

# Why India's PMA Will Harm the Indian and Global Economies

BY STEPHEN J. EZELL | MARCH 2014

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*India's PMA policy is unlikely to benefit India's ICT manufacturers, and overall is likely to do harm to India's broader economy.*

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Despite contentions that India's Preferential Market Access (PMA) policy—which enacts local content requirements (LCRs) on public procurement of electronics and information and communications technology (ICT) products in India—is a temporary, limited, and non-distortionary measure designed to give a slight and momentary boost to domestic electronics and ICT hardware manufacturers, the reality is that the PMA is a highly distortive policy which is likely to damage both the Indian and broader global economy.

In February 2012, the Indian Ministry of Communications and Information Technology announced a Preferential Market Access mandate for electronic goods which imposed local content requirements on the procurement of information technology products by both government and private sector entities with “security implications for the country.” On July 8, 2013, India's government announced that it would suspend and review its Preferential Market Access requirements for local content as applied to private sector procurements.<sup>1</sup> ITIF applauds the Indian government for recognizing the concerns voiced by foreign governments, investors, and the international ICT community and rescinding the PMA's application to private sector procurements.<sup>2</sup>

However, India's government has left in place a PMA policy that mandates phased increases in the domestic value addition of electronics and ICT products for these to be eligible for procurement by Indian government agencies or by state-owned enterprises or other public sector undertakings in sectors including education, healthcare, energy, utilities, and mining. The policy stipulates that by year-end 2014, 25 percent of value addition for a wide range of electronics and ICT products—everything potentially from notebooks and netbooks, tablets and desktops, servers, printers, keyboards, monitors, memory card devices, photocopiers, scanners, faxes, mobile phones, projectors, networking equipment, phone network switching equipment (wireless and wireline), network

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management systems, and many others—must be performed domestically in India.<sup>3</sup> These percentages are intended to continue to rise to 45 percent in 2015 and to 80 percent by 2020.<sup>4</sup> Even if the PMA is applied only to public sector procurement and not private sector procurement, it will still impact approximately 30 percent of India’s \$20 billion ICT marketplace, a rather significant share.

Nevertheless, advocates of the PMA have argued that it is justified on the grounds that it:

1. is not distortionary;
2. is justified on security grounds;
3. is justified because it’s in India’s “national interest” to assist domestic electronics and ICT hardware manufacturers and because it can help India balance its terms of trade;<sup>5</sup> and
4. is justified because other countries have similar preferences in government procurement activity.

Unfortunately, these justifications are mistaken on a number of accounts. In fact, the PMA:

1. is trade-distortionary and will entail at least a *de facto* price or quality preference which will have significant negative effects on Indian citizens;
2. far from making ICT products in India more secure—is actually likely to make them *less* secure;
3. will degrade global trade and contribute to spillover and contagion effects reducing global trade and economic integration;
4. is distinct and more severe than many other countries’ preferences for local production in government procurement activity; and
5. is unlikely to have any significant long-term effectiveness as an instrument to bolster domestic manufacturing, while in fact possibly distracting Indian policymakers from enacting the kinds of policies they need to truly enhance the competitiveness of India’s economy and manufacturing industries.

## THE PMA IS TRADE DISTORTIONARY

Some have erroneously argued that the PMA is not trade distortionary because it does not include any “price or quality” preferences, as some other nations (e.g., Brazil) have implemented when imposing local content requirements in government procurement activity. For example, as *The Economic Times* explains, India’s Department of Telecommunications has defended the PMA on the grounds that it “does not provide price preference to them [domestic manufacturers] over imported products and also that there has been no dilution of technical requirement.”<sup>6</sup> This argument holds that the PMA “only” requires that a certain percentage of procurements be fulfilled by products that have been manufactured (or their intellectual property contributed) by an entity in India, whether by an Indian-owned entity or a foreign-owned one.

While this is technically true, in fact, the PMA embodies a very real *de facto* price/quality preference. For if India-based ICT and electronics equipment manufacturers could win contracts today when Indian government procurement is conducted on a *best-value* basis—

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awarding contracts based on the optimal combination of price and quality—then India would not need to introduce a specific preference for domestic manufacturers. In other words, *by definition*, the PMA will entail a price/quality preference for local manufacturers, for if those competitors were currently winning a sufficient share of those contracts (in the Indian government's estimation), then a PMA would not be needed. And because Indian public procurement decisions going forward will not be made solely on a best-value basis—because a part of the determination will be made on the *location* of where value addition occurs—then by definition India's government will be awarding contracts for procurement of electronics and ICT products that are either of higher price or inferior quality.

Moreover, the PMA is an economically regressive policy, representing a transfer payment from average Indian taxpayers to well-to-do Indian manufacturers. The PMA will raise government costs by making the procurement of ICT products more expensive, leading to one of the following several undesirable outcomes: 1) India's government will procure fewer, or more inferior, ICT products, which will compromise or outright preclude the provision of much-needed e-government services and solutions, such as Indian citizens' ability to efficiently conduct business with Indian government agencies online or the deployment of advanced ICT systems such as health IT or intelligent transportation systems; 2) India's government will have to increase expenditures—and thus raise taxes—to maintain the same level of ICT procurement; or 3) India's government will have to forgo other expenditures to cover the increased cost of expenditures on ICT products. In all three of these cases, average Indian citizens will suffer.

According to the research firm Gartner, Indian government ICT procurement is expected to total \$6.4 billion in 2014.<sup>7</sup> Supposing the PMA's implicit price preference raises the cost of procurement 20 percent over the best-value basis in 2014 (and this estimate could easily be much higher if India sticks to its goal of achieving 80 percent domestic value addition by 2020), then India's ICT budget would in effect “buy” only \$5.1 billion worth of ICT equipment in 2014, and therefore the ability of the Indian government to efficiently provide services to their businesses and citizens would decrease by approximately 20 percent. Conversely, India's government could decide that it must maintain at least its current level of ICT procurement (i.e., it must have at least X number of computers, photocopiers, etc.), meaning that India would have to now spend \$7.6 billion—\$1.2 billion more than it would have to spend otherwise—to purchase as much ICT capacity as it previously acquired. To achieve that, either the Indian government will have to raise taxes on India's 1.27 billion citizens—in fact, India would need to raise taxes on each citizen by \$1 to account for the PMA's higher prices/lower quality—or the government could forgo expenditures for the provision of other government services, such as for food security or infrastructure deployment.

In fact, India's PMA will have wide distortive effects across India's entire economy because it imposes LCRs on a general purpose technology—ICTs—that is key to enhancing productivity in the provision of government services, to deploying both wireless and Internet broadband networks that constitute essential platforms for digital commerce, and to deploying digital applications such as health IT and intelligent transportation systems that can deliver important societal benefits such as improved health outcomes, greater

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safety, greater energy efficiency, and reduced environmental impact from greenhouse gas emissions. In other words, ICT products and services enable productivity growth throughout India's economy.

That's why Indian economists P.D. Kaushik and Nirvikar Singh found that for every \$1 of tariffs India imposed on imported ICT products, India suffered an economic loss of \$1.30 because of lower productivity.<sup>8</sup> As Kaushik and Singh found in reference to their study of ICT adoption in India, "High tariffs did not create a competitive domestic [hardware] industry, but [they] limited adoption [of ICT by users in India] by keeping prices high."<sup>9</sup> But the PMA will act like a tariff in making ICT products more expensive in government procurement. (A tariff sets the price, but not the quantity; the PMA sets the quantity but not the price.) Put simply, the PMA is a regressive policy instrument that will increase incomes of well-off companies either at the expense of government services or higher taxes for the average Indian citizen. With Indian government procurement of ICT products expected to grow to \$10 billion by 2020, these distortions and the annual cost imposed on India's citizens will only grow more severe.

The reality is that with its PMA policy, India is trying to alter India's production/consumption patterns with regard to a particular set of goods—in this case ICT and electronics products. As ITIF describes in explaining the inability of a carbon price to deliver innovation in the renewable energy sector in *Inducing Innovation: What a Carbon Price Can and Can't Do*, there are really three mechanisms countries can use to try to shift more production to occur domestically: 1) price incentives; 2) quantity requirements or restrictions; or 3) lowering costs and improving quality—i.e. competing through innovation.<sup>10</sup> Price incentives refer to explicit price preferences for locally produced products in government procurement, such as Brazil's 25 percent price preference for Brazilian medical technologies and drugs in government procurement. Quantity requirements set specific percentages for products that must be locally produced in government procurement, such as India's requirements for local content in solar projects, which stipulate that at least 10 percent of new photovoltaic projects must use domestically made solar cells and modules.<sup>11</sup> The PMA clearly falls into this second category.

It would be far more preferable if India chose to help its domestic producers expand production in India not by resorting to price or quantity preferences but by focusing on a third avenue of policies that could assist Indian manufacturers in lowering costs and improving quality. These include "good" policies such as better infrastructure, better workforce training and skills development, better labor market policies, better tax and foreign direct investment policies, increased investment in scientific research and technology transfer, and SME extension policies. It's through such types of policies, as described in a forthcoming ITIF report on Indian economic policy, that countries cultivate globally competitive ICT and electronics manufacturing industries, as opposed to industries that can only compete when awarded government preferences and thus often end up being uncompetitive in global markets.

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And the PMA will distort global markets for trade in ICT and electronics products. ICT industries are innovation industries, characterized by decreasing average cost of production—that is, high fixed costs of initial research, development, and design but lower marginal costs of incremental production. Yet this is precisely why the PMA is in fact so distortionary and damaging to global ICT innovation.

First, by protecting domestic-producing firms, the PMA lowers the market share of other ICT firms because it induces excess competition by enabling more firms to compete than necessary in a marketplace; indeed, by definition it enables firms to compete that could not succeed if procurements were awarded on a best-value basis.

Second, the PMA raises global ICT costs because it exacerbates market balkanization. Innovative firms need access to large markets (i.e., economies of scale), which better enable them to cover those fixed costs, so that unit costs can be lower and revenues for reinvestment in innovation higher. An ICT manufacturer, for example, may only need one or two plants to produce an ICT product for global sales, but if nations require the firm to manufacture locally in order to sell locally, then it will need multiple plants, thus increasing the firm's costs and reducing the resources available for investing in future innovation. In these two ways, the PMA introduces government-induced excess competition and added production costs that will lead to less global innovation and higher global costs. This makes the PMA a trade-distortionary instrument.

## **THE PMA WILL NOT INCREASE ICT SECURITY**

Advocates' second argument for the PMA is that it is justified on security grounds. This argument holds that if at least 25 percent of value addition for ICT and electronics products procured by the Indian government occurs locally, then India can be more ensured it won't suffer from foreign cyberattacks or security breaches. As *The Economic Times* notes, India's "security agencies here too had a role to play in the formulation of the new [PMA] rules, as they have warned multiple times that malicious codes could be implanted to networks, before or after manufacturing, and that testing of equipment alone may not solve the problem."<sup>12</sup>

But attempting to justify the PMA on the basis of security concerns is incorrect on several grounds. First, if this argument is seriously accepted and taken to its logical conclusion, then every country—including countries such as Andorra, Bangladesh, Fiji, Mauritius, Pakistan, and everyone else—should have their own electronics industry and there should be no trade in ICT products. Moreover, according to this logic, not only should all countries fulfill their demand for ICT products with domestically produced ones (in theory to be more confident about those product's security features), then in fact the United States should also procure all ICT services from locally based providers, because the United States may be vulnerable to an increased risk of cyber-attack or network breaches when core business process activities of key U.S. firms such as financial institutions are outsourced to Indian IT services and business processing firms. If India wants to justify the PMA because "malicious code could be implanted to networks," would that make the U.S. government justified in imposing local content requirement for the provision of ICT services because bad actors at Indian ICT services firms could implant malicious code in software?

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This is not to diminish the reality that many countries—including both India and the United States—face serious cyberattacks. As *The Hindu* notes, India’s Department of Telecom recently launched an investigation into the alleged role Chinese telecom equipment manufacturer Huawei played in hacking into Bharat Sanchar Nigam Limited (BSNL)’s network and sabotaging its expansion plans in Rajahmundry in coastal Andhra Pradesh.<sup>13</sup> And it is true that the United States has had concerns over Huawei’s activities as well, including barring Chinese networking vendors Huawei and ZTE from U.S. government networks.<sup>14</sup> However, India is conflating the legitimate issues it has had regarding the security of networking products manufactured by Chinese vendors such as Huawei and ZTE and using it as a justification for mercantilist protectionism on a wide range of ICT products made by other companies.

Moreover, if network security and not industrial policy were truly India’s primary concern in enacting the PMA, then there’s no reason for applying the PMA to an entire range of ICT and electronics products such as monitors, keyboards, printers, photocopiers, scanners, faxes, etc. that have little or nothing to do with cybersecurity. In addition, if enhancing the security of ICT networks is truly a driving reason for the PMA, it’s difficult to see how this goal will be achieved when the PMA is applied only to public sector and not also to private sector procurement.

Ironically, the reality is that the PMA will likely only weaken ICT security for India. That’s because: 1) India’s PMA will increasingly call for the purchase of ICT products based on consideration of location produced rather than value and merit, including the quality of the product’s security features, and 2) it’s the world’s leading ICT manufacturers and services providers that are most capable of developing advanced cybersecurity technologies. Or does India’s PMA mean to suggest that the advanced cybersecurity technologies developed by its ICT hardware and services firms are in all cases superior to those developed by American, European, Korean and Japanese firms? To be clear, security issues related to ICT products are indeed a legitimate and important concern. But India’s attempt to justify the PMA on security grounds ignores global norms, which hold that the best approaches to security are based on risk management and public-private partnerships and acknowledge that the security of ICT products or components is dependent upon how they are developed, produced, and deployed—not on where they are manufactured. India would be better served not by introducing the PMA or by introducing compulsory registration requirements for ICT products, but by collaborating with international partners in preventing and combatting cyberattacks and accepting the test findings of internationally reputed laboratories.

On this latter point, in 2012, India’s Department of Electronics and Information Technology issued a “Compulsory Registration Order” for Product Safety that requires new electronics equipment that are imported into or sold in India to be tested by domestic labs, registered with the Bureau of Indian Standards (BIS), and then specially labeled prior to going on the market.<sup>15</sup> But India’s compulsory registration requirements are based on an Indian standard that is identical to the international standard to which the global ICT industry already tests and certifies products. As a result, companies have been forced to retest their products (only within India) with no benefits to product safety. Moreover, even

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though ostensibly the requirements were introduced to ensure “public safety,” they have been applied to a wide range of specialized ICT equipment (such as high-end servers) that do not pose a safety risk to the public.

## THE PMA WILL NOT ON NET SPUR THE GROWTH OF INDIAN MANUFACTURING

The third argument backers of the PMA make is that it is needed to bolster domestic manufacturing and to help India address growing trade imbalances.<sup>16</sup> For example, Rajoo Goel, Secretary General of the Electronic Industries Association of India (ELCINA) cites a report from India’s Department of Electronics and Information Technology which finds that “demand for electronic equipment in India is estimated to reach \$400 billion by 2020, while domestic electronic production, in the absence of policy support, is projected to reach a bare \$104 billion in the same period.” He notes that, “this will lead to a huge trade imbalance. Huge imports, projected at \$296 billion, will also create millions of jobs in supplier countries, effectively exporting jobs from India.”<sup>17</sup>

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But this argument contains several flaws. If this justification for protectionist policies were widely accepted, then it would lead to major deleterious consequences for the global trading system. Such an argument suggests that India should embrace an economic policy of autarky—or being self-sufficient in every economic sector—such that India would not need to rely on any foreign imports of ICT products, or for that matter other items, such as gold. But if that logic holds, then India should also seek to balance its trade in exports of ICT services, for India runs a trade surplus in that sector and is really producing more ICT services than is demanded by the Indian economy. In other words, if India wishes to achieve self-sufficiency in ICT hardware production in the context of the global economy, then it should also seek self-sufficiency and nothing more in terms of ICT services output. Moreover, by the same logic as before, all countries should do this, such that countries including Bangladesh and Pakistan each develop their own indigenous ICT industries, because to do so clearly would be in their own national interests. In fact, the goal of countries’ economic policy should not to be have one particular industry balance its trade, or to have one particular industry generate more jobs, it should be to raise a nation’s GDP through higher productivity achieved by all sectors of an economy.

Rather than look at ICT products as the source of trade imbalances, India would be better served if they were seen for what they are: transformational enablers of productivity, innovation, and economic growth. It’s understandable that Indian policymakers wish to increase domestic manufacturing of electronics and ICT products or to desire more balanced trade in ICT products. But to achieve that India should be playing an attraction, not a compulsion game, putting in place proactive policies that entice and attract multinational ICT corporations to invest in manufacturing operations in India, not to compel them to place the bare minimum there. And to achieve more of the latter, India should look not to enact its own mercantilist policies but to join with the international community in combatting the mercantilist practices of countries such as China whose mercantilist activities have distorted global trade and investment patterns and significantly hurt other developing nations such as India that might otherwise have received some of the investment and gained some of the global market share that China has captured.<sup>18</sup> It’s these

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types of policies that have compelled India to initiate more than 159 anti-dumping cases against China since 1992, including in ICT sectors such as mobile phones. In fact, not only has India filed more anti-dumping investigations against China than any other country at the WTO, this represents the largest number of anti-dumping investigations filed by any country against another.<sup>19</sup> Clearly China's policies have damaged India's terms of trade in the ICT sector. But if India wants to redress this, the best approach is to collaborate with the international community to push back against China, not to implement broad-brush policies such as the PMA that seek to mandate local production for eligibility in government procurement.

## THE PMA IS NOT LIKE OTHER NATIONS' PREFERENTIAL POLICIES

Advocates' fourth justification for the PMA is that they are just the same as any other local content requirement imposed by foreign governments. Here advocates also argue that India is within its World Trade Organization rights to enact local content requirements because it is only an observer, not a signatory, to the Government Procurement Agreement. They also argue that other nations like the United States engage in the same kind of policies. While it is true that the United States has its own minimal "Buy America" requirements, the reality is that not all local content requirements in government procurement are created equal. The stated intent behind the PMA to achieve percentages of up to 80 percent local value addition is far in excess of anything even contemplated in any of the *Buy America* provisions and frankly even beyond the 25 percent price preferences that countries such as Brazil and Malaysia have implemented as part of their government procurement practices. Also, it's worth noting that the United States regularly waives the provisions of its *Buy America Act* and *Buy American Act* within the context of free trade agreements (and indeed these have been waived many times).<sup>20</sup> In summary, the PMA portends to be a far more trade-distortive policy than the minimal U.S. *Buy American* provisions, or indeed the local content requirements of many other countries.

For all this, the irony behind the imbroglia surrounding India's PMA policy is that it's unlikely to increase overall Indian ICT manufacturing, and certainly not worth the harm, including the reputational harm, that will inure to India's broader economy. Indeed, even the PMA's advocates acknowledge the "feebleness" of the PMA effort, with one report noting that, "In the broader context, PMA alone seems to be a feeble attempt at driving domestic manufacturing, given that manufacturers need more than just access to government procurement to become as competitive as a foreign supplier" and that "there is no clear consensus on whether such a policy will help India achieve either of its objectives, i.e., manufacturing or/and security."<sup>21</sup>

Indeed, infrastructure weaknesses alone impose a cost disadvantage of 6 to 8 percent on Indian manufacturers.<sup>22</sup> And Indian ICT manufacturers are 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 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's a self-imposed handicap entirely within the purview of Indian policymakers to address by decreasing tariffs and thus the cost of key ICT inputs. As a recent report from the



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Swedish National Board of Trade emphasized in examining the likely impacts of a Trans-Atlantic Trade and Investment Partnership agreement on the Swedish economy: “The positive impacts on national income stem primarily from a nation’s liberalization of its own barriers. [This is] because they result in lower costs for imports and lead to a better use of domestic and imported resources.”<sup>23</sup> In other words, India’s electronics and ICT manufacturers would be better off if India eliminated its inverted duty structure in the ICT sector by voluntarily lowering its high tariffs on ICT parts and components.

More broadly, this discussion reemphasizes the main theme of ITIF’s forthcoming report, *The Indian Economy at a Crossroads*, which is that the energy of Indian policymakers would be much more profitably directed if focused on addressing the true underlying challenges to the productivity and competitive potential of Indian firms (in ICT or other sectors): notably improving India’s digital and physical infrastructure; improving the business environment in terms of labor and tax policies; making it easier to start and to conduct business; to attract rather than compel foreign direct investment; and to invest in science, technology, and workforce skills. As Sadanand Dhume and Julissa Milligan write in *How Bad Economic Choices Threaten the US-India Relationship and India’s Rise*, “To revive Indian manufacturing, India needs to focus on the basics—speedy and sensible land acquisition, labor laws that do not discourage firms from hiring, world-class infrastructure, and at least a modicum of good governance.”<sup>24</sup> As they note, “not one of the entrepreneurs interviewed for this report—including up-and-coming software product manufacturers in Silicon Valley, Bangalore, and Hyderabad—said they required government-imposed quotas to be competitive.”<sup>25</sup> Put simply, the PMA is a distraction from the real challenges India’s economy faces that if not addressed now will still persist a decade from now (just as failing to address such issues a decade ago caused those challenges to remain today, which precipitates the “need” for a PMA).

In conclusion, the PMA is a distortive policy that is unlikely to prove effective as it will impose costs on India’s economy and citizens. It should be repealed in full.

## ENDNOTES

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## ACKNOWLEDGEMENTS

The author wishes to thank the following individuals for providing input and assistance to this report: Robert Atkinson, Kathryn Angstadt, and Bethany Imondi. Any errors or omissions are the author's alone.

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