group, the Cellular Operators Association of India (COAI), wrote to the Department of Telecommunications (DoT) alleging that existing licence agreements do not allow any operator to conduct prelaunch trials at the scale at which RJio conducted its trial. The COAI claimed that RJio had violated the terms of its licence agreement with the DoT and the principles enshrined therein which are meant to ensure fair competition and non-predatory pricing behaviour (*Hindu Business Line* 2016).

Anti-competitive Practices

What is meant by predatory pricing and predatory behaviour? When a firm cuts the price of its goods or services, it forces its competitors to lower their prices. This results in the profits of the competitors falling and they may even have to incur losses. If the competitor does not cut prices, it loses market share and if it does cut prices to below its average cost of production, it runs the risk of insolvency. The act of reducing prices to curb competition and then increase prices to earn monopoly profits is considered anti-competitive.

Competition laws in various national jurisdictions aim at safeguarding long-term consumer interests from overt and disguised predatory tactics of market actors. These laws seek to instil a competitive market environment by regulating, monitoring and assessing competitive practices between and among firms. In the United States, the Sherman Act protects firms from "unreasonably exclusionary conduct that is dangerous and is likely to create or maintain monopoly rents" (Mehta 2008). When a firm not only intends to harm its competitors but also harm its consumers, its pricing behaviour is considered "predatory."

In India, the Competition Act 2002 defines predatory pricing as the "sale of goods or provision of services, at a price which is below the cost … of production of the goods or provision of services, with a view to reduce competition or eliminate competitors" (The Competition Act 2002). Section 4 of the act has stated that predatory pricing is a form of abuse of dominance. The section also provides a set of procedures to understand predatory pricing by first analysing whether a firm in question is dominant in a particular market and whether that firm has abused its dominant position. The act makes clear that only firms with dominant market positions can be considered predatory in the eyes of the law.

The Competition Commission of India (CCI), an independent market regulator responsible for regulating market behaviour and competition, has investigated a number of instances of unfair competition. For example, the CCI has investigated complaints of "predatory pricing" against transport-technology companies, Uber and Ola, as well as allegations made against e-commerce websites, Flipkart and Amazon. These complaints were made after these companies started offering large discounts to consumers. Each of these companies have since been exonerated of any charge of "predatory pricing" as none of them had a "dominant position" in their respective markets (Singh 2016). While investigating these cases, the CCI considered a firm's market share as the sole determinant of dominant position. The CCI is, however, expected to consider a range of factors while ascertaining market dominance.

Anti-competitive Behaviour?

In order to determine whether RJio's behaviour (in form and in substance) has been predatory and/or anti-competitive, a close examination is required of the telecom industry's market structure, spectrum auctions and regulatory changes, besides the pricing of RJio's products and services and issues related to interconnection charges and points of interconnection.

Table 1 shows that Bharti, Idea and Vodafone together account for 75.2% of the market in terms of revenue and 61% in terms of subscribers. There are 220 million active unique smartphone users

Table 1: Comparing Five Incumbent Telecom Operators

Variable	Bharti Airtel	Idea Cellular	Vodafone India	Reliance Communications	Aircel
Revenue market share (RMS)	32.7%	19.2%	23.2%	3.6% (Q4FY16)	5.3% (Q4FY16)
Subscriber base (million)	294	175	198	100	65.1
Wireless subscriber base	24.7%	17.03%	19.26%	9.54%	8.59%
Data revenues (as a % of total)	23.7%	20.6%	18.57%	31.8%	20%
3G users (million)	28.1	30.5	27.8 (4G included)	25.4 (4G included)	
4G users (million)	5	1.8			

Source: TRAI (2016b); Srivastava (2016); Anand (2016); ICRA (2016); authors' calculations based on Q1FY17 and FY15–16 results published by Bharti Airtel, Idea Cellular, Vodafone India and Reliance Communications.

in India (*Hindu* 2016), making the country the second largest smartphone market. Analysts forecast that by 2019 there will be around 651 million smart-phone users in the country (*Mint* 2016b).

Financial leverage ratios are used to determine how much of a company's capital comes from debt and are used to find out the ability of a firm to meet its financial obligations. For the incumbent telecom firms, financial leverage ratios are as follows: Bharti 4.96, Idea 2.63, Reliance Communications 2.77 and Vodafone 2.03. For the new entrant, RJio, its financial leverage ratio stood at 2.48, according to the Financials.Morningstar.com website. In 2009, RIL had insignificant levels of debt but this had increased dramatically to over ₹1,80,000 crore by the end of March (Kumar and Mulgaonkar 2016). With the industry likely to consolidate further, the main telecom operators will be investing to expand and modernise their infrastructure and also on spectrum. The high capital expenditure will drive up financial leverage ratios of the incumbent firms and the new entrant.

The top three telecom companies (Airtel, Idea and Vodafone) occupy most of the market. They each offer a variety of products and services (2G, 3G, 4G and basic calling/texting). While RMS and subscription base figures are a robust industrial measure to ascertain market dominance, in order to make a comparative assessment of the impact of the "aggressive competition" initiated by RJio using 4G VoLTE only, one would require detailed product-specific revenue and subscription base data from each telecom operator.

Telecom operators provide consumers with voice services over circuit switched (CS) networks as well as packet switched (PS) networks. The purpose of CS networks is to provide the caller with a dedicated circuit for the session of the call where the communications flowing between phones always follow the same path with no other network traffic interfering. These networks provide dedicated point-to-point connections for the caller and receiver. PS networks, on the other hand, are used to send data—in separate blocks or packets—across a network where the data is broken up, transferred through an IP network and then reassembled to deliver the message. Unlike RJio which is a fully IP-based network, incumbent operators like Airtel, Idea, Vodafone, RComm and BSNL use both CS and PS networks and offer services across these networks.

The basic difference between 2G and 3G cellular technology is the rate at which voice and data is transferred through a network. The first sends and receives data at speeds slightly below 50,000 bits per second whereas 3G sends and receives data at a rate a little more than four million bits per second; 2G was primarily designed to provide mobile users with a faster method of transmitting information via voice signals whereas 3G was designed to transfer information via data signals. The 4G technology brings to the consumer the speed as well as the transmission efficiency of broadband internet on a handset.

As the battle among the telecom operators will be fought hard over the coming years, two phenomena will become evident. One, incumbent firms will continue providing 2G and 3G services and non-internet telephony voice services on CS networks for the majority of subscribers. Two, there will also be a greater attempt by these operators to not only replace their older technology platforms—2G, 3G and voice services—with 4G platforms but also make the market for 4G services as attractive as possible for the average consumer in the country. The two are not contradictory since voice services account for three-fourths of the total revenue earned by the incumbent operators. The transition from a technologically-fragmented industry with different types of networks, to one which is wholly based on IP connections, will be a long and arduous process.

RJio is competing with existing operators directly in the 4G market and hopes to dominate the market because of its "early mover" advantage. However, if its major rivals invest substantially in infrastructure for expanding their 4G services and until the average price of cellular hardware falls, the disruption that RJio will cause could end up being a relatively short-lived phenomenon, even ephemeral. The socio-economic inequalities in India inhibit the majority of people from being able to afford expensive mobile handsets. Therefore, incumbent firms will perforce have to continue to maintain their existing voice-based services. However, since internet telephony and the transfer of voice through IP networks is the future of telecom the world over and also in India, an important question arises: How long will it take the industry to make the transition from its present hybrid state to one which is entirely internet based? This is not an easy question to answer as it depends on many imponderable social and economic factors.

Auctions and Regulatory Changes

The manner in which Reliance Jio acquired spectrum in the 2,300 MHz band during the broadband wireless access (BWA)/4G auctions in 2010 through Infotel Broadband Services Private Limited (IBSPL) was controversial. A "draft" report of the Comptroller and Auditor General (CAG) of India leaked to the media in 2014 noted that IBSPL had submitted an allegedly forged bank guarantee to the DoT as part of the company's commitment to bidding in the auction (Guha Thakurta 2016). The draft CAG report questioned the transparency of the auction process as IBSPL failed to inform the Telecom Regulatory Authority of India (TRAI) and the DoT of the ongoing talks it was having with RIL for RIL to acquire IBSPL.

The lack of disclosure by IBSPL of an ongoing relationship with RIL during the course of the BWA/4G auction process which ended that day after 117 rounds of bidding, impaired the competitive environment as other participants in the auction were unaware of the complete financial status of the bidder, IBSPL.

At the end of the auction process, IBSPL had won one block in each of the 22 telecom circles in the country with a total bid amount of ₹12,847.44 crore. On 17 June 2010, less than a week after the auction ended, IBSPL's board of directors authorised the allotment of 4.75 billion equity shares of 10 each to RIL allowing it to own 95% of the company. On 22 January 2013, IBSPL was renamed Reliance Jio Infocomm Limited. Another contentious issue raised by several observers is that the Notice Inviting Applications (NIA) for the BWA/4G auctions had clearly stated that the winning bid did "not confer the right to provide any telecom services" on the winner and specifically stated that the BWA spectrum was not to be used for carrying voice traffic.

A committee of the DoT was set up in 2012 to look into issues related to the creation of a unified licence (UL) regime which also examined the fact that the BWA/4G spectrum was not "liberalised" spectrum—that is, the specific purpose for which the spectrum could and could not be used is not mentioned. The committee held that the bidders during the auction process could not take an informed decision as their bidding patterns would have been different if they had known that the spectrum could have been used for both data and voice services. In 2013, an expanded version of the same DoT committee decided that internet service providers (ISP) could convert their licences under the new UL regime, so that they could use their spectrum to provide both voice and data services. This meant that the precondition fixed on the BWA/4G spectrum resource at the time of the auction, namely, to provide only data and internet services as the NIA stated, was overturned in 2013 after IBSPL had won the auction in 2010.

Not surprisingly, Reliance was the first beneficiary of this scheme as it converted its ISP licence to provide voice and data services under the UL. RJio was granted the UL to provide voice and data services in October 2013 and had paid an entry and migration fee only. The "draft" CAG report noted that the total loss to the exchequer was estimated at ₹22,842 crore as Reliance had acquired the BWA/4G spectrum at a price far lower than what its competitors had paid for during the 3G auctions conducted in 2010.

According to Mahesh Uppal, director, Com First, a consultancy firm specialising in telecom regulatory issues, the analysis in the draft CAG report can be contested. An important reason why BWA and 3G spectrum are not strictly comparable is on account of the fact that a robust infrastructure to support BWA/4G services did not exist at the time the auctions took place. BWA spectrum was meant for internet services whereas 3G spectrum was available for both voice and data and had a good ecosystem in place in terms of infrastructure and availability of affordable devices which BWA services did not have. There were, thus, different valuations for the respective spectrum bands.

The final report of the CAG submitted in Parliament on 8 May 2015 did not mention the calculations made in the draft report but merely stated that the DoT failed to plug loopholes in the rules. In addition, as per the liberal roll-out conditions stated in the NIA, 4G services were to be operationalised within five years of the effective date of the grant of the spectrum. The deadline of five years for the roll-out of services on the BWA/4G platform ended on 31 August 2015. The final CAG report stated that the failure to roll out services had led to a "lack of efficient use of spectrum and hoarding of spectrum in view of absence of roll out of BWA services" (Comptroller and Auditor General of India 2015). Uppal added that since the winners of 3G and 4G spectrum had to make upfront payments, the delay in rolling out services also hurt the spectrum-holders given that the tenure of their holdings has been fixed for 20 years.

According to Uppal and others, a more substantive issue pertains to the spectrum usage charge (SUC). Since the BWA/4G spectrum was originally only meant for data services, the SUC for the BWA spectrum was fixed at 1%. Despite the 2013 change by the DoT giving the spectrum winner (RJio/IBSPL) the opportunity to use the spectrum for voice services as well, the SUC was not revised thereby giving RJio a significant advantage over its competitors since telecom operators who were offering voice services through various other technologies were having to pay between 5% and 8% of their revenues as SUC (Sridhar 2016a).

Lawyer Prashant Bhushan has accused both the Congress and the Bharatiya Janata Party (BJP) of being culpable in rigging the auction process as the Reliance bid took place through a *benami* bidder. He added that since the motive for the spectrum block was initially meant for data which was later revised to include voice traffic as well, the fact that the Supreme Court overlooked these facts in its 8 April 2016 judgment was unfortunate. He remarked:

> It is not a question of regulatory capture; it is more a case of the government selling out to Reliance. It allowed Reliance to have an advantage by enabling it to allow spectrum, which was only meant for data traffic, to carry voice. The terms of the auction were tweaked by the government, not the regulator, the Telecom Regulatory Authority of India [TRAI], in this case. (Sridhar 2016b)

'Free' Voice Calls an Illusion?

As mentioned, RJio offers its 4G services on a pan-India basis through a new technological platform called LTE or long-term evolution. As mobile phones cannot run 2G and 4G services at the same time, that is, a voice and data call cannot take place simultaneously, RJio's network uses VoLTE to ensure that the voice call continues simultaneously with data transfers (Sridhar 2016b). RJio treats voice as data—VoIP (Voice Over Internet Protocol)—and sends the voice communications through the networks as packets. For incumbent operators, on the other hand, only a small part of their voice traffic is transmitted as data.

When an incumbent firm offers its 4G service, it transmits voice calls via 2G or 3G technological platforms when a consumer makes a VoIP call; RJio can only transmit such information via 4G. Airtel, Idea and Vodafone, as users of earlier spectrum technologies, are able to ensure that consumers who make IP-based communications are charged less, as they consume data using 2G and 3G services. On the other hand, RJio being a wholly IP-based VoLTE service cannot afford to give its consumers the option or the ability to use 2G/3G technology for making internet-based communications.

In order to avail RJio's "free" voice services there are many caveats that consumers may not be aware of. First, to truly get the best service, that is, RJio's calling service that aims to provide HD (high-definition) calls, both the caller and receiver need to have VoLTE-enabled handsets and both need to be connected to a 4G network. Second, when a RJio customer calls using a VoLTE handset and the receiver is on another network, the call will not be HD as RJio has to convert the call from a packet-switched to a circuit-switched network. Third, if a particular customer does not have a VoLTE phone then she or he would have to use the Jio4Gvoice application (voice, text, photos and video conference), earlier called Jio Join, to ensure that the call is free and ensure that the data used to make such calls is not debited from a customer's account (Banerjee 2016).

Most mobile handsets in the country at present are not 4G/VoLTE enabled although the majority of phones released in the market in 2016 do have this capability. If a consumer decides not to buy a VoLTE handset, she must use the Jio4Gvoice app to make calls. Those with 2G/3G handsets can still use RJio's network but must connect to a personal and portable WiFi device called JioNet. However, users are not debited for the data used for calls made via the Jio4Gvoice app if they choose to use another over the top (OTT) service like WhatsApp, Facebook or Skype to make the same VoIP call—in which case, the data consumed would be charged for. RJio is evidently discriminating in favour of voice data only and not against all other types of information (data) sent via their network.

We believe that unsuspecting consumers may not be fully aware of the technological intricacies behind RJio's service, as the "free" voice service essentially means that the voice traffic is carried through data packets (VoIP calls) whereas traditionally, voice traffic (non-VoIP) takes place through CS networks.

The intricacies of RJio's service and the manner in which its offerings have been promoted and propagated might not legally constitute predatory pricing. However, the fact that its customers will have to fulfil specific conditions to avail the full range of the "free" and "high quality services," can certainly be termed as predatory behaviour, according to us. Uppal disagreed with this interpretation of what constitutes predatory behaviour. He added that one should make a distinction between issues of public policy and sharp business practices indulged in by "cut-throat competitors" in the marketplace.

While Prime Minister Modi's Digital India dream is to connect 1.2 billion Indians with mobile broadband connectivity, RJio's "free" voice call service comes with real costs. The true price that the average consumer would have to pay goes beyond the data tariffs quoted by RJio and requires the *aam aadmi* to not only upgrade his or her existing handset to one which is 4G/VoLTE enabled but also use a specific application. This clearly makes the claims of reaching out to a billion-plus people not just difficult and daunting, but highly exaggerated and arguably even spurious. RJio's behaviour can, hence, be called predatory because it is boasting about providing free calls to its consumers without explaining the technological intricacies and not highlighting the fact that by merely shifting allegiance from an incumbent operator to the new entrant a customer will not naturally and automatically get the free service. There is also a likelihood that by the time a customer gets a 4G/VoLTE-enabled handset and is able to make HD calls, RJio would have revised its tariff rates.

IUCs and PoI Issues

The extant interconnect usage charges (IUC) regime in India's telecom sector is one of the most important factors that ensure fair competition, consumer welfare, growth of users and the equitable distribution of revenues and costs among various service providers and their networks. In order to connect a call, operator A must pay an IUC to operator B, when A's customer wishes to call B's customer. From February 2015 till now, the IUC has been fixed at 14 paise per call terminated and total IUC charges comprise around ₹20,000 crore of revenues by all telecoms operators put together (Rathee 2016).

In August 2016, TRAI published two separate documents, a consultation "note" on IP-based interconnection and a consultation "paper" on IUC which considers a change in the payments regime and potentially, a reduction or a complete doing away with the IUC on both traditional and IP-based networks. The COAI termed this development as indicative of a "bias" in favour of RJio. Since RJio consumers do not "pay" for voice calls, it is likely that its consumers would make more outgoing calls than receive incoming calls. This, in turn, would result in large cash outflows for RJio. A Bank of America–Merrill Lynch estimate is that in its first year operations and assuming a subscriber base of 30 million, RJio would incur an IUC bill worth ₹2,400 crore (Parbat 2016). If the IUC is brought down to zero, it could potentially shrink the annual revenues of the top three operators (Airtel, Idea and Vodafone) by about ₹5,000 crore and provide a distinct cost and competitive advantage to RJio (Rathe 2016). Since RJio customers will be calling relatively more people on other networks, it will have to convert the VoIP/PS signals for a CS network, thereby incurring interconnection charges.

The incumbents have argued that RJio's free voice calls have led to a "tsunami" of voice traffic, congestion on their networks and an increase in the cost of managing interconnections. An Idea Cellular executive was quoted in the *Economic Times* as saying that the traffic between Idea and Jio was 14.5 times higher than normal resulting in an increase in the cost of providing the interconnections over its network (Khan 2016).

J S Deepak, secretary, DoT, in an interview with the *Economic Times*, stated that the interconnection issue was hardly new. Fifteen years earlier when operators such as Airtel and Idea entered the sector, they had accused BSNL, then the only incumbent operator, of not giving them enough POIs (points of interconnection). "Today, these incumbents are on the other side of the table," he added (Mankotia 2016).

RJio has accused Bharti Airtel of not releasing as many POIs as had been agreed upon. In response to RJio statements, Airtel in turn accused RJio of trying to mask the technical problems in RJio's VoLTE network by raking up the POI issue. In addition, Airtel stated that it had released a large number of POIs, which are "sufficient to serve over 15 million customers, which is much more than ... (RJio's) present subscriber base and ... (its) demand for 10 million projected customers."

The interconnection issue is leading to around 10 crore call failures per day between RJio customers and customers of other operators, claimed RJio in a public statement. It hit out at the incumbent operators for not providing enough POIs, accusing them of not "demonstrating any real intent to resolve the issue" and of violating licence conditions and TRAI regulations on quality of service. "The deliberate move to not provide sufficient interconnection points is aimed at hindering RJio's entry into the sector and depriving customers from enjoying the superior HD services offered by RJio," the statement by RJio noted (PTI 2016b).

TRAI chairman R S Sharma has said that one of the key mandates of the regulator is to ensure that there is high quality of services and that consumers are "protected" (Doval 2016). However, since the arrangements for POIs are a "bilateral issue" between operators, TRAI's abilities to investigate, intervene and resolve disputes are limited, he stated, adding that if regulations are violated "then we will have to take action against the party concerned" (PTI 2016c). Sharma added that operators are being asked why they are not providing quality services to consumers (Rathee 2016).

Sunil Bharti Mittal, chairman of Bharti Airtel, gave a resounding response to RJio's accusation and also commented on the mud-slinging discourse among telecom operators that has ensued since RJio's launch. "Just because you have been successful in one or the other industry… doesn't give you the right to be on top. You have to earn that…," Mittal said in an interview to the *Economic Times*. He added that he had told RJio's chairman Ambani that POIs could not be an issue obstructing the launch of Jio and was at best a "temporary issue" that would be resolved in weeks. Moreover, talking about IUC, Mittal said: "When you go below that cost, that is a very straightforward situation of predatory pricing" (Mankotia and Guha 2016).

An enlightening and sober view was put forward by Mittal when he said:

> … rural, suburban people are still on to feature phones where they want to make calls and do a little bit of 2G. So the curve may be accelerating toward 4G but it is not going to happen that we wake up tomorrow morning and everything is 4G … In the last 16 quarters there is less voice growth and in some cases voice de-growth … Jio has accelerated that path now. (Mankotia and Guha 2016)

The war of words between RJio and the COAI escalated to unprecedented levels. On 26 September, RJio dubbed its competitors, Airtel, Idea and Vodafone, as incumbent dominant operators (IDOs). It said the COAI was heavily biased in favour of the top three operators and called for a "comprehensive overhaul" of the association's rules, regulations and procedures in a letter sent to the director-general of the COAI Rajan Mathews and the chairman of the lobby group, Gopal Vittal, who also happens to be the CEO of Bharti Airtel. RJio's letter hoped that a committee comprising three retired Supreme Court judges would be set up to ensure that COAI's governance mechanisms become "more in line with democratic principles" (ET Bureau 2016).

The COAI hit back immediately late on a Sunday evening. In a letter made public, COAI's Mathews described RJio's conduct "unbecoming of a member," claimed it had misinterpreted specific rules and countered RJio's IDO acronym calling the new entrant a BDO or a "backdoor operator." The letter by the COAI further went on to allege that despite its "skullduggery" and "repeated and grave provocations," RJio had been "welcomed" into the association. Mathews then recounted the history of how RJio acquired its licence through a "front entity" and how it was prospectively allowed to offer "full" voice and data services, despite objections from the CAG and others.

After various stakeholders submit their views on the interconnection issue in response to TRAI's consultation papers on IUC, the authority will have to ensure that the future policy regime is balanced and does not consciously or unconsciously benefit any particular operator, be it RJio or its rivals. This would check predatory behaviour and the possibility of predatory pricing in the future.

Conclusions

Using revenue market share and subscription base figures as a method to understand market dominance, RJio cannot at present be classified as a dominant operator. As per the provisions of the Competition Act, RJio cannot be said to be indulging in predatory pricing. However, RJio's behaviour and the manner of its entry into country's telecommunications industry may certainly be considered as predatory for a few specific reasons.

One, the manner in which it acquired the BWA/4G spectrum in 2010 and the fact that it doubly benefited when the government changed its rules retrospectively to allow operators to provide both voice calls and data services on the same spectrum.

Two, RJio has also benefited from an unfair cost advantage as the spectrum usage charges (SUC) have remained unchanged and are not in line with the SUC paid by incumbent operators who offer similar services on their respective 2G, 3G and 4G technology platforms.

Three, the propagation of "free" voice calling may mislead consumers who might end up paying more for RJio's services than they would pay for similar services provided by other operators given the fact that RJio is entirely data centric and only works on 4G LTE and 4G-VoLTE mobile handsets.

Four, the timing and sequence of events relating to probable regulatory changes in the IUC regime indicates that RJio is at the right place at the right time—the regulator has been publicly considering changes in specific regulations nearly a month before the commercial launch of RJio and the Reliance Group has in the past displayed an uncanny ability to take advantage of regulatory changes resulting in the playing field becoming far from level.

Mukesh Ambani might believe that RJio has consciously or unconsciously jump-started the inevitable internet revolution in telecommunications in India. A recent survey has indicated that RJio SIMs are being used as a secondary SIM by over half those surveyed (*Mint* 2016b).

However, the larger internet revolution in telecom is a long way away. What matters now is the manner in which regulatory changes and spectrum auctions take place, as well as how operators interact with one another operationally and politically so that consumer welfare and quality of services are not undermined. As Ambani's biggest competitor Sunil Mittal has pointed out, predatory pricing will ensue if the IUC regime is made to change fundamentally to give RJio distinct cost and revenue advantages over its rivals. RJio has deployed effective marketing and propaganda techniques to acquire unsuspecting consumers. It has been able to take advantage of ambiguous and lax regulatory processes and systems of oversight. It has arguably not provided technical and operational information with clarity to its customers. RJio's entry has certainly taken place through predatory behaviour. Whether its pricing is predatory, which could hurt incumbents and consumers in the future, depends on the steps that are taken by the regulatory authority.

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