India’s robust economic growth over the past two decades—including its development of a world-class information and communications technology (ICT) software and services industry—has largely arisen from its decision in the early 1990s to abandon the restrictive economic and trade policies that characterized the Indian economy of the 1970s and 1980s and instead embrace core tenets of free markets, open and non-discriminatory trade, and openness to flows of goods, people, technology, and capital. Indeed, the liberalization of India’s economic and trade policies in the early 1990s have had profoundly positive impacts on the Indian economy. For example, India’s gross domestic product (GDP) grew at a 4.21 percent annualized rate from 1970 to 1991, but after India’s embrace of economic and trade liberalization policies in 1991, India’s GDP grew at a 6.81 annualized rate from 1992 to 2011, meaning that India’s economic liberalization policies contributed to a sustained average of 40 percent greater GDP growth per year for a period of two decades.\(^1\) Similar impacts can be seen in India’s contributions to regional (Asian) economic growth, which increased by one-third after India’s economic reforms in the early 1990s. Specifically, India contributed just 9.8 percent of regional economic growth from 1970 to 1990, a rate that increased to 15.5 percent over the period from 1990 to 2010.\(^2\)

Unfortunately, as the competition for innovation-based economic growth has intensified among nations, a growing number of countries are increasingly turning to “innovation mercantilist” tactics such as forcing local production or technology/intellectual property (IP) transfer as a condition of market access, manipulating standards or currency rates, or otherwise disadvantaged foreign competitors to gain domestic advantage.\(^3\) These practices are evident, for example, in China’s recent attempts to impose indigenous innovation product standards or its insistence that firms participate in joint ventures or transfer technology or intellectual property as a condition of obtaining market access.\(^4\) Both pressured by and seeing the “apparent success” of such mercantilist tactics in countries like China, India is increasingly adopting similar innovation mercantilist practices of its own, as evidenced in its recent Preferential Market Access (PMA) rules for procurement of electronic goods or new requirements to license intellectual property to sell in-country. These policies are particularly concerning because they threaten to disrupt the strong trade relationship that exists between India and the United States. Indeed, the United States represents India’s second largest export market (while India is the United States’ 13th largest goods trading partner). U.S. goods and services trade with India totaled $86 billion in 2011.\(^5\)
The House Ways and Means Trade Subcommittee’s Wednesday, March 13 hearing on the turbulent state of U.S.-India trade relations reflects the growing attention and concern related to India’s recent embrace of a wide slate of “innovation mercantilist” policies that seek to bolster Indian economic and employment growth by distorting global trade rules and forcing investment and production to occur in India. India has erected these policies in a diverse range of sectors from ICT to life sciences, clean energy, digital content, financial services, and retail.

For instance, in February 2012, the Indian Ministry of Communications and Information Technology announced a Preferential Market Access mandate for electronic goods (the PMA Mandate) which imposes local content requirements on procurement of electronic products by government and private sector entities with “security implications for the country.” A specified share of each product’s market—anywhere from 30 to possibly even up to 100 percent—would have to be filled by India-based manufacturers, with the local content share for each product rising over time. The policy’s coverage is so broad it could easily capture half of India’s ICT market. In fact, on March 12, 2013, India’s Department of Telecommunications sought the Defense Ministry’s approval to classify select telecommunications products as “security sensitive” in the run-up to mandating 100 percent domestic sourcing for private sector gear procurements.

When applied to the private sector, India’s PMA violates Article III of the GATT (the General Agreement on Tariffs and Trade, whose provisions are incorporated into World Trade Organization (WTO) rules), which prohibits a member nation from discriminating against foreign competitors by forcing them into “buy local” contracts with domestic suppliers for purposes of private sector procurements. It’s also poised to violate the WTO’s Agreement on Subsidies and Countervailing Measures (ASCM), which prohibits WTO members from granting incentives based on the use of local content. India’s PMA is significantly and dangerously outside the bounds of the globally established norms of international trade and if implemented will engender serious harm both to India’s economy—and to the entire global trading system.

Two objectives of the PMA Mandate are for India to have 80 percent of the computers and electronics sold in India by 2020 be manufactured domestically and to increase India’s ICT exports thirteen-fold from $5.5 billion today to $80 billion by 2020. In pursuit of these goals, India has also excluded foreign ICT vendors from participating in the country’s $4 billion national fiber optic network project, introduced a compulsory registration scheme requiring onerous and duplicative in-country certification testing on a range of computer and electronics equipment, and instituted new rules requiring that foreign corporations enter into joint ventures to sell computers online. As the United States Trade Representative Office’s 2012 National Trade Estimate Barriers Report notes with regard to India’s increasing introduction of mercantilist ICT policies, “Certain aspects of these proposals, if implemented, would impose significant barriers to trade in the ICT sector. Moreover, such approaches, as well as other proposals such as increased conformity assessment procedures and domestic preferences in government procurement, will likely do little to foster domestic manufacturing, but instead produce perverse consequences of discouraging investment, weakening ICT infrastructure, and increasing costs to Indian consumers and firms seeking to do business in India.”
India has also declined to participate in negotiations to expand the Information Technology Agreement (ITA), which eliminates tariffs on trade in ICT products, despite strong evidence that membership in the ITA boosts countries’ levels of domestic innovation in ICT sectors and evidence that countries which are non-members of the ITA have seen substantial decreases in ICT exports as a share of their total goods exports. For example, from 1997 to 2010, the share of ICT goods exports as a percentage of the country’s total exports increased by 39 percent and 16 percent, respectively, in ITA members China and India, but decreased by 227 percent and 300 percent, respectively, in non-ITA member countries Argentina and Brazil.

In life sciences, the India Patents Controller has issued at least four compulsory licenses (essentially a government-mandated licensing of a patent) for innovative cancer therapies that were researched and developed in the United States, including Genentech’s breast cancer drug Herceptin, Bayer’s Nexavar, and Bristol-Myers Squibb’s Ixempra and Sprycel leukemia therapeutics. The compulsory licenses were granted on the specious grounds that: 1) the drug prices were too high; 2) the domestic market wasn’t supplied adequately; 3) and the drug wasn’t being adequately “worked” (e.g., manufactured) in India. In at least three more cases, India revoked patents for an alleged failure to demonstrate an inventive step. And India denied Novartis’s patent application for the cancer drug Glivec on the grounds that it did not satisfy a “special” rule for “new forms” of known substances—despite the fact that 75 countries have already issued a patent for the drug.

These are just some of the actions recently taken by the Indian government aimed at stripping innovative biopharmaceutical companies’ intellectual property for the benefit of India’s domestic industry. Meanwhile, even as Indian generic drug sales to the United States have grown dramatically, data suggests India has routinely flouted trade rules to bolster its generic industry at the expense of the United States’. Without access to the Indian market, biopharmaceutical innovators lose access to a great number of consumers, which impacts demand and ultimately affects jobs in the United States that rely on innovation and R&D.

India has also erected new barriers to foreign direct investment (FDI) in the pharmaceutical industry. India had previously allowed up to 100 percent FDI in the pharmaceutical sector without requiring government approval. But in October 2011, India appeared to back away from this openness, adopting a requirement that foreign acquisition of pharmaceutical firms (“brownfield investments”) be approved by the Competition Commission of India (CCI). While FDI would still be permitted up to 100 percent, such investment would no longer be automatic. Instead, the CCI has been charged with “balancing” public health concerns with the need to attract FDI when deciding whether to approve a particular acquisition. As the United States’ 2012 National Trade Estimate Barriers Report notes, “This ‘balancing’ requirement erroneously presumes that FDI in the pharmaceutical sector is in tension with the government’s public health objectives, and places the evaluation of such objectives in the hands of the CCI, which appears to be neither competent nor statutorily authorized to perform such analysis.” The CCI has been tasked with developing regulations within six months to govern these brownfield decisions, during which time the Foreign Investment Promotion Board will determine approvals for acquisition of pharmaceutical firms by foreign companies. As the 2012 National Trade Estimate Barriers Report...
explains, “India’s stringent and nontransparent regulations and procedures governing local shareholding inhibit inbound investment and increase risk to new entrants.”

Price control regulations in some sectors, such as the pharmaceutical sector, have further undermined incentives for foreign investors to increase their equity holdings in India.

In clean energy, India has introduced local content requirements for wind turbines and solar photovoltaic cells as part of an effort to promote creation of domestic solar cell and wind turbine manufacturing industries. Specifically, as part of its Jawaharlal Nehru National Solar Mission, India introduced local content requirements that solar project developers source at least 50 percent of their crystalline solar modules and cells from domestic manufacturers in order to receive significant government subsidies. In response, the United States requested a WTO dispute settlement in February 2013 over India’s solar program.

Digital content piracy, especially that affecting software, music, and film, continues to be a major challenge in India. As the United States Trade Representative’s Office 2012 Special 301 Report notes, “large-scale copyright piracy, especially in the software, optical media, and publishing industries” persists in India. For instance, the Business Software Alliance’s 2011 Global Piracy Study found that the commercial value of PC software theft in India in 2011 totaled $2.9 billion, with the software piracy rate reaching 63 percent. Likewise, the International Federation of the Phonographic Industry (IFPI) estimates that more than half of Internet users (54 percent) access unlicensed services on a monthly basis in India. Such rampant digital piracy distorts global trade, threatens the production of digital content in the future, and costs jobs in the United States. While India has introduced new draft copyright legislation, the United States has raised a number of concerns with it, arguing that it contains inadequate protections against unlawful circumvention of technological protection measures connected to Indian and foreign rights holders copyrighted works.

Because of U.S. concerns about inadequate protections for U.S. intellectual property rights holders in a range of industries from life sciences to digital content, India remained on the United States’ Special 301 Priority Watch List in 2012, with the 2012 Special 301 Report noting that India has “made limited progress on IPR protection and enforcement, and its legal framework and enforcement system remained weak.” Unfortunately, when intellectual property rights are not protected, it has a chilling impact on both rates of domestic innovation and on foreign direct investment into India’s economy. But while compulsory licensing—or outright theft—of intellectual property can help countries in the short-run, it stifles incentives to embark on home-grown technology development, and this only hurts countries in the long-run.

India also makes it difficult for foreign financial services providers to compete in-country. Although India allows privately held banks to operate in the country, the banking system is dominated by government-owned banks and direct investment by foreign banks is subject to restrictions. State-owned banks account for roughly 72 percent of the assets and 86 percent of all bank branches in the banking system. Under India’s branch authorization policy, foreign banks are required to submit their internal branch expansion plans on an annual basis, but their ability to expand is severely limited by
nontransparent quotas on branch office expansion. No licenses to open additional bank branches have been issued to U.S. banks since March 2009, despite several banks having applied.

While India has taken important steps to liberalize its retail sectors and open them to more foreign direct investment, several hurdles still remain. For example, FDI provisions in the retail sector are to be handled on a state-by-state basis and are to be focused only on big cities with a population of more than one million, which risks further polarizing urban and rural India, as well as exacerbating planning and environment issues in these already congested cities. Another provision stipulates that foreign chains have to source almost one-third of their manufactured and processed goods from small- and medium-sized enterprises.25

Beyond barriers to trade in specific industries, a number of additional hurdles impede trade between India and the United States (and other foreign nations). For example, as the 2012 National Trade Estimate Report on Foreign Trade Barriers notes, “U.S. exporters continue to encounter tariff and nontariff barriers that impede imports of U.S. products, despite the government of India’s ongoing economic reform efforts.” According to the World Trade Organization, India’s average bound tariff rate as of 2010 was 46.4 percent, while its simple MFN (most-favored nation) average applied tariff for 2010 was 12 percent. According to the 2012 National Trade Estimate Report on Foreign Trade Barriers, India has not reduced the basic customs duty in the past four years.26

Furthermore, India is not a signatory to the WTO’s Government Procurement Agreement (GPA), though it did become an observer to the GPA in February 2010. As the 2012 National Trade Estimate Report on Foreign Trade Barriers directly states, “India’s government procurement practices and procedures are often not transparent. Foreign firms rarely win Indian government contracts due to the preference afforded to Indian state-owned enterprises and the prevalence of such enterprises.”27 India’s 2006 Micro, Small and Medium Enterprise (MSME) Act authorizes the government to provide procurement preferences to MSMEs.

In summary, India’s tariff walls, market access restrictions, local content requirements, licensing of foreign intellectual property to domestic companies, and other trade-distorting practices are part of a concerted industrial policy intended to boost domestic manufacturing in India. India feels it must bolster its manufacturing sector for two primary reasons. In part, Indian officials feel they must create millions of manufacturing jobs to accommodate the more than 250 million citizens entering India’s workforce by 2025 and in part they are concerned about growing current account balance (trade) deficits. But modernized import substitution industrialization policies that try to add an export-led growth component simply won’t work; and in fact are likely to do more harm than good to India’s economy.

First, there’s simply no correlation between a medium- or large-sized nation’s balance of trade and its unemployment rate.28 Second, India’s mercantilist policies miss that India could most readily increase economic growth by raising productivity across-the-board, especially with the productivity level of India’s economy just 10 percent that of the United States.29 Third, they miss that trade barriers which raise prices (or compel the use of inferior) general purpose technologies like ICTs only hurt consumers
and inhibit the diffusion of ICTs among domestic-serving sectors such as financial services, retail, and transportation, causing productivity growth in these sectors to languish. These higher prices also raise the prices of imports for inputs used by Indian manufacturers. This explains why economists have found that for every $1 of tariffs India imposes on imported ICT products, India suffers an economic loss of $1.30. Fourth, they ignore that the best way to ensure that countries participate in global supply chains, such as for ICTs, is by acceding to global multilateral agreements that remove barriers to their trade. That’s why the OECD has found that countries not participating in the ITA saw their participation in global ICT value chains decline by over 60 percent from 1995 (when the ITA was chartered) to 2009, leaving a clear message: countries that don’t participate in open cross-border flows of digital information and ICT products only end up excising themselves from global production networks. Finally, India neglects to recognize that as it erects more barriers to global trade, other countries will respond with their own trade barriers in kind, meaning that India’s own trade-distorting policies will surreptitiously undermine its ambitious export goals.

To be sure, manufacturing can certainly play an important role in helping India meet its employment goals. In fact, a McKinsey Quarterly report, *Fulfilling the promise of India’s manufacturing sector*, finds that India’s manufacturing sector could grow six-fold to $1 trillion by 2025, creating up to 90 million domestic jobs. For India’s manufacturing sector to achieve that level of impact, it will both have to build its domestic manufacturing base and also attract robust levels of foreign direct investment from multinational manufacturers. But mandating and forcing companies to manufacture in India in order to be able to sell products there is not the way to go about it. In fact, such an approach will only backfire and make multinational corporations leery of moving forward with FDI projects in India. This approach is one reason why foreign direct investment in India, which reached a record $47 billion in FY 2011, had fallen by 67 percent in the following year [up to September 2012]. Indeed, it’s quite clear that foreign direct investment in India’s electronics and telecommunications sectors fell off a cliff after the country’s announcement of the PMA. For example, FDI in India’s telecommunications sector fell from $2 billion in the period from April 2011 -March 2012 to just $70.6 million from April 2012 to December 2012. Likewise, FDI into India’s electronics sector fell by over 80 percent between those two time frames.

Rather, India can realize its goals and attract globally mobile investment—and within the time frames it desires—if it focuses on enacting a range of “good” innovation policies that enhance the competitiveness of its economy. In particular, India needs to implement a range of policies to increase the productivity of its manufacturing sector, a problem because workers in India’s manufacturing sector are almost four and five times less productive, on average, than their counterparts in Thailand and China, respectively.

As Rajiv Kumar and Abhijit Sen Gupta of ICRIER (the Indian Council for Research on International Economic Relations) write in *Towards a Competitive Manufacturing Sector*, six key factors are holding back the competitiveness of India’s manufacturing sector, including: 1) the presence of entry barriers (e.g., making it difficult to start a new business); 2) labor market rigidities; 3) procedural constraints; 4) exit barriers; 5) emerging skill constraints; and 6) infrastructure. For instance, it takes 35 days to start a business in India, 62 days to register property, 25 days to complete one procedure to enforce a contract, and 10 years to close a business—all durations well in excess of those seen in developed and developing
countries alike, including India’s principal competitors such as China and Korea. And the cost to start a business equals 56.5 percent of the average Indian citizens’ per capita income. Meanwhile, more than $60 billion in committed capital investment awaits environmental or land clearances. And over both the near- and long-term, India must tackle an infrastructure investment deficit of some $350 billion that affects particularly its energy and transportation infrastructure. Addressing these issues is the best way for India to empower its manufacturing sector to realize the kind of contribution India’s government would like it to make to bolster the country’s economic and employment growth.

In other words, the best path forward for India is to offer globally mobile investment and enterprise all of the attractors of China—a large, fast-growing consumer marketplace, a cheaper labor pool, but one that yet features hundreds of thousands of skilled engineers, etc.—with none of the “innovation mercantilist policies” multinational corporations all-too-often encounter in China. India shouldn’t be playing the same game as China, rather it should be offering an alternative and superior model. India should be adopting an attraction, not a compulsion, strategy.

Ultimately, India’s innovation mercantilist policies if not significantly modulated threaten to inflect great harm not only on its own but also the global economy. U.S. government and industry have been engaged in intense dialogue with Indian officials for well over a year toward modifying the PMA, compulsory licensing, and related policies without seeing significant improvement. It’s time to add some sticks to the carrots. Congress should immediately direct the U.S. International Trade Commission (ITC) to initiate an investigation of how India’s mercantilist policies damage the U.S. economy, as it did with the ITC’s 2011 report examining the Effects of China’s Intellectual Property Infringement and Indigenous Innovation Policies on the U.S. Economy. Congress should also begin the process of withdrawing India’s participation from the Generalized Systems of Preferences (GSP), which provides reduced tariffs for Indian goods entering U.S. markets. In fact, India was the top developing country GSP-beneficiary in 2011, with $3.7 billion in imports entering the United States duty free, and the country has benefitted significantly from the preference. Indeed, as a 2011 report, Is the US GSP scheme benefitting India’s trade?, finds, “GSP concessions [have] helped to accelerate India’s exports into the USA.” Finally, the U.S. Trade Representative’s Office (USTR) should start preparing to bring a WTO dispute against India regarding the PMA Mandate’s local content requirements, as it has done with solar panels.

To be clear, a strong, growing, and collaborative trade relationship between the United States and India is in both parties’ best interests. But India’s recent trade policies are placing that relationship in jeopardy. The United States should not sit idly by as the Indian government enacts regulations that harm American industry and jobs. Strong leadership will be needed from both sides to ensure a continued constructive and robust trade relationship between the two countries.
ENDNOTES

1 Author’s analysis of World Bank Development Indicators Data. World Bank, World Development Indicators, “GDP growth (annual %),” (accessed January 24, 2013).
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