

## Written Testimony to the United States International Trade Commission

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The first year of Prime Minister Narendra Modi's administration has seen significant vigor toward bolstering India's economy and reimagining the country's trade and investment policies. As ITIF noted in its report *The Indian Economy at a Crossroads*, the best way for India to sustainably grow its economy is by encouraging market-based competition, including among domestic and foreign competitors, embracing an across-the-board productivity growth strategy, and investing in the innovation potential of its economy.<sup>1</sup> Yet in the first part of this decade, India appeared to be showing signs of shifting toward a state-directed system that embraced elements of a Chinese-style indigenous innovation strategy.<sup>2</sup> In other words, India seemed to be embracing a set of policies that sought to limit imports in key technology sectors, to apply local content requirements (LCRs) to bolster manufacturing in advanced technology sectors, to use foreign direct investment (FDI) as a tool to compel knowledge transfer, and to facilitate the shift of intellectual property (IP) from foreign enterprises to domestic Indian ones through the issuance of compulsory licenses or the revocation of already-granted intellectual property rights. Such policies are concerning both because they can cause innovation-based U.S. enterprises to win significantly less market share in India than would otherwise be the case and also because they can advantage Indian firms as they compete in third-party markets against U.S. competitors.

To be sure, since its first day in office on May 27, 2014, the Modi administration has taken a number of concrete and laudable steps to liberalize India's trade and investment policies and embrace market-based economic growth. However, a number of concerning policies—many introduced by the previous Singh administration—remain in place and have not been repealed or modified, and even the Modi administration has introduced several new potentially trade- and investment-distorting policies.<sup>3</sup> In short, there is no question that progress has been made, and it is important to acknowledge this. But India has a long way to go toward implementing economic, trade, and investment policies that will enable the Indian economy to flourish to the fullest extent possible.

On the positive side, the Modi administration has announced a number of promising economic reforms and taken some steps to liberalize certain FDI and trade policies. Notably, it has:

- Eased FDI restrictions in the defense, insurance, railway, and building construction sectors. In the defense sector, the FDI cap has been lifted from 26 to 49 percent while the cap on FDI in the

insurance sector has also been increased to 49 percent and FDI caps in the railway sector have been removed.<sup>4</sup>

- Retired India's Planning Commission, a vestige of centralized state planning, and replaced it with a government think tank, the National Institution for Transformation of India Aayog (NITI).<sup>5</sup>
- Established a domestic IPR-focused experts group and announced development of a draft National IPR Policy.<sup>6</sup>
- Announced a Digital India program that seeks to “transform India into a digitally empowered society and knowledge economy.”
- Announced plans to establish 100 “Smart cities” throughout India and allocated nearly \$1 billion to the effort.<sup>7</sup>
- Passed the Land Acquisition Rehabilitation and Resettlement Ordinance in December 2014 to facilitate land acquisition for eight sectors, principally for infrastructure development.<sup>8</sup>
- Made moves toward “single window clearance” that have decreased the number of forms needed to move goods across India's borders from 14 to 3.<sup>9</sup>
- Announced a phased reduction of the corporate income tax from 30 to 25 percent and set an April 1, 2016 deadline to complete long-pending implementation of a comprehensive goods and services tax (GST).<sup>10</sup> Finance Minister Jaitley believes completion of a GST could add two percentage points to Indian economic growth.<sup>11</sup>
- In April 2015, scratched last remaining restrictions (on the books since the 1970s) that allowed only small businesses to produce items such as wooden furniture, locks, candles, matches, bangles (i.e., bracelets), and pickles.<sup>12</sup>
- Announced a goal to move India into the top 50 of the World Bank's Doing Business Index, up from its ranking of 142 (out of 189 countries) in 2014.<sup>13</sup>
- Launched a new Ministry of Skill Development to foster inter-ministerial coordination on public policy making.<sup>14</sup>

Despite this progress, a number of trade-distorting policies persist, some of which were introduced by the previous Singh administration that have yet to be addressed or repealed and some of which have been newly introduced by the Modi administration itself. These policies affect in particular U.S. enterprises competing in India's information and communications technology (ICT), life sciences, retail, and renewable energy sectors. Guiding India's goals across many of these sectors is the Modi administration's “Make in India” policy, which seeks to lift manufacturing's share of India's economy from 16 to 25 percent and to create 100 million new manufacturing jobs over the next decade. While certainly India needs and can achieve a more robust manufacturing sector, it is important India achieves these goals by implementing policies that improve its environment for doing business—e.g., clearing red tape; making much-needed labor market, land, and tax reforms; and investing in research and development (R&D), infrastructure, and skills—and by playing an “attraction” not a “compulsion” strategy toward attracting foreign investment to India.

Unfortunately, in too many cases, India has pursued trade- and investment-distorting policies to achieve some of its “Make in India” and broader economic policy goals, as the following section elaborates.

## **Information and Communications Technology**

Perhaps the most concerning among these is that the Modi administration has given no indication it intends to repeal forced localization policies such as India's Preferential Market Access (PMA) policy. That policy intends for 80 percent of Indian public sector procurement of ICT and electronics products to come from domestic sources by 2020. Some have tried to defend the PMA on the grounds that it is not a distortionary policy; that it is justified on security grounds; or that it is in India's "national interest" to assist domestic electronics and ICT hardware manufacturers, in part to help India balance its terms of trade.<sup>15</sup> But the reality, as ITIF explains in the report *Why India's PMA Will Harm the Indian and Global Economies*, is that the PMA is a trade-distortionary tool that entails at least a de facto price or quality preference which will have significant negative effects on Indian citizens and on overall rates of ICT investment. Moreover, far from making ICT products in India more secure, the PMA is actually likely to make them less secure.<sup>16</sup>

Indeed, the PMA's continuing application to Indian government and state-owned enterprise (SOE) procurement activity threatens to significantly distort India's ICT market—it's estimated the PMA will impact at least one-quarter of India's ICT market—and harm U.S. ICT enterprises and ICT production. In fact, if India's PMA were to be fully realized—with India achieving the goal expressed by the Telecom Regulatory Authority of India in its 2011 Telecom Equipment Manufacturing Policy of having 80 percent of India's demand for telecommunications equipment be met through domestically manufactured products by 2020—with at least 50 percent of that production being met by Indian producers—then ITIF estimates the PMA will cause U.S. exports of ICT products and services to India to fall by \$1.7 billion annually by 2020, costing over 10,000 U.S. jobs.<sup>17</sup>

Another continuing concern remains India's Compulsory Registration Order for ICT products, which requires new electronics equipment sold in India to go through health and safety certification testing in Indian laboratories, even if they have already been approved by internationally certified labs. Specifically, in September 2012, the Indian Department of Electronics and Information Technology (DEITY) issued mandatory compulsory registration for 15 categories of electronic and ICT goods.<sup>18</sup> (DEITY added an additional 15 categories of electronics and ICT products to its list in late 2014.)<sup>19</sup> The policy, which entered force in January 2014, mandates that manufacturers register their products with laboratories affiliated or certified by the Bureau of Indian Standards (BIS), even if they have already been certified by internationally recognized laboratories.

India's compulsory registration requirements for electronics and ICT products were developed with limited industry consultations, are practically unworkable, and veer markedly from global norms. Moreover, India's compulsory registration requirements are based on an Indian standard that is identical to the international standard for product safety which the global ICT industry already uses to test and certify products. As a result, companies have been forced to re-test their products (only within India) at tremendous expense, and with no benefits to product safety. In fact, one ICT manufacturer has calculated that for it to be compliant with India's regulatory certification scheme, it has had to file over 100,000 physical pieces of paper to achieve compliance, with the total cost of compliance after just six

months of such activity reaching \$3.5 million. In total, U.S. and other foreign ICT enterprises have paid hundreds of thousands of dollars in fines and have incurred millions of dollars in new compliance and liability costs.<sup>20</sup> Moreover, the time-to-market delays and regulatory uncertainty introduced by the compulsory registration order threaten to jeopardize as much as one billion dollars of exports and potential sales of ICT products per quarter.<sup>21</sup> India's compulsory registration requirements constitute an unnecessary non-tariff barrier that should be repealed, with India returning to accepting certifications delivered by internationally reputable labs.<sup>22</sup> Unfortunately, the Modi administration has not signaled an intention to repeal this requirement, nor has it rescinded DEITY's objective to test all "security-sensitive" telecommunications equipment in India effective April 2015.<sup>23</sup>

Tariffs on ICT products remain high and a barrier to trade with India. Unfortunately, as part of its first budget announced in July 2014, the Modi administration actually introduced new tariffs of up to 10 percent on four broad categories of telecommunications equipment and technologies—including switches, Voice over Internet (VOIP) equipment and phones, and certain networking equipment—despite the fact that India committed to eliminating tariffs on many of these very products when it joined the original Information Technology Agreement (ITA) in 1997.<sup>24</sup> Further, Customs Notification 11/2014, which introduced these new tariffs as part of the 2014-2015 Union Budget, also specifies that products using certain technologies, such as Multiple Input/Multiple Output and Long Term Evolution (LTE) wireless technology, will also be subject to new duties.<sup>25</sup> Moreover, regrettably, the Modi administration has not signaled interest in joining negotiations to expand the Information Technology Agreement, a trade agreement that commits 80 nations to eliminate tariffs on trade in a wide range of ICT products and which has been a boon for the global information economy.

Beyond this, Indian ICT goods manufacturers remain hampered by an inverted duty structure that has maintained high tariffs on a range of ICT parts, components, and supplies which in many cases has made it difficult for India's ICT goods manufacturers to affordably acquire needed components for the manufacture of ICT products. India's inverted duty structure is certainly a real impediment for India's ICT manufacturers, but it is a self-imposed handicap entirely within the purview of Indian policymakers to address by decreasing tariffs and thus the cost of key ICT inputs.

Unfortunately, such persistently high tariffs on the imports of ICT parts and components have proven particularly harmful for India's economy. As the Indian economists Kaushik and Singh found, for every \$1 of tariffs India has imposed on information and communications technology products, it has suffered a \$1.30 economic loss because of lowered productivity.<sup>26</sup> India's tariffs on ICT products force all ICT-consuming industries in India to acquire more expensive or technologically inferior ICT products.<sup>27</sup> Among other impacts, this slows the deployment and adoption of wireline and wireless broadband in India since telecommunications carriers' costs will by definition increase. In other words, in the interest of supporting one sector—ICT manufacturers—Indian policy has harmed every other sector of the Indian economy that relies on ICT products (and services) as inputs to their business by raising their price or lowering their quality. India also places a relatively high tax of 12 percent on both wireless and broadband services and separately a consumer product tax of 13 percent, which further raise the cost of

ICT products and services and thus decreases the adoption and use of these productivity- and innovation-enhancing technologies.<sup>28</sup>

In 2015, India launched a new *National Telecom Machine-to-Machine (M2M) Roadmap*, which amounts to the world's first national strategy for the Internet of Things.<sup>29</sup> The *Roadmap* acknowledges that, "Machine-to-Machine (M2M) communications represent tremendous opportunities...[and] can bring substantial and tangible social and economic benefits to consumers, businesses, citizens, and governments."<sup>30</sup> While India's *National Telecom M2M Roadmap* contains many impressive elements, its focus on developing capacity within India's borders goes too far by focusing on supporting indigenous innovation at the expense of innovation as a whole. In particular, the *Roadmap* signals that M2M devices, such as sensors and microchips, are to be included in India's Preferential Market Access policy, although such a move would have a counterproductive impact on adoption of M2M technologies by limiting access to the highest quality products and increasing costs by eliminating competitive pricing.

Moreover, the *Roadmap* potentially introduces India's first local data storage requirements by requiring that all M2M gateways and applications servers that service customers in India must also be located in India. While the *Roadmap's* authors proclaim that the mandate is intended to protect national security, the notion that data must be stored locally to be secure is patently false, as ITIF writes in *The False Promise of Data Nationalism*.<sup>31</sup> While the *National Telecom M2M Roadmap* only represents a draft document at this point, the local data storage laws it references risks setting a dangerous precedent, and the otherwise laudable strategy could be significantly improved by removing the local data storage requirements and the inclusion of M2M devices in the PMA. India should also look to develop technology standards related to the Internet of Things in coordination with the global community on a voluntary, transparent, consensus-based, and market-led basis—the path most likely to prove beneficial, successful, and sustainable in the long run for Indian ICT enterprises and industries, the global ICT industry, and indeed the global economy.<sup>32</sup>

Online copyright piracy continues to remain a significant challenge in India. As of 2013, the percentage of unlicensed software used by Indian enterprises and organization stood at 61 percent, with the commercial value of unlicensed software reaching over \$2 billion.<sup>33</sup> India also has one of the highest rates of video piracy (usually the result of illegal camcording) in the world, with pirated films out of India appearing on the Internet in an average of 3.15 days.<sup>34</sup> In fact, incidents originating in India accounted for half of all video piracy incidents that occurred in the Asia-Pacific region in 2013.<sup>35</sup> While American producers of video content are certainly harmed by such piracy, Hollywood (English Films), Bollywood (Hindi Films), Tollywood (Telugu Films), and Kollywood (Tamil Films) are the prime victims of this piracy.<sup>36</sup>

Despite the progress realized in other sectors, foreign investment limits remain across several Indian telecommunications sectors.<sup>37</sup> For example, India limits foreign ownership in these specific audiovisual sectors: cable news (49 percent); FM radio (20 percent); head-end in the sky (74 percent); direct-to-home (DTH) broadcasting (49 percent); teleports (49 percent); news broadcasting (26 percent); and newspapers (26 percent).<sup>38</sup>

Finally, while as noted there is much to be commended with regard to the the Digital India plan, one shortcoming of the strategy is its call for “Net Zero Imports of ICT products by 2020.”<sup>39</sup> India’s primary goal should not be “Net Zero Imports of ICT products” but rather to “support fielding a globally competitive ICT goods manufacturing and services industry.” Moreover, to the extent India focuses on its ICT trade balance, it should include India’s globally competitive ICT services sector in its calculations. Even then, India’s focus on its trade balance, in particular as a measure of job creation, is misguided, because trade balances have little relationship to unemployment rates, as evidenced by the fact that among large nations (with more than 50 million people) the correlation between the trade balance and the unemployment rate is -0.09.<sup>40</sup> Regrettably, the Digital India plan also reiterates the intent to leverage the PMA to achieve greater levels of electronics and ICT goods manufacturing in India.

### **Life Sciences**

In 2014-2015, foreign intellectual property rights holders in the life sciences sector continued to encounter significant challenges in defending their intellectual property rights in India, particularly with regard to the issuance of compulsory licenses, patent denials, and patent revocations.<sup>41</sup> As the United States Trade Representative Office’s *2015 Special 301* report noted, “With respect to patents, the United States continues to have serious concerns about the innovation climate for the biopharmaceutical and others sectors.”<sup>42</sup> For example, in July 2014, a Bombay High Court upheld a ruling granting an Indian domestic manufacturer a compulsory license to the IP behind Bayer’s anti-cancer drug Nexavar.<sup>43</sup> The appeal pertained to the Indian Patent Controller General’s March 2012 grant of a compulsory license to Natco, an Indian pharmaceutical company, enabling it to produce a patented cancer drug (Nexavar, or sorafenib tosylate) made by Bayer.<sup>44</sup> Nexavar is a life-extending oncology drug used to treat advanced stages of kidney, liver, and thyroid cancer, for which all the R&D work on the drug had been performed in the United States.<sup>45</sup> India’s Patent Controller General had previously ruled against Bayer on three counts, including one contending that the patent was not “worked” (i.e., exercised) to the fullest practical extent in India because it was not manufactured there—a policy decision that discriminates against imports in violation of India’s commitments as part of the World Trade Organization’s Trade-Related Aspects of Intellectual Property (TRIPS) agreement. Bayer has now lost challenges to the compulsory license before both the Indian Intellectual Property Appellate Board (IPAB) and the High Court of Bombay. Commenting on the July 2014 decision, Anoop Narayanan, a senior intellectual property lawyer and founder of AN and Associates, a Mumbai-based law firm, noted that the decision “will ultimately discourage foreign companies to enter [the] local market with research-based products.”<sup>46</sup>

In another case, in June 2014, the Indian Patent Office refused a patent for the U.S. firm Abraxis BioScience’s (a division of Celgene) anti-cancer drug Abraxane. The Indian Patent Office rejected the application on the grounds that Abraxis Bioscience’s patent application failed to demonstrate “an inventive step” and was therefore not patentable, according to Section 3(d) of the Indian Patent Act of 1970.<sup>47</sup> Further, in December 2014, the Indian Patent Office revoked the patent for Abbvie’s Humira® citing lack of an inventive step and insufficiency of description, despite having granted a patent to Humira in 2009.<sup>48</sup> Moreover, the order revoking the patent coincided with the launch of the generic

version of Humira by another Indian company.<sup>49</sup> Also, in March 2015, Boehringer Ingelheim's patent on Spiriva®, which was granted in 2013, was revoked in part because it failed to demonstrate therapeutic efficacy under the requirements of Section 3(d).<sup>50</sup> Abraxis, Abbvie, and Boehringer Ingelheim join a lamentably growing list of firms—whose ranks had already included Allegran, Merck, Pfizer, and Roche, among others—who have had their patent applications for innovative life sciences products rejected or revoked by the Indian Patent Office on the specious grounds that their drug's development lacked an inventive step or did not show a sufficient degree of "inventiveness."

These decisions stem from Section 3(d) of India's patent law, which states that pharmaceutical companies have to prove significant clinical efficacy enhancements in their drugs over already-patented compounds. In prohibiting the grant of patents to new forms of known substances unless it results in enhanced efficacy over the known substance, Section 3(d) significantly expands the criteria necessary to establish an "inventive step." The policy limits the patentability of potentially beneficial innovations such as drugs with fewer side effects, decreased toxicity, or improved delivery systems. In essence, Section 3(d) creates a special, additional criterion for pharmaceuticals, which could preclude issuance of a patent even if the applicant demonstrates the World Trade Organization (WTO) standard of being new, involving an inventive step, and being capable of industrial application.<sup>51</sup>

Moreover, such rulings provide Indian generic companies with an opportunity to acquire the intellectual property needed to produce certain pharmaceuticals without having to incur the costs of the drug's development, which is tantamount to weak firms drawing off sales from stronger firms, consequently reducing their ability to reinvest in life-saving drug innovation. Of particular concern is that such decisions set a potentially harmful worldwide precedent regarding the requirements and conditions for receiving a patent, with other nations have begun to copy elements of India's Section 3(d) in their patent laws. For example, in 2008, the Philippines amended its patent law to add language similar to Section 3(d) to describe inventions that would not be patentable.<sup>52</sup> And, in 2012, Argentina issued resolutions that limit the patentability of derivatives of pharmaceutical products in much the same way as India.<sup>53</sup> Indian generic drug manufacturers and international non-governmental organizations reportedly were quick to praise the revisions.<sup>54</sup>

U.S. life sciences firms have also encountered challenges in securing injunctions against firms that manufacture patented inventions without authorization from the patent holder. As recent cases such as *Merck v. Glenmark* and *Cipla v. Roche* have demonstrated, when approving such marketing without authorization, Indian state governmental authorities lack an adequate mechanism to confirm whether the item to be manufactured is under patent.<sup>55</sup>

Another challenge pertains to the proliferation of counterfeit pharmaceuticals that are manufactured, sold, and distributed in India. First, these counterfeit pharmaceuticals take market share from genuine pharmaceuticals manufactured and sold by U.S. enterprises operating in India. Second, India has joined China as the top two country sources of most of the counterfeit pharmaceuticals shipped to the United States, which undermines the sale of authentic pharmaceuticals in the United States in addition to introducing health and safety concerns.<sup>56</sup>

As in the case of information and communications technology products, India also imposes very high tariffs on medicines, pharmaceutical inputs, and medical devices. In fact, According to an October 2012 World Trade Organization (WTO) report entitled *More Trade for Better Health? International Trade and Tariffs on Health Products*, India maintains the highest tariffs on medicines, pharmaceutical inputs, and medical devices among the WTO members identified in the report.<sup>57</sup> In 2014, the U.S. government formally requested that India eliminate its 7.5 percent basic customs duty, additional duty, and special additional duty for medical equipment and devices—such as pacemakers, coronary stents and stent grafts, and surgical instruments—and for parts of medical devices.<sup>58</sup>

Finally, India has begun to make greater use of price controls on pharmaceuticals entering the country. As of April 2015, India's National Pharmaceutical Pricing Authority implemented pricing restrictions on 509 drug formulations through a Drug Price Control Order (DPCO). However, exemptions from those restrictions allow certain medicines that are manufactured in India and “developed using indigenous R&D,” to be priced higher, providing an advantage to Indian companies.<sup>59</sup>

### **Retail**

While India has liberalized its foreign direct investment policies in certain sectors, FDI in single-brand and multi-brand retail “by means of [electronic] commerce” remains explicitly prohibited.<sup>60</sup> While India does permit up to 51 percent foreign ownership in companies in the multi-brand retail sector, it leaves to each Indian state the final decision on whether to authorize such FDI in its territory.<sup>61</sup> In addition, where such FDI is allowed, significant limitations are imposed on entry, including requirements to: invest at least approximately \$100 million, of which at least 50 percent must be in “back-end infrastructure” (e.g., processing, distribution, quality control, packaging, logistics, storage, and warehouses) within three years of the initial investment; open stores only in cities that have been identified as eligible by the respective state government; and source at least 30 percent of the value of products sold, from “Indian ‘small enterprises’ which have a total investment in plant [and] machinery not exceeding” \$2 million.<sup>62</sup> India does allow up to 100 percent foreign direct ownership in retailers selling a single-brand product, subject to certain conditions such as a requirement to source at least 30 percent of the value of the products from Indian small and medium-sized enterprises. But if the foreign investor does not wish to meet this requirement (among others), it is limited to an ownership cap of 51 percent.<sup>63</sup>

Such restrictions pose significant hurdles to U.S. enterprises wishing to enter online commerce, retail, and distribution markets in India. For example, because of these restrictions, Walmart runs two wholesale stores in India because local laws designed to protect owners of smaller shops limit overseas companies to operating single-brand stores, or wholesale outlets.<sup>64</sup> The effect of this strategy will be to keep retail productivity low, for as the McKinsey Global Institute has found, innovative retailers such as Walmart contributed approximately 15 percent of the U.S. productivity acceleration in the last half of the 1990s.<sup>65</sup>



## **Renewable Energy**

India continues to identify patents as obstacles to the dissemination of climate change technologies, pressing for outcomes that would potentially undermine incentives for innovation, such as patent protection and competitiveness conditions that are critical parts of the response to climate change and other environmental challenges.<sup>66</sup> In fact, India's National Manufacturing Policy, introduced in 2011, promoted compulsory licensing as a mechanism available for government entities to effectuate technology transfer in the clean energy sector.<sup>67</sup>

And so far the Modi administration has continued the existing policy of India's national solar program which discriminates against foreign solar equipment manufacturers by requiring Indian solar energy producers to use Indian-manufactured solar cells and by offering subsidies to those developers using domestic equipment instead of imports.<sup>68</sup> Specifically, under Phase-II (2013-2017), Batch I, of the Jawaharlal Nehru National Solar Mission (JNNSM), which was launched in October 2013, at least half of the anticipated 750 MW of Grid Connected Solar must use domestically produced solar cells and modules. Moreover, under Phase II, Batch 1, this local content requirement was expanded to cover solar thin film technologies as well, which comprise the majority of the components made in the United States.<sup>69</sup>

## **Tax Policies**

American enterprises continue to face an opaque tax environment in India, which places them at a disadvantage relative to domestic competitors. Further, the slow pace of dispute resolution at the India Central Board of Direct Taxes (CBDT) makes it difficult for enterprises to plan operations. In fact, there are over 300,000 pending tax disputes in India, of which over 220,000 are with the CBDT, with \$73 billion in tax revenue locked up in those cases.<sup>70</sup> As Rajiv Kumar, a senior fellow at the Center for Policy Research argues, "the CBDT's aggressive stance toward foreign investors is also reflected in the sharp hike in the number of transfer pricing cases in which CBDT officers have increased tax demands."<sup>71</sup> For example, the number of transfer pricing cases, which were virtually non-existent in the 1990s, have risen from 1,061 in 2004-2005 to 2,638 in 2011-2012 (the latest year for which information is available). Of these, 52 percent of transfer pricing cases in 2011-2012 resulted in additional tax demands.<sup>72</sup>

Moreover, several cases pertaining to retroactive taxation remain ongoing. While Vodafone won in January 2015 a dispute pertaining to its pricing of shares of its stakes in its Indian companies sold to other arms of Vodafone (a tactic through which Indian authorities alleged Vodafone avoided \$500 million in taxes), Vodafone is still fighting another case in which tax authorities say it owes more than \$2 billion in taxes left over from its acquisition of a phone company in India.<sup>73</sup> Further, in March 2015, retroactive taxes of \$3.3 billion were levied on energy company Carin India Ltd. (60 percent owned by a British corporation).<sup>74</sup> Meanwhile, the Modi administration has declined to repeal India's retroactive taxation law.<sup>75</sup>

## Conclusion

Two-way U.S.-India trade in 2014 tallied \$66.8 billion, not even one-tenth of the \$690.7 billion in two-way U.S.-China trade conducted in 2014.<sup>76</sup> In other words, there exists significant potential to bolster trade between India and the United States and deepen an extremely important trade relationship for both countries. The Modi administration has taken several important first steps to liberalize Indian trade and investment policies, yet more remains to be done. History has shown that India's economy flourishes most when it embraces the core tenets of free and competitive markets, open and non-discriminatory trade, and openness to flows of goods, technology, capital, and people. Unfortunately, in recent years, India has moved in the opposite direction, with India tumbling 11 places in the World Economic Forum's latest Global Competitiveness Index, falling from 60th to 71st place, and ranking a disappointing 76th out of 143 in the World Intellectual Property Organization's Global Innovation Index.<sup>77</sup>

In his efforts to reinvigorate India's economy and grow India's manufacturing sector in particular, it will be important that Prime Minister Modi eschew indigenous innovation policies that seek to bolster domestic enterprises at the expense of foreign competitors. Moreover, the Prime Minister should remember that the greatest challenge India's economy faces is to substantially increase its productivity levels, an objective best realized by welcoming general purpose technologies such as best-of-breed information and communications technology products into the country. Taking concrete steps to repeal the PMA and other local content requirements, to rescind onerous compulsory registration provisions, to combat digital piracy, to improve the IP environment for foreign intellectual property rights holders (particularly in the life sciences sector), and to allow greater FDI and competition in a range of sectors from retail to education, among others, all represent steps that would bolster India's trade and investment environment while benefitting India's economy over the long-term.

## Endnotes

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