JIRICO
Jindal Initiative on Research in IP and Competition

ROLE OF INDIAN REGULATORS TO FOSTER INNOVATION

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JIRICO Brief

INTRODUCTION

How can regulators encourage innovation? This JIRICO brief attempts to answer this question in the context of India and especially with respect to India's economic regulators. Unlike some other countries, for example the United Kingdom (U.K.), none of the Indian regulators is statutorily required to promote competition or under an obligation to promote economic growth. Should regulators have an 'innovation agenda', while adopting regulatory policies or regulatory decisions, to ensure that innovation enhances competition and consumer choice, without the risk of subsidizing regulatory standards.

There has been a flurry of developments in India's innovation landscape since the inauguration of the Narendra Modi government. First was the announcement of the National IPR Policy, which for the first time demonstrated, government's recognition of the importance of strong intellectual property rights (IPRs) for fostering innovation and to ensure the success of its flagship programmes of 'Startup India' and 'Digital India'. The government's 'Atal Innovation Mission' aims at building an innovation culture by setting up Atal Tinkering Labs in schools across India, equipped with the latest tools and technologies of science and design to expose India's next generation to ideas beyond textbooks. The Government has also used innovation methodologies in its task of governance, using cutting edge technology to implement various government schemes and policies. For example, PRAGATI, i.e. 'Pro-Active Governance and Timely Implementation', a radical innovation which is a combination of videoconferencing, digital data management and geospatial information systems, enabling the Prime Minister's Office to track the progress of central and state government ventures in real time. 'Invest India' is another such example, where the government has used an innovative corporate structure to provide end-to-end solutions for potential investors, from the pre-investment stage which may involve scouting for land and liaising with the central and state governments, as also their relevant agencies; to the investment stage of gathering the necessary approvals to commence operations; to a post-investment stage which may require the settling of any grievances with any agency or government.

Thus, there seems to be an overall consciousness among both government officers and Indians about the role that technology plays in improving the lives of Indian polity and economy. In fact, a book written by Vinay Sahasrabuddhe and Dhiraj Nayyar, which

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documents many such innovation related schemes and policies of the government — both for its own administration as well as for making Indian an innovation hub — is aptly titled "The Innovation Republic: Governance Innovations in India Under Narendra Modi".

However, inspite of making such progresses, India officially ranks 57 among 127 countries in the 2018 'Global Innovation Index' — much below its BRICS peers of China and Russia. Even countries like Vietnam, Thailand and Mongolia outrank India on the list. Despite India's forward looking National IPR Policy, India lags behind, even among the developing world, on both — an acceptable regulatory regime which supports robust IPRs or a country, which is a major source of international patent applications. According to data released by World Intellectual Property Organization (WIPO) in 2018, China moved into the second position as a source of international patent applications filed via WIPO in 2017, with United States (U.S.) ranking in the first place. According to WIPO data — two Chinese technology companies were the top filers of international patent applications in 2017, with Huawei (number one filer) and ZTE (number two) followed by Intel, Mitsubishi and Qualcomm. India does not even rank among the top 10 in the list.

POSSIBLE ROLES BY REGULATORS OR COURTS IN MAKING INDIA AS AN INNOVATION HUB

There are a zillion ways in which one can propose to improve the attractiveness of the Indian economy as an innovation hub. However, this brief discusses the role that regulators or courts could play in encouraging innovation. Given that India's capacity for entrepreneurial innovation stands at the cross-roads of a mature IPR framework, competitive prowess and an ability to attract investment — each of which has a different regulatory structure in India — implementation of progresses made by the legislative/executive should not be curtailed by the country's economic regulators or courts. Therefore, the question we need to ask is: What is the role of regulators/courts in encouraging innovation?

Regulators are required to fulfill a variety of statutory objectives — consumer protection, integrity of markets, consumer welfare, including market growth. For example, the Securities and Exchange Board of India Act (SEBI) Act 1992 which establishes the SEBI — India's securities market regulator and specifically mandates SEBI to both develop and promote India's securities markets, besides protecting the interests of the investors. Similarly, the Competition Act of 2002 mandates the Competition Commission of India (CCI) — India's only all market regulator — to promote and sustain competitive markets besides protecting consumer interests. Therefore, regulators are often faced with large and diverse sets of regulatees, forcing them to make decisions as to how and where to allocate resources in particular activities. How do regulators balance these regulatory priorities, especially when market regulators are regulating issues of a technology sensitive industry (Telecommunications) or where R&D efforts/innovation are crucial for maintaining intra-industry competition (Pharmaceuticals)? Indian regulators often choose to prioritize consumer interests over those of the industry or even attempt to develop mechanisms that encourage innovation in the market, while balancing interests of consumer welfare.

Currently, regulators perceive their role as law-enforcing agencies, charged with the responsibility of either *ex ante* standardising sectoral rules of conduct or *ex post* deciding legal liability issues of sectoral/industry actors. Innovation is not an input factor in their regulatory decision-making process.

Regulators, neither voluntarily nor under law, are required to assess the impact of their decisions/policies on an industry's capacity to innovate or grow.

This regulatory philosophy came under scrutiny before the Supreme Court of India in *Excel Corp Limited & Ors v Competition Commission of India* (2017(6) SCALE241), where the Supreme Court expressly stated that one of the goals of competition law enforcement should be to foster innovation as a means of curbing consumer harm. The Court extensively quoted from reports of the 'International Competition Network' on 'Economic Growth and Productivity' stating:

> '**Encouraging innovation**. Innovation acts as a strong driver of economic growth through the introduction of new or substantially improved products or services and the development of new and improved processes that lower the cost and increase the efficiency of production. Incentives to innovate are affected by the degree and type of competition in a market.'

Although this diktat is related to only competition law enforcement, but in essence the message is applicable to all Indian economic regulators to ensure that 'incentives to innovate' are not affected by their regulatory decisions or policies.

To create a robust innovation ecosystem, India needs to ensure that innovation remains central in both the economic policy-making of the government as well as in the judicial process of its regulators and courts. To develop a national vision of innovation, the regulatory agendas of regulators/courts should be in coherence with the innovation agenda of the federal or state governments. Regulators must establish a mechanism where additional information regarding the kind of technological and business model developments that are occurring in the industry gets incorporated into their regulatory thinking and outcomes.

For example, the CCI, without any detailed inquiry, passed interim orders against Ericsson that its royalty calculation methodology — based on the entire value of a product using its standard essential patents (SEPs) — is unfair, anticompetitive behaviour. Although the issue of determining the appropriate SEP royalty rate remains sub judice, CCI's conclusionary remarks that Ericsson's royalty practices were abusive in nature did not consider if it could chill effect on the incentive to innovate for the telecom industry. Similarly, CCI's order against 14 automobile firms requiring them to sell their proprietary designed spare parts and diagnostic tools in the open market without pricing conditions and further standardise the design of their spare parts to facilitate their use across brands did not consider the innovation requirements of the automobile industry.

The Telecom Regulatory Authority of India (TRAI) with its net neutrality ruling — which disallowed differential pricing by telecommunication service providers, based on the content consumed by the users — could have discouraged investments in telecom infrastructure, internet penetration and development of innovative internet data products. India's media and entertainment industry's innovation woes arise from TRAI's required fixed tariff rules, which prevent the effective monetisation of the industry's rich content. TRAI's new net neutrality rules, released in November, require internet providers in India to treat all online content the same, preventing them from favoring — or withholding — access to certain

websites, services or apps. The problem with TRAI's approach is that it did not even consider if zero-rating plans could serve as joint marketing tools between network carriers and content providers to better market mobile-based internet access to new markets. As, I have written before, zero-rating plans are examples of service process innovations which, through the instrument of the market, can increase India's digital access to urban and rural poor.[1] The fact that such discussions on even considering service process innovations were never meaningfully considered by TRAI in the net-neutrality policy drafting process remains problematic.

Similarly, SEBI's notice against crowdfunding platforms, warning investors that they could be in violation of the country's securities laws, could have offered a premature blow to India's budding crowdfunding start-ups, consequently limiting the availability of funding resources for India's medium and small innovators. SEBI's mandate includes the task of developing India's securities market, which includes accommodating the rise of innovative Fin-tech space, while at the same time ensuring adequate checks and balances for safeguarding the interests of investors.

The same fate has been meted out to crypto-currencies in India by India's prudential banking regulator — the Reserve Bank of India (RBI). Banks and other crypto-currency exchanges will be required to terminate their existing relationships with firms or individuals dealing in crypto-currencies. The regulator's rationale for banning crypto-currencies from India is the risks associated with dealing with such currencies. RBI's regulatory philosophy is not in sync with the rapid technological innovations being made in the financial services sector. Instead of developing evolving regulatory strategies to deal with emerging disruptive innovation in financial services, mere banning of such fin-tech advancements is hardly helpful.[2]

Other country's financial regulators like the U.K's Financial Conduct Authority (FCA) has developed innovative regulatory regimes like a 'regulatory sandbox' for financial services. The 'Fin-tech Sandbox' or an application program interface (API) sandbox creates an artificial regulatory environment that innovators and testers can use to mimic the characteristics exhibited by the production environment on a real-time basis to help simulate responses from all the systems an application interfaces with. Financial service providers can pilot-test their innovative products and services without immediately having to meet all the normal regulatory requirements. The FCA would set up some minimum eligibility requirements for firms hoping to apply for this service. This allows FCA to balance the requirements of allowing innovative Fin-tech services to enter the market and yet maintain some quality checks on the firms intending to enter the market. As per the FCA the 'Fin-tech Sandbox' provides for a 'safe space' designed to reduce the time and cost of bringing new products to market in a bid to encourage firms to be innovative and to increase competition. It is quite disheartening to see such advancements in economic regulatory philosophy compared to the draconian 'ban-it' philosophy fostered by our economic regulators.

The CCI, SEBI, TRAI and RBI — India's top four economic regulators — in the examples cited above, when prioritizing their statutory mandates choose protection of consumer over those of innovation and economic growth, without even attempting to strike a balance between the varying interests of the regulates. An innovative Fin-tech space ultimately caters to new consumer expectations, improves consumer welfare and contributes to the overall growth of a nation's economy.

Infact 'Niti-Aayog' CEO Mr. Amitabh Kant, have publicly stated that financial sector regulators should stop hindering with ideas in the financial technology sector. Mr. Kant stressing that the role of Indian regulators needed to evolve rather than being restrictions of growth stated — "It is very important that we allow technology to move forward and the regulators don't become restrictors, which very often they do, but become facilitators and creators." Mr. Kant speaking at a public event organized by the Confederation of Indian Industry (CII) stated that India should adopt the FCA's sandbox regulatory, which needs to be designed to adopt a unified consumer-centric lens through a single integrated sandbox, serving all of India's four financial sector regulators. Mr. Kant was referring to RBI, SEBI, the Insurance Regulatory and Development Authority of India (IRDAI) and the Pension Fund Regulatory and Development Authority (PFRDA).

Not only Indian regulators but often Indian courts ignore innovation concerns of an industry when passing sweeping decisions. For example, the Delhi High Court's recent copyright verdict, which confers unrestricted reprographic (reproduction of graphics through mechanical or electrical means) rights on academic institutions may drive reputed publishers out of the field of Indian academic publishing or chill their incentive to invest in developing innovative learning platforms.

Earlier in the summer of 2017, when Reliance Jio — a maverick telecom player entered the Indian telecommunication market disrupting the market of the incumbent telecom players by offering free voice calls and roaming, a suite of multimedia apps as well as dirt cheap data connectivity coupled with affordable 4G handsets. The incumbents, including Vodafone, Airtel, Idea had to re-imagine their market conduct to remain competitive in the markets. One of the incumbent rival — Bharati Airtel brought against a charge of "predatory pricing" by Jio before the CCI for providing consumers free services to eliminate competition in the Indian telecom market. The CCI in turn noted that: "providing free services cannot by itself raise competition concerns unless the same is offered by a dominant enterprise and shown to be tainted with an anti-competitive objective of excluding competition/ competitors, which does not seem to be the case in the present matter." *(*In Re: *Bharati Airtel Limited and Reliance Industries Limited, Reliance Jio Infocomm Limited, Case No. 03 of 2017, dated: 09/06/2017)*. It would seem that the country's antitrust regulator would be right in reaching such a conclusion, given Jio's miniscule market share and a decision that encourages market/pricing innovation. However, India's telecom authority — TRAI, has filed a petition before the Supreme Court of India challenging CCI's jurisdiction to decide the aforesaid matter in favour of Reliance Jio.

Reliance Jio had further contended before CCI that the incumbent telecom operators had formed a cartel to block Jio's entry by denying the entrant the requisite number of points of interconnects, which would ultimately inconvenience the customers. CCI had in a *prima-facie*order directed its Director-General (DG) to investigate such cartelization conduct by the incumbent Telecom companies. While relying to a petition filed by Vodafone, Airtel, Idea, the Bombay High Court set aside and quashed CCI's order directing its DG to further investigate the conduct of the three incumbent Telecom companies to determine if they had acted collusively to thwart the entry of Reliance Jio in the Indian telecom market on grounds of lack of CCI's jurisdiction to probe into — 'interpret the contract conditions/policies of telecom sector/industry/market, arising out of the Telegraph Act and the TRAI Act.' *(Writ Petition No 8594 of 2017 and others, order dated: 21/09/2017)*.Both CCI and Reliance Jio have appealed before the Supreme Court against the order of the

Bombay High Court. The Reliance Jio entry saga and its consequent regulatory tussle, including those by Indian High Courts suggest the total lack of concern among Indian regulatory/judicial institutions to accommodate innovative firms/companies within the Indian economy. Reliance Jio's innovative pricing platform has the potential to transform the digital access footprint of the country and yet a host of Indian regulators are tussling with each other to regulate/control its entry conditions into the Indian market.

Other Indian regulators like the National Pharmaceutical Pricing Authority (NPPA) routinely adopt strategies, including egregious 'price control' mechanisms, which hinder the ability of the industry to innovate. The ability of an innovator to monetise her innovation-based upon its market value is a key ingredient to the entire innovation process. Price control measures deny an innovator the right to price goods in line with what the market will permit and deprive the market of an efficient reallocation of resources for the next round of the innovation process. A much talked about recent example is the price capping of stents, engineered by the NPPA. In February, the NPPA, venturing from drug pricing into medical device pricing, slashed prices of stents — a tube-like mesh placed to unblock arteries to maintain the heart's blood supply — by about 85%.[3]

In effect, NPPA put all drug-eluting stents into a single category and price, with no consideration of innovations that have led the industry from first to the fourth generation of stents. Further, NPPA disallowed stent manufacturers from withdrawing their loss-making products from the market for at least six months to avoid any shortage. This essentially means that stent manufacturers can neither decide the price nor the type of stents they can sell in India — an echo of the 'license-quota-permit' raj from which India seems to have been unshackled a quarter of a century ago. The fundamental illogic of NPPA's decision is the "all stents are the same, they are priced the same, but you must make all stents available" argument. If all drug-eluting stents are the same, does it matter which ones the companies supply? And if they are not, then how can the same price apply to all?

CONCLUSION

It is not an argument that regulators/courts need to prioritise the innovation needs of a sector over issues of consumer safety, fair market access, product quality, etc. However, regulators in their regulatory processes should be equally focused on the potential effects of their actions on the innovative capacity of the sectors they regulate. They should help facilitate emergence of new industrial ideas as much as regulate them.

For this, a new relationship needs to be developed between regulators and regulatees. Currently, Indian regulators have a policing attitude towards industry behaviour, focused on delineating industry dos and don'ts, and are reactionary — especially in dealing with sectoral innovations which occur within an unregulated space — rather than facilitating or incentivising the emergence of path-breaking solutions.

The idea is to make Indian regulatory agencies a stakeholder of the sector/industry's sectoral process, where industry actors and regulators, on a real-time basis, will facilitate the development of innovative solutions for consumer needs within a given regulated or unregulated legal framework. For this, Indian

regulators need to pro-actively develop a good understanding of the market ecosystem in which sectoral innovation is occurring. Similarly, generalist courts, on the other hand, should defer to the wisdom of these expert regulators while deciding appeals within the larger rule-of-law framework.

The Niti Aayog, under the auspices of the Atal Innovation Mission, can take leadership in developing the details of a cohesive national strategy for innovation, and work with Indian regulators/courts to promote the need to develop a new regulatory agenda for India's judicial and quasi-judicial agencies, which will partner the government's vision for transforming the country into an innovation destination.

[1] Payal Malik and Avirup Bose, "A 'chota recharge' model for the internet", *Financial Express* (May 1, 2015).

[2] This is not to suggest that there should not be regulatory concerns around the stability of crypto-currency and the viability of it being used as legal tender. In-fact the U.S. Secretary of the Treasury, Steve Mnuchin has indicated that U.S. crypto-currency regulations would look to prevent the possibility that crypto-currency could be used in money-laundering activities. However, this is different from the current "ban-it" philosophy of the RBI. Let us take the example of Canada - after weeks of hearings, which included testimony from experts, the Canadian Parliament approved Bill C-31 on June 19, 2014, the world's first national law on digital currencies. Even though the Canadian Financial Consumer Agency in Canada does not consider crypto-currencies to be absolute "legal tender," Such an stakeholder based exploratory policy building process is absent from the Indian scenario.

[3] For general media reports on the topic see: "Govt caps prices of coronary stents in huge relief to heart patients", *Mint* (February 14, 2017) (available at: https://www.livemint.com/Science/l5e572cVeCWGCSRmvnTlqL/Coronary-stent-prices-slashed-by-up-to-400-in-huge-relief-t.html).

O.P. Jindal Global University at a Glance

People

4400 *Students*

FEMALE 42% | MALE 58%

334 *Faculty*

FEMALE 43% | MALE 57%

350 *Non-teaching staff*

FEMALE 26% | MALE 74%

1:13 *Faculty-Student ratio*

37 *Average age of faculty members*

1900 *Alumni*

Faculty

3 *Rhodes Scholars*

50% *Alumni from the top 200 global universities*

17% *International faculty from 25 countries*

Students

UNDERGRADUATE 90% | MASTERS / DOCTORAL 10%

60% *Students on scholarships*

29 *Indian States & Union Territories represented by students*

20 *Countries represented by students*

Schools

18 *Programmes*

- 11 Undergraduate Programmes
- 6 Postgraduate Programmes
- Doctoral Programme

8 *Schools*

- Jindal Global Law School — India's First Global Law School
- Jindal School of International Affairs — India's First Global Policy School
- Jindal Global Business School
- Jindal School of Liberal Arts & Humanities — India's First Transnational Humanities School
- Jindal School of Government and Public Policy — India's First Public Policy School
- Jindal School of Journalism & Communication — India's First Global Media School
- Jindal School of Art & Architecture — India's First Interdisciplinary School of Built Environment
- Jindal School of Banking & Finance — India's First Global Finance School

Research

700+ *Research Publications*

55+ *Interdisciplinary research centres*

3 *Research & capacity building institutes*

- JILDEE — Jindal Institute of Leadership Development and Executive Education
- Jindal Institute of Behavioural Sciences
- IIHEd — International Institute for Higher Education Research & Capacity Building — O.P. Jindal Global University

International Collaborations

200+ *Collaborations*

50+ *Countries*

187 *Student exchange collaborations*

180 *Faculty exchange & development programmes*

132 *Joint research collaborations*

Accreditation, Rankings & Memberships

QS University Rankings: BRICS — Quacquarelli Symonds (QS) — 2018 Edition

Ranked 251-300 amongst 9000 universities in the BRICS

QS I-GAUGE Indian University Rating — DIAMOND — 2018

- Recognised & Granted Autonomy by University Grants Commission
- Ranked 1st 'SWACHHTA' Ranking 2017 Government of India
- Accredited by National Assessment and Accreditation Council
- Recognised by Bar Council of India
- Member of Law Schools Global League
- Member of Association of American Colleges and Universities
- Member of Association to Advance Collegiate Schools of Business
- Member of International Development and Public Policy Alliance
- Member of Association of Indian Universities