II. The Motivations and Actions of Big Business in Each Phase of Telecom Development[7]

For two decades, India's telecom industry was marked by a continuous stream of entries and exits by Indian and international big capital. Almost every big Indian business house, and some of the largest firms internationally, entered the telecom industry in India in the last three decades; most exited as well.

The Government opened up the sector for private capital in the wake of the 'new economic policy', which followed India's balance of payments crisis in 1991 and its 'structural adjustment' loan from the International Monetary Fund (IMF) that year. Cellular services started in all the four metropolitan cities in August 1995, with two operators in each city. In the 25-odd years since then, almost 30 large clusters of corporate actors entered (the actual number of legal entities would be significantly higher, as industrial groups formed numerous companies with complex ties and corporate structures in order to corner telecom licenses).[8] Most remarkably, almost all of these earlier entrants have disappeared since, with Bharti Airtel[9] being possibly the *only* exception. (In the 1990s Airtel was just a fledgling manufacturer of push button phones, hardly a part of big capital in India.)

7 Primarily based on this part, a shorter piece as an argument on monopoly capital under neoliberalism is being carried by *Monthly Review* in one of their forthcoming issues.

8 The data are drawn from media reports too numerous to cite here, and from databases created by the author.

9 Airtel is equally owned by the Bharti group and Singapore Telecommunications – SingTel.

In 1995, license auctions were held for the remaining 19 circles,[10] and by 1997 many of India's largest business houses, such as the Tatas, Aditya Birla, Modi, Goenka, Thapar, Escorts, Essar, and Max had entered the telecom industry. The wealthiest Indian-origin business groups abroad, such as the Hindujas, followed suit, and groups such as the (then undivided) Reliance and Videocon entered during the closing years of the 1990s.

All the Indian groups had foreign partners: the Government clearly recognised that none of the Indian private entities had any experience in running a telecom service, and hence a foreign partner (with maximum ownership of 49 per cent) was mandatory. In this fashion, a large number of global telecom corporations got entry into the domestic market. Some notable names included AT&T, NTT (Japan), France Telecom, Telenor, Swisscom, Bell, Hutchison Whampoa, Telstra, SingTel, and Telecom Malaysia. All these came in through waves of collaboration in the late 1990s and then in the latter half of the first decade of the 21st century. Among the international entrants, almost all have exited. Vodafone is the only exception, continuing its operations at present, though no longer with its original partner, the Indian house of RPG.

The conventional account of this process is that, while many corporate houses tried their hands at the telecom sector, most burnt their fingers; only a few could survive, either because of the 'peculiar' nature of the industry, or 'bad' Government policies, or both.[11] However, even as a spate of big business houses exited after making an early entry, new firms continuously made attempts to enter too. How do we explain this?

In this section we highlight what appear to be some key motives for the persistent attempts by big business to enter the sector; their conduct after entry; and the fallout of these motives and actions. The argument here is based on certain patterns that can be seen across business groups over these years. For the sake of brevity, we will refrain from placing all the evidence collected, but certain notable examples will be discussed as illustrations for the argument being made here.

10 In the early years of liberalisation, India was divided into 23 circles (4 metros and 19 others) for the purpose of telecom services and licensing, broadly, but not exactly, on the lines of state geographies, keeping also in mind the population to be served. Later Tamil Nadu and Chennai were merged into one circle, reducing the total to 22 circles.

11 This will be discussed in Part III.

1. Not Seeking to be Strategic Investors but Middlemen and Speculators

The telecom sector in the 1990s was a capital-intensive industry, marked by rapid technological development. India largely lacked the requisite ecosystem of equipment manufacturing base and know-how. Returns from telecom operations would be possible only if an investor were willing to make long-term investments and build the requisite competitive capabilities.

But in reality, almost none of the private domestic firms in this initial phase seemed interested to become strategic investors and build the capabilities required for a 'sunrise' industry. Their role appears to have been that of merely cornering licenses and acting as mediators between foreign firms and the Indian State as well as other domestic actors. The predominant motive of the Indian investors in the telecom sector seemed to be to get quick windfall returns, treating their telecom ventures as merely one more investment in their portfolios, which spanned many and varied industries.

Predictably, most of them exited as soon as they found appropriate bidders, both domestic and international, to whom they could sell their stakes. This process was facilitated by the progressive liberalisation of the foreign direct investment (FDI) regime by the Government during this period.[12] With the benefit of hindsight, it appears that the entire game plan of the domestic firms was to corner licenses and the critical limited resource of spectrum (discussed in the following subsection), and wait for the right moment and price to sell the license/spectrum to the highest bidder. There did not seem to be any genuine attempt to build institutions that could be competitive and sustainable globally, or even nationally.

This pattern began immediately after the entry of private firms in the industry. In 1996 itself, reports emerged that it was 'clear' that most of the licensees operating in the 23 circles did not have 'viable' business models.[13] It was reported that at least eight of them were accumulating huge

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12 In the 1990s, FDI was limited to 49 per cent in telecom sector; in 2005 it was raised to 74 per cent; and 100 per cent FDI became permissible in 2014. But even before the limits were raised, the Government turned a blind eye to the flouting of these requirements - more on this in Part III.

13 '25 years since the first mobile call', *op. cit.*

losses, with revenues not even matching their annual license fees outgo. Predictably, there were complaints that the Government was charging 'unfair' and massive license fees.[14] Notably, these complainants were some of the largest Indian business houses and their global telecom collaborators.

This has been a consistent pattern across the entire period – companies not paying up contracted license fees, and then bitterly complaining that the Government was unfair in demanding dues. (Of course, if a hapless woman labourer accepts work for less than minimum wages on a construction site in the nation's capital, we are told by the establishment that she accepted it with 'open eyes' – it is a 'contract'.) By 1998, the telecom industry was reporting a Rs 400 crore negative cash flow (profits before depreciation, but after interest and tax) a month. Telecom firms demanded concessions on the ground of 'national interest': "we will have the sector passing into the hands of *foreigners*. That has not happened even in advanced economies. Telecom is as critical to a country as its defence sector. It has to be in *our* hands" (emphasis added).[15]

Ironically, though, almost immediately after they had begun operations, most Indian telecom operators had either already given up control to foreign interests, or were actively looking for foreign buyers. The Ruias of the Essar group, Analjit Singh of Max India and BK Modi of Modicorp had reportedly already given up majority equity control in their cellular ventures. Let us take the case of Modicom Networks, the cellular licensee in Punjab and Karnataka at the time. Promoter BK Modi floated a holding company, Modi Welvest, to finance his 51 per cent stake in a telecom firm. He then sold 49 per cent of his stake in Welvest to the American International Group (AIG)[16] (at a reported premium of 40 per cent) – which meant that the effective stake of the Modis in the licensee company came down to 26.01 per cent (51 per cent of 51 per cent).[17] Around the same time Shyam Telecom made a similar attempt to sell its stake to Telesystem Mauritius

14 At this point spectrum was bundled along with the license.

15 "Takeovers In Disguise", *Business Standard*, April 13, 1998. https://www.business-standard.com/article/specials/takeovers-in-disguise-198041301075_1.html accessed on 18/09/2022.

16 A US-based firm, one of the largest financial and insurance companies in the world.

17 "DoT May Allow Holding Firms In Cellular Services", *Business Standard*, September 20, 1996. https://www.business-standard.com/article/specials/dot-may-allow-holding-firms-in-cellular-services-196092001273_1.html accessed on 18/09/2022.

for Rajasthan operations.[18]

Even starker is the case of Hutchison Whampoa (Hong Kong's largest investment group). It acquired control of Mumbai cellular operator HutchMax Telecom in 1998 by effectively raising its stake to 68.6 per cent. Mumbai, at the time, was the most developed telecom market in the country, and notably, the permissible limit for FDI was only 49 per cent. The investment route of the Hong Kong telecom operator was to acquire 49 per cent directly in HutchMax, and a further 49 per cent in Telecom Investment India, which held 40 per cent in HutchMax. Kotak Mahindra held a 51 per cent stake in Telecom Investment India. The remaining 11 per cent in HutchMax was owned by Max India and its promoter Analjit Singh.

Similarly, Swisscom, a telecom arm of the Swiss government, also gained a majority stake and management control in Sterling Cellular, which held cellular licences in Delhi, Uttar Pradesh (East), Haryana and Rajasthan. In a structure similar to the HutchMax deal, Swisscom raised its stake from 33 to 49 per cent directly in Sterling Cellular, and also picked up 49 per cent in another Indian company that held 3 per cent in Sterling. As the chief of a northern cellular company grudgingly admitted: "All the sops that the industry is asking for is to improve the selling price and fatten the operating profits of the (international) buyer." The same 1998 story also reports that other operators lined up for similar manoeuvres in the name of 'swadeshi': JT Mobiles, Koshika Telecom, BPL, Skycell, Fascel, and the list goes on![19]

One of the fallouts of such manoeuvres was that, almost immediately after the Indian telecom sector was opened up for the private players, the invisible hands of international finance were everywhere. For instance, in 1997 itself it was reported that Hong Kong venture capital company Distacom Communications was aspiring to become 'one of the largest players' in the Indian cellular services sector. According to the Chairman of Distacom Richard Siemens, the value of Distacom's telecom holdings worldwide[20] were around $1 billion at the time, which, he hoped, would appreciate to $5 billion in five years. Distacom held 20 per cent in Hutchison Max

18 *Ibid*.

19 "Takeovers In Disguise", *op. cit.*

20 Four in India and one each in Japan and Hong Kong, India being the largest.

Telecommunications.[21] It held 25 per cent of Calcutta cellular operator Modi Telstra, a joint venture between Australia's Telstra and India's Usha Martin. And it held 39 per cent in Modicom Networks, a joint venture between India's Modicorp and Motorola, which had licences for Punjab and Karnataka. Distacom in turn was 30 per cent owned by the government of Singapore, 20 per cent by investment house Lazard Frères, 10 per cent by Peregrine Securities and the rest by individuals, including Italy's Gianni Agnelli, principal shareholder of Fiat.22 Similarly, around the same time, AIG had a number of telecom investments in India - Tata Teleservices, Tata Communications, and BPL Mobile, besides Modicom Networks as discussed earlier.[23]

Thus in the early years itself there were complex manipulative tactics, such as selling off licenses, changing brand names, and mergers and acquisitions, used by some of the largest firms – Hutch, BPL, Sterling, etc. And if none of these dubious methods worked, or if good prices became available, a quick exit from the industry could be made. Such was the route taken by Koshika, RPG, Usha Martin, Spice-ModiTelstra, Skycell, Escotel, JT Mobile, Fascel – the examples are too many to be cited here. And huge money was made through such operations. As a recent *Business Standard* story says, "the smart boys to hit the jackpot" included the Ruias of Essar, Ajay Piramal of Piramal Enterprises, Analjit Singh of Max group, Rajeev Chandrasekhar[24] of BPL Mobile, the Hindujas, Nandas of Escorts as well as B K Modi and Shyam groups, and even professionals like former CEO of Vodafone India, Asim Ghosh.[25]

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21 Most likely this stake was sold within a year, as by 1998, HutchMax had a different holding structure as reported earlier in this subsection.

22 Sanjit Singh, "Hks Distacom Bets Big On The Cellular Front," *Business Standard*, June 24, 1997. https://www.business-standard.com/article/specials/hks-distacom-bets-big-on-the-cellular-front-197062401104_1.html accessed on 19/09/2022.

23 "Winners And Losers", *Business Standard*, December 27, 1997. https://www.business-standard.com/article/specials/winners-and-losers-197122701104_1.html accessed on 19/09/2022.

24 Now a minister in the Modi cabinet.

25 Surajeet Das Gupta, "When telecom stood for pass to windfall gains, and not financial Stress," *Business Standard*, November 27, 2019. https://www.business-standard.com/article/economy-policy/when-telecom-stood-for-pass-to-windfall-gains-and-not-financial-stress-119112601527_1.html accessed on 19/09/2022.

2. Cornering Spectrum and Licenses Along the Lines of Real Estate

Perhaps a key reason for intense corporate traffic in the telecom industry is the central position of a natural resource like spectrum. Telecom signals are electromagnetic waves that can travel only through the channels of spectrum, the bandwidth of radio frequencies assigned to a service provider. Spectrum is the path on which signals travel, very much like an automobile travels on a highway. Hence, without access to spectrum, there can be no mobile telecom service. But spectrum is a natural resource, like land, which cannot be produced, and hence is available in a limited quantity, and that too only from the State. It is, therefore, a coveted resource for the telecom industry. Just as a lot of money can be made merely by trading in land, if it can be cornered at a 'good' price and there are buyers looking for it, so too with spectrum.

This has been the case in India so far, as the demand for spectrum has been exponentially increasing due to the ever-widening consumer base, new services being added and new generations of technology, from 2G to 5G, appearing in quick succession. No wonder so much of the media coverage of the industry has been consumed by debates and discussions around the 'selling' and pricing of spectrum. The spectrum charges have to be paid to the State, much like taxes,[26] and hence much of the debate has been around the spectrum pricing, or more specifically the mechanism for 'price discovery' in a 'free market'. In the free market envisioned by Adam Smith, there are enough buyers and sellers to ensure no individual can influence the market, and information is supposedly freely available. Hence prices are 'discovered' in the market, as all participants are only price takers (and not price makers). But in the case of a limited resource such as spectrum, with only one seller and a handful of buyers, the whole enterprise of finding the right price has been fraught with serious consequences for various interests. Hence it has given rise to a whole industry of lobbyists and experts, first to facilitate cornering of spectrum at the lowest

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26 Much noise is generated when a price, fee or tax is charged by the State, especially to big business. But when the same good/service is sold by the private sector, price rises affecting consumers are assumed to be inevitable, as if governed by natural forces. Witness the debate around spectrum prices versus, say, the absence of discussion of the steep jumps in electricity prices over the years as the power sector was progressively privatised.

possible 'effective' price,[27] and then speculating in the cornered spectrum at the right time, with the right suitors.

From the very beginning, spectrum allocation has been in the news for these very reasons. To begin with, spectrum was bundled with the license for telecom services in a particular circle. In the first round of telecom licensing for the 19 circles across the country, auctions were held in early 1995. Service providers had to pay annual license fees plus charges for spectrum usage. But immediately the process got into a controversy as Koshika Telecom, a company with an annual turnover of mere Rs 228 crores, won bids for several licenses worth Rs 57,000 crores (250 times its turnover!).[28] After vehement protests by the competing bidders, the rules were hastily redrawn and another auction was held.

This tactic was even extended in the auctions for the licenses in basic telephony, where no spectrum was involved, as these licenses were supposed to be for fixed line connections. In the same year, (1995), Himachal Futuristic Company Limited (HFCL),[29] a small telecom equipment manufacturer in partnership with Bezeq, an Israeli government-controlled company, won nine licenses for fixed line services. The bids, totalling a whopping Rs 85,000 crores, were won by HFCL, while its turnover was apparently less than Rs 100 crores! Some of the HFCL bids were around five times those of the next highest bids quoted by groups such as the Tatas and Reliance![30] This time around, the bids were not cancelled, but new rules were added *post hoc,* and no company was allowed to retain

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27 Even when operators have bid relatively high sums for spectrum/license, they have ended up either not paying at all or progressively seeking and getting concessions from the Government, as we will discuss in Part III.

28 S Gopal, "The History of Telecom Spectrum in India: The 900MHz Auctions," *Gadgets360*, July 31, 2016. https://gadgets360.com/telecom/features/the-history-of-telecom-spectrum-in-india-the-900mhz-auctions-827495 accessed on 20/09/2022.

29 HFCL has been in the news in later years too - in 2010 as a front, through a related company, for Jio to acquire countrywide spectrum (dealt with below), and even more recently in 2022 as a front for Reliance ownership of the media company NDTV.

30 Aditi Roy Ghatak and Paranjoy Guha Thakurta, "2G spectrum: How the big telcos got away with murder," *Firstpost*, June 01, 2012. https://www.firstpost.com/business/2g-spectrum-how-the-big-telcos-got-away-with-murder-328459.html accessed on 20/09/2022.

more than three licenses for the Type A Circles,[31] thus effectively awarding HFCL three licenses in spite of the glaring concerns about its credibility.

Two features need to be noted in these early sets of bidding that set the pattern for the years to come. Firstly, there seemed to be a gold rush in the telecom sector, and it was assumed that there were plenty of quick bucks to be made. And secondly, the gains were *not* to be made by building competitive institutions and capabilities. Rather, windfall gains were to be made by cornering spectrum through manipulations, and then speculating in license and spectrum, selling to the highest bidder.

The speculative (and quick money-making) nature of this whole enterprise is illustrated by the so-called '2G scam'. A lot has been written on the issue and hence we will be brief and highlight only the key issues that are relevant to our argument.[32] Spectrum allocation in 2008 captured the attention of the whole nation after the Comptroller and Auditor General (CAG)'s 2010 report provided three estimates of the loss to the exchequer due to the purported scam, the highest of which was Rs 1.76 lakh crore. This is a humongous amount even 15 years later, and even at the scales involved in the telecom sector. The case involved giving away 122 licenses in 2008 at 2001 prices, on a first come first serve (FCFS) basis. This was clearly unjustifiable, as in 2001 there were barely 4 million mobile subscribers, whereas by the time of the 2G spectrum auction/license allocation, the number of subscribers had multiplied by 75 times to 300 million. So much for 'price discovery'! The CAG report brought out in great detail that the allocation did not even follow FCFS – several capricious deadlines were set, and other conditions were changed arbitrarily for seemingly no other reason but to favour certain parties. Tellingly, out of the 122 new licenses awarded, 85 were to parties that did not meet even the Department of Telecom (DoT)'s *own* eligibility criteria.

Significantly, some of the corporate actors with the richest hauls of licenses in the scam were basically real estate companies. If the whole game

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31 Circles across the country were divided into A, B and C categories, based on their commercial potential. This time the bids were not cancelled, allegedly because HFCL was close to the then communications minister Sukh Ram.

32 For more details and to reflect on how brazen the State-monopoly capital combine can be even in a high profile case like telecom licensing, see: Paranjoy Guha Thakurta & Akshat Kaushal, "Underbelly of the Great Indian Telecom Revolution," *Economic & Political Weekly*, December 4, 2010, vol. xlv, no. 49, pp. 49-55.

of telecom licenses and spectrum was merely a form of property speculation, as we have argued above, it is unsurprising that real estate firms extended their skills to a new domain where even more money could be made. Notably, this was taking place over a decade after the first set of telecom companies complained of the lack of a market in India, exorbitantly priced spectrum and excessive Government levies, with the aim of obtaining a Government bailout. These pleas in turn led to the National Telecom Policy 1999 under the then NDA regime.[33]

For instance, Unitech, one of the largest real estate companies in the country at that time, bought 22 licenses for a sum of Rs 1,651 crore in 2008. And within months it offloaded 60 per cent of its purported telecom arm's stake to Telenor (of Norway) for Rs 6,200 crore, an appreciation of more than six times! These transactions can only be termed as speculation in telecom license and spectrum. Similarly, Swan Telecom, promoted by another real estate company, DB Realty, obtained its license for Rs 1,537 crore; it immediately sold 45 per cent of its shares to Etisalat (of the UAE) for around Rs 4,200 crore. Likewise, Shyam Telecom sold shares to the Russian firm Sistema at a massive profit. Further, companies such as Swan, Loop and Datacom, each of which cornered a large number of licenses, were fronting for established corporate groups such as BPL, Reliance and Videocon. In some cases they were doing so illegally, as the rules stated that only one company from a group could bid for a circle. As a result, in some circles spectrum was allocated to more than 12 companies, clearly an unsustainable proposition, given both the limited market in terms of purchasing power, and the capital intensity and know-how required to establish a reasonable telecom service.[34]

What followed were irrational price wars and the exits of several operators. Some of this will be discussed in the next subsection. Due to the furore created about the scam, the Supreme Court in 2012 declared the 2008 allocation to be null and void, cancelled all 122 licenses, and ruled for a fresh license and spectrum allocation. But by this time many of the Indian bidders had made huge profits. Meanwhile many of the new investors lost massive investments, and could not survive all the price undercutting and

33 More on this in Part III.

34 The deck for such irrational doling of licenses was cleared in 2005 by removing the maximum number of players in a circle, which till then was four.

dubious dealings.

The story of the acquisition of spectrum and licenses in 2010 by what has now become India's largest telecom company, Reliance Jio, is in some ways very similar, and in significant ways starkly different. In brief, two issues are relevant for our purpose.[35] Firstly, a small broadband service provider company, IBSPL, fronted for Reliance and acquired countrywide spectrum. Secondly, the license to provide internet services was later converted into a license for full-fledged provision of mobile services. Perhaps it is the latter manoeuvre (which was not even allowed in 2010), or maybe the combination of the two, that caught competitors unawares, and they failed to counter this decisive move of Reliance.

At the time it entered the auction, IBSPL was a tiny company providing internet services, with paid-up capital of a mere Rs 2.51 crore, a net worth of Rs 2.49 crore, and just a single leased line client, from which it earned Rs 14.78 lakh. Even its holding company, IDPL, had similarly ordinary numbers. Nevertheless, IBSPL managed to meet the financial requirements for bidding – an earnest money deposit in the form of a bank guarantee worth Rs 252.5 crore, a hundred times its net worth. More importantly, IBSPL won bids and acquired 20 MHz 4G spectrum for all 22 telecom circles for Rs 12,848 crore – 5,000 times its net worth! Meanwhile, on the same day, June 11, as the bids ended, at an extraordinary general meeting of its shareholders called at short notice, IBSPL raised its authorised share capital by 2,000 times, from Rs 3 crore to Rs 6,000 crore. It did this by issuing 75 per cent of its shares to Reliance, making itself a subsidiary of the latter. Within about a week, IBSPL ceased to be a private company and converted itself into a public limited company. In January 2013, the company was renamed *Reliance Jio Infocomm Limited*.

By 2012, the Government had come out with a framework for a Unified License regime which made possible the migration of internet service providers (ISP) into full-service operators offering voice services. (With the new convergence technologies, voice calls could be made through data packets as well.) Reliance was the first one to take advantage of this policy, and it converted ISP licenses into unified licenses. These unified licenses formally authorised Reliance to provide voice services by October 2013,

35 Other important details could be found in "The Immaculate Conception of Reliance Jio," Paranjoy Guha Thakurta and Aditi Roy Ghatak, *The Wire*, March 4, 2016, https://thewire.in/tech/the-immaculate-conception-of-reliance-jio accessed on 23/09/2022.

by paying the requisite conversion fees.

Originally, the Government's idea was to auction 4G licenses for broadband Internet services, while 2G/3G were to be used for voice services. But with this new unified license and the backdoor entry of Reliance, courtesy the IBSPL manoeuvre and the availability of new convergence technologies, Reliance upended the whole game for its competitors. (More on this will follow in Part III below.) By any criterion of regulation, IBSPL's fronting for Reliance should not have been allowed by the competent authorities. Indeed, a draft report of the CAG in 2013 passed severe strictures against Reliance and the concerned government bodies. It also estimated a huge loss to exchequer, which most likely was an underestimation: had the competitors known that it was Reliance that was bidding for the spectrum, that too for mobile services, perhaps the whole game would have been played very differently. But that eventuality is only in the realm of speculation now. Predictably, the final CAG report tabled in the parliament significantly watered down the whole affair.

The handful of more notorious cases discussed above are not really exceptions. As has been asserted earlier, this has been the pattern through three decades of telecom licensing and spectrum allocation. Guha Thakurta and his associates have followed many such exercises and presented numerous detailed stories.[36] What they have found is a long list of irregularities that might have cost the exchequer many lakhs of crores of lost revenues. Among them: (1) arbitrary pricing, (2) crossover from one kind of license to another, (3) allowing parties to sell stakes, making licensing policy of little consequence, (4) forcing the public sector BSNL to provide its infrastructure to these new operators for providing services through intra-circle roaming – thus, these new licensees could start getting subscribers and providing services without rolling out their network, and then could sell off their licenses, (5) allowing sharing, pooling and trading of spectrum, like any other commodity, (6) even more egregiously, allocating companies double the spectrum they had paid for, (7) and of course evidence of strategic bidding by the actors with tacit understanding, thus gaming the whole system, as the number of players drastically went down. Moreover, the licensing regime has been progressively liberalised, making

36 For the sake of brevity, we are not citing all the sources here, but see for instance the four-part expose, "2G spectrum: How the big telcos got away with murder…" *op. cit*.

the earlier round of rules and regulations irrelevant and thus rendering the whole exercise a farce.

3. Eventual Monopolistic Hold over the Industry

The final outcome of the short-term manipulations of successive entries and exits of telecom players in India over three decades since the industry has been privatised is that there are just *three* private players[37] left, who have divided the vast market among themselves. There have been two distinct mechanisms through which the industry has reached the present monopolistic endpoint:

- Firstly, ongoing waves of consolidation among players; two of the three existing operators are clearly the outcomes of consolidation of numerous corporate entities.
- And secondly, undercutting of rival firms on the basis of unsustainably low prices. This is done mostly by new entrants in order to get a sizeable share of the market, resulting in a bloody internecine war and further consolidation, as a large number of players are not able to sustain this sort of cut-throat competition.

We will discuss both these patterns through specific examples in this subsection.

A revealing example of the pattern of consolidation in the Indian telecom industry is the 25-year journey of what today has become the third largest telecom company in India, Vodafone Idea.[38] On the surface, it represents a collaboration between one of the largest global telecom corporations, Vodafone, and one of the largest business houses in India, the Aditya Birla Group. However, the story starts much earlier.

The company started in the mid 1990s as a collaboration between one of the largest telecom companies in the US, AT&T, and the house of Birla, with a $300 million[39] offshore financing, the largest ever. It was to build the biggest cellular network in the country for the relatively prosperous

37 The public sector BSNL is left with less than 10 per cent market share and has increasingly become inconsequential in this game. More on it will follow in the next part.

38 This paragraph on Vodafone Idea is on the basis of a large number of news reports over the years; the references are available with the author.

39 At the current value of the time.

markets of Gujarat, Maharashtra and Goa.

Within a few years the house of Tatas had merged their telecom operations with this entity. Over another year it acquired the substantial operations of two more of the very successful and large operators, those of the RPG group and BPL, making it the largest telecom operator in the country. The consolidated corporate entity launched the new brand name of *Idea* in 2002 with a massive advertisement campaign. Within a couple of years, first AT&T and then the Tatas sold off their respective stakes to the Birlas.

Once Reliance Jio entered the fray in 2016, there was a further wave of consolidation. First Idea bought another large telecom company called Spice. Finally Vodafone India[40] and Idea came together in 2018 in the biggest telecom merger anywhere in the world. At the time of this merger they were number 3 and number 2 in terms of market share in India, and the combine became the largest Indian telecom company, with a subscriber base of 390 million.

But interestingly, all this consolidation does not seem to have relieved the long-standing troubles of the behemoth. In 2021 the company reported losses of more than Rs 44,000 crores, and a cumulative loss of around Rs 1.33 lakh crore over three years. Further, Vodafone Idea had a debt of Rs 1.9 lakh crore on its books, including Rs 1.68 lakh crore owed to the Government for unpaid license and spectrum dues (more on this in the next part).

Though not as dramatically as Voda-Idea, Bharti Airtel too has continued to expand through consolidation since its early entry in the telecom industry. One of the ways they have grown is to acquire several operators over the years - JT Mobile, Skycell, Spice and Hexacom during 1999-2004, WBSPL in 2012 and Augere in 2015. And finally in 2016-17, in the wake of Jio entering the market, it acquired the sizeable operations of telecom operators like Videocon, Telenor, Tata[41] and Tikona.

Telecom is a very capital-intensive industry, and technologies have been changing at a fast pace. The Indian operators have repeatedly tried to capture the widest possible market by investing in the latest technol-

40 Vodafone entered India market through buying what was Hutch Essar in 2007, one of the largest operators in the country.

41 So, part of telecom operations of the Tatas was subsumed in Vodafone Idea, and another part, owned by a different Tata group entity, was later subsumed in Airtel.

ogy, combined with sharp undercutting of prevalent prices. But, given the limited purchasing power of the masses, the latter strategy led to vicious price wars. We will explain this through two examples, both pertaining to the house of Reliance, over two different generations.

When the then undivided house of Reliance entered the telecom industry in early 2000s, it drew from its deep pockets (which it enjoyed due to its control of large petroleum resources) and invested in one of the finest networks of the time, with claims of pan-India optical fibre cable spread over 2 lakh route kilometres. In July 2003, it launched 'Monsoon Hungama',[42] selling a mobile phone for Rs 501 (at a time when prices for similar handsets were hovering around Rs 2,000), with free incoming calls to boot. Though this helped them achieve a substantial market share, it resulted in massive losses, and a write-off of Rs 4,500 crores in 2006. This price war brought down the tariffs for voice calls to just 40 paise a minute from the then prevailing rate of Rs 2 a minute. Reliance Communication (RCom) tried to repeat this strategy in 2006-07, but by this time the business house had been split between the two brothers, and the cash-rich monopoly of petroleum had gone to the elder brother, Mukesh Ambani. The result was that RCom's market capitalisation fell from a peak of Rs 1.7 lakh crore in 2010, when it had the second largest market share in the telecom industry, to a low of Rs 2,087 crore in February 2019. RCom filed for bankruptcy in 2019, with Rs 50,000 crores of estimated debt on its books; its assets were worth merely Rs 18,000 crores.

Six years after Reliance made its backdoor entry into telecom in the manner explained in subsection 2 above, the new firm Reliance Jio announced its grand entry into telecom services. It grandly claimed to be 'the largest 4G-only telecom network in the world', covering 18,000 cities and towns and over 2 lakh villages.[43] In a very unusual entry strategy, Reliance Jio kicked off 'test trials' of its 4G services from May 2016 by giving out

42 For the sake of brevity, the citations are not being provided here. However, some of the details can be found in "Now, Net-enabled phones for Rs 480 from Rcom," Rajesh S Kurup, *rediff.com*, December 31, 2007. https://www.rediff.com/money/report/phone/20071231.htm accessed on 04/10/2022.

43 More details on this grand entry of Reliance Jio can be found here: Anuj Srivas, "How Reliance Jio's Entry Tied Regulatory Knots Around India's Telecom Ecosystem," *The Wire*, January 13, 2018. https://thewire.in/tech/reliance-jio-telecom-regulation-trai-anil-ambani accessed on 05/10/2022.

SIM cards, apparently only to its employees and their friends and family. These restrictions were slowly loosened as the months passed, and by the end of August 2016, the company had anywhere between 2.5 to 3 million users without officially launching commercial operations. Then, in September 2016, the company announced its formal launch with a 'Welcome Offer' – a three-month period of free voice and data services. This was followed by a 'Happy New Year (HNY) offer' in December 2016 – an extension of free services. In February 2017, CEO Mukesh Ambani claimed that Jio had crossed the 100 million-subscriber mark – merely 170 days after its formal launch on September 5, 2016.

There were repeated complaints by competitors and their collective body, Cellular Operators Association of India (COAI), that this kind of predatory pricing would kill competition, but regulatory bodies kept passing the buck from one to another. Finally, they sought legal opinion, and in January 2017, the Attorney General Mukul Rohatgi ruled that "promotional offers are *not* subject to regulatory principles of non-discrimination, non-predation… in terms of the extant statutory rules…" But these sorts of 'freebies' continued under various schemes introduced in succession. The last in the series was called *Summer Surprise*, a roundabout way of giving customers another three months (April-June) of free services by having them pay in advance for data and voice services that they would use from July 2017 onwards.

Finally, the Telecom Regulatory Authority of India (TRAI) woke up from its purported slumber and "advised Jio to withdraw the three months of complimentary benefits…" Even J.S. Deepak, the secretary in the Department of Telecom (DoT) at that time, by all accounts close to Reliance, was forced to write against this sort of brazen 'bloodletting' in the telecom industry and its implications for Government revenues. According to him, Reliance's free data offers – and their consequent effect on the revenues of other operators – had cost the Government Rs 685 crore through the reduced collection of licence fees and spectrum usage charges.[44] He further added that this would have implications for the massive loans of the PSU banks to the telecom operators. Tellingly, within a week of this note, Deepak was transferred out of the DoT.

44 *Ibid*. The company's impact on Government dues was much higher, as *The Wire* noted.

The freebies by Jio in 2016-17, and the earlier giveaway of the spectrum in the '2G scam', have been justified by some quarters on the grounds of providing 'cheap' services to the so-called masses. At the time of 2G scam, the then communication minister Kapil Sibal defended the Government by this logic. In May 2017 *The Wire* quoted the comment of additional secretary DoT, N. Sivasailam that revenue dips on account of licence fee, etc. (post Jio launch) should be seen as "incomes in the hands of consumers".[45] Data rates in India became among the lowest in the world after the entry of Jio. However, this led to many of the operators (including the company of the younger Ambani brother, Reliance Communication) failing or selling out. This was largely a consequence of Jio's decision to spend a massive sum, reportedly between $20 to 25 billion, in building a modern telecom network and then giving services free of cost to whoever signed up for a Jio SIM. Free services were provided over an extended period, more than a year, by which time much of the competition had been bled out of contention.

45 Of course the question that really begs for an answer is, then why not give the money directly in the hands of the consumers?