

## Quality Rules in India: Trade, Technical Regulations and Consumer Protection

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**ABSTRACT** India's competitiveness in manufacturing and the success of 'Make in India' depend on its ability to produce high-quality products and services. Product quality is important for human health and consumer safety, as well as for protecting the climate and the environment. One way of ensuring that products and services meet certain standards is through technical regulations with mandatory compliance. However, technical regulations also have the potential to impede the cross-border flow of goods and services if they become barriers to trade. Until recently, India had few technical regulations, but it is now set to change this. This brief analyses sectoral patterns and trends in India's technical regulation by looking at mandatory certification schemes and notifications to the Technical Barriers to Trade Committee of the World Trade Organisation. Four measures are identified, which could support goals such as consumer protection while also improving India's competitiveness and its integration into international trade.

### INTRODUCTION

Indian Prime Minister Narendra Modi was applauded at the 2018 World Economic Forum for speaking in favour of globalisation and publicly positioning himself against protectionism.<sup>1</sup> Yet, tariff rates were increased on a range of products in the 2018–19 public budget, creating a concern that Indian policy did not echo Modi's words in Davos.<sup>2</sup> While higher tariffs attract immediate media attention, the

long-term regulatory trends have been neglected. Currently, India is strengthening its regulatory framework for products by making compliance mandatory for a growing number of technical standards. Until now, India has had relatively few technical regulations. However, recently enacted policies have extended the influence of Indian ministries on technical regulations. Technical regulations such as

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mandatory safety standards for gas appliances are important because they are one way of ensuring that products and services do not harm people. Similar regulations can be important for consumer safety and to protect the environment.

However, mandatory technical regulations tend to increase costs for companies. The necessity of collecting information about regulations, conducting compliance, product testing and certification, and possibly even changing production processes all add up. Both domestic and foreign companies incur these costs, and the latter face them more often in the form of technical barriers to trade (TBT). TBTs are measures that can regulate markets and protect consumers, but they can also be used to make imports and exports more difficult to protect domestic markets.

TBTs are not always intentional; often, they are the result of regulatory differences and contradictions. This makes it crucial for regulators to weigh the necessity of new or modified regulations to ensure that unintended TBTs do not arise. This will facilitate the ease of doing business in India and the competitiveness of the domestic industry, as well as the success of the 'Make in India' initiative, which aims to transform India into a global design-and-manufacturing hub.

Sectoral patterns and trends in India's technical regulation are outlined in this brief by looking at the emergence of India's mandatory certification schemes and data from the TBT Committee of the World Trade Organisation (WTO). These insights are used to identify the possible challenges India may face in international trade and competitiveness in manufacturing. Four measures are then identified, which could support consumer safety and environmental protection while also

improving India's competitiveness and its integration into international trade.

## **TECHNICAL REGULATIONS IN INDIA**

Standards guide consumers to make informed decisions and gauge key quality aspects of products, such as safety, performance or environmental friendliness. Standards play an important role in improving the efficiency of production and facilitating international trade, for example, by ensuring the compatibility of products. Companies in many countries thus engage proactively in the development of standards. Compliance to standards is usually voluntary, but governments may take necessary measures in the public interest.

According to the WTO, legitimate objectives include national security, the prevention of deceptive practices, protection of human health or safety, animal or plant life or health, and the environment (Article 2.2, TBT Agreement). By making compliance to standards mandatory, these standards become technical regulations. These regulations may also include requirements related to packaging, marking and labelling, and procedures for demonstrating compliance, e.g. conformity assessment procedures (testing, inspection and certification).

In India, the government primarily leads standardisation with the Bureau of Indian Standards (BIS), recognised as the national standards body. By 2017, more than 19,000 voluntary Indian standards had been developed, of which only 137 product standards are mandatory. The BIS operates several schemes that define the compliance procedure. The BIS Mandatory Product Certification Scheme applies for 116 products, for which it grants licences after the successful completion of production-site inspections and sample testing.

Another 50 products fall under the Compulsory Registration Scheme, which requires manufactures to be registered with the BIS after their products have been tested by a BIS-recognised laboratory.

On 12 October 2017, the Bureau of Indian Standards Act, 2016 came into force, replacing the previous 1986 law. Besides other changes, the new BIS Act makes it easier for the government to notify or declare products, systems and services for which compliance to specified standards are mandatory. This notification of technical regulations by Indian ministries is often called “Quality Control Orders.” According to Article 16(1) of the BIS Act, 2016, the central government can do so “in public interest or for the protection of human, animal or plant health, safety of the environment, or prevention of unfair trade practices, or national security.” Several ministries have already started examining the need for new technical regulations or have begun product notification.

As the prevention of 'unfair trade practices' is mentioned in the Act, some recent Quality Control Orders make use of this possibility. A notification by the Department of Heavy Industry on 13 September 2017 listed five heavy electrical industry items for which the Department of Commerce had suggested Quality Control Orders for trade purposes.

## **PATTERNS AND TRENDS IN INDIA'S TECHNICAL REGULATIONS SINCE THE EARLY 2000s**

As of 1 March 2018, 146 products have been regulated in India through mandatory certification. Most of these products are either from the electronics and IT sector (27 percent) or steel (25 percent). Other regulated products

are related to food safety, cement, cylinders and valves, and household electrical goods (nine percent each). Up until 2012, cement and household electronics goods, such as electric stoves, irons and room heaters, had been the sectors with the most regulated products (see graph). Household electronic goods are products for which people understandably prefer a high degree of product safety and corresponding enforcement. The same holds true for the regulation of cement and the role this regulation plays in safety for construction. There have not been any complaints from other countries at the WTO that the introduction of such measures in India would violate a free trading system. In this context, however, the volume of imported cement in India has constantly been at a low level.

Due to its use in the defence industry, steel is of strategic relevance for governments. The current trade dispute between the US and China had its starting point with steel tariffs. Looking at quality, however, it would seem reasonable to have stronger regulation to ensure safe construction and industrial goods. The numerous technical regulations for steel in India have been a matter of dispute at the WTO. In 2009, China, the European Union (EU), Japan and a few other countries raised a Specific Trade Concern at the TBT Committee, regarding India's Quality Control Order on mandatory certification for steel products. The countries claimed a lack of harmonisation with international standards and that the regulation was an unnecessary barrier to trade. Similarly, The Stainless-Steel Products (Quality Control) Order, 2015 was criticised by the EU for its disproportionality and a lack of harmonisation with international standards.<sup>3</sup>

For some observers of India's quality landscape, the introduction of the 'Compulsory

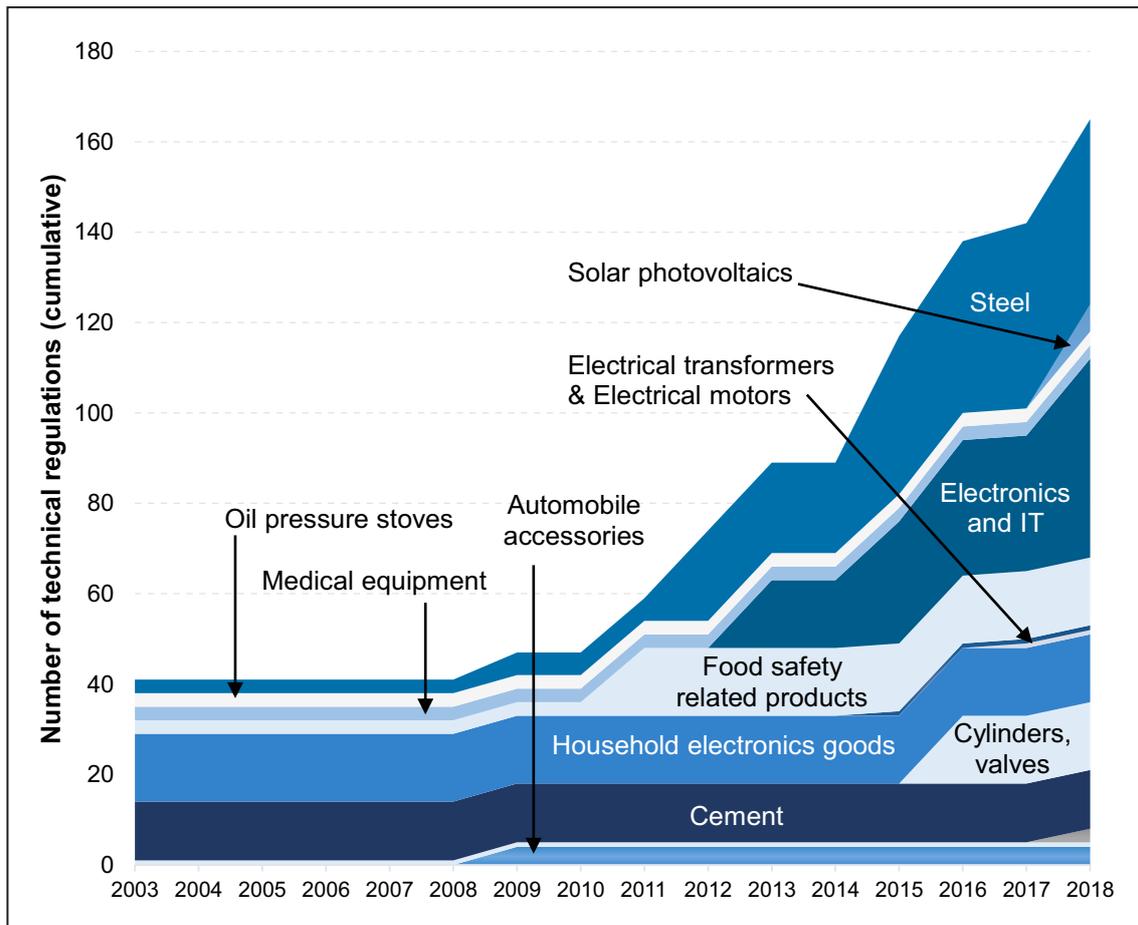
Registration Scheme (CRS) for Electronic and IT Products' was seen as a turning point in the use of technical regulations. Launched in 2012, this scheme regulates products such as video games, wireless keyboards, mobile phones and laptops. It was speculated that the introduction of this regulation was a response to India's growing trade deficit with China. In 2004, India had a small trade surplus of US\$2 billion with China; by 2011, this had changed to a trade deficit of about US\$40 billion, with Chinese electronics and IT products representing a substantial share of the Indian imports.

The graph shows that, in India, there has been an increase in not only the overall number of technical regulations but also the number of sectors that are regulated. At the end of 2017, it

was announced that further standards were to become mandatory in the solar photovoltaic sector, electrical components and electrical motors.

Are these regulations for the benefit of consumers, to protect indigenous industries, or both? Despite the depicted trends, it is difficult to speculate on the reasoning behind each regulation. Indian discourse on technical regulations provides some indications that there is a focus on trade considerations. In 2016, the Government of India shortlisted 137 products for a technical regulation, first phase. The shortlist was based on four inputs: 1) 105 product proposals from an Inter-Ministerial Committee on Non-Tariff Measures; 2) a list of 121 products, for which anti-dumping duties

**Graph: Number of Products under Mandatory Certification in India (2003-18\*)**



New or amended mandatory certification for products since 2003.

\* 2018 includes announced mandatory certification, which have not yet entered into force.

Source: Authors' calculations based on public data from the Bureau of Indian Standards 2018, [www.bis.org.in/cert/ProdUnManCert.asp](http://www.bis.org.in/cert/ProdUnManCert.asp).

had been levied in the past five years; 3) 100 products with an Indian export interest; 4) 25 sectors under the Make in India initiative.<sup>4</sup>

## CHALLENGES

India has recently celebrated remarkable improvements in the ease of doing business, indicating its willingness to remove bureaucratic hurdles. However, there is a tipping point when too many—sometimes unnecessary—technical regulations create red tape and inflate costs for companies. Even though technical regulations are neglected in the heavily cited World Bank Index, they represent a real potential burden for companies.

In several industry roundtables held in 2017 and 2018 with German companies who operate in India, the relevance of technical regulations was discussed in detail. These roundtables took place in the framework of the Indo-German Working Group on Quality Infrastructure between the German Federal Ministry for Economic Affairs and Energy and the Indian Ministry for Consumer Affairs, Food and Public Distribution. Within this bilateral Working Group, Germany and India cooperate on standardisation, conformity assessment and accreditation, and market surveillance to reduce TBTs and strengthen consumer protection.

Repeated testing requirements—due to non-acceptance of test reports in India—are a common concern for foreign companies. In one of the roundtables, a German manufacturer of agricultural machinery pointed out that the requirement to carry out additional test procedures in India made it unviable to launch in the Indian market. The costs of the required testing procedures would have exceeded the potential profits for this manufacturer.

In further discussions with companies

operating in India, it became apparent that the challenges of technical regulations include operational difficulties. Among the issues brought up were a lack of understanding on the implementation of technical regulations, burdensome compliance procedures, and short transition periods for new regulations. Companies pointed to one recent case: the introduction of new Indian energy-efficiency regulations for electric motors, which are used in a wide range of production facilities. The motor regulations entered into force in January 2017 and went into effect in October 2017. Many companies argued that a 10-month period was insufficient because of the substantial technical changes and compliance procedures that were required. Even after the government extended the implementation by two months, companies claimed that a transition period of up to 24 months would have been more appropriate. These examples show that companies have a high interest in regulatory certainty and need an adequate planning horizon to make sound business decisions.

When regulations are introduced or changed, companies face higher costs. The Indian government, too, incurs additional expenditures when overseeing and enforcing a larger number of mandatory certifications. Every rupee spent on unnecessary certification requirements is a rupee that cannot be spent on much-needed regulations in other areas. For instance, currently, there are almost no technical regulations for the safety of machinery or gas appliances, while there are regulations for wireless keyboards. This raises the question of whether such a product should take regulatory priority over a product that is connected to flammable gases.

Technical regulations on trade may have a potentially negative effect on India's own

economy. The goal to increase manufacturing's share of GDP to 25 percent by 2025 and become a global or regional manufacturing hub depends on the availability of imports. If companies face barriers in importing intermediate and capital goods, they are less likely to select India as an export-processing location.<sup>5</sup> This especially holds true for high value-added manufacturing with complex and long value chains.<sup>6</sup> However, if India embraces imports, it is likely to attract more foreign direct investments under the Make in India campaign.

While India is populous, the comparatively low domestic purchasing power still makes it attractive for companies to tap foreign markets. India is aiming to reach a 3.5-percent share of global trade by 2020, which will require a deeper integration into global value chains. The electronics and IT hardware industry is one where the country has the potential to move into higher value manufacturing.<sup>7</sup> However, this sector relies heavily on products from multiple countries. High import duties and technical regulations, such as the Compulsory Registration Scheme for Electronic and IT Products, could become a potential hurdle for India in its attempts to diversify.

Despite their name, TBTs are not only about trade. They can affect domestic firms as well as foreign ones. Creating India-specific technical regulations sets Indian companies on a separate technological path. This reduces the economies of scale for export-oriented Indian companies, as both international and Indian specifications must be met.

Regulating products by prescribing specific technical requirements may limit the innovative capabilities of companies. Given today's fast-paced technological changes, a technical standard made mandatory today might already be outdated tomorrow. Avoiding this, while also

fostering the innovative capabilities of companies, requires allowing companies to develop their own ways to achieve goals such as product safety, at least for low-risk products.

In the highly regulated EU, it proved successful to refer to performance standards that outline functional requirements instead of prescribing specific technological solutions. European standards are there to facilitate compliance with requirements defined in legislation (EU Directives), but their use remains voluntary. This so-called “new approach” of the EU—even though more than 30 years old by now—can help spur innovation because companies have the possibility to develop their own technological solutions to ensure that the objectives of regulations are met.<sup>8</sup>

Finally, technical regulations are inadequate tools to counter unfair trade practices of other countries, such as illegitimate export subsidies or import restrictions. They are inflexible and create technological path dependencies for companies, for example when making capital investments to set up a production process for a product based on an India-specific standard. If the other country revokes unfair trade practices, technical regulations cannot be taken back easily. Given that the WTO offers mechanisms to respond to unfair trade practices such as countervailing duties, it may usually not be required to apply technical regulations for those means in the long run.

## THE ROAD AHEAD

In closing the gap between products that are regulated and those that are not, it is important to avoid the issues discussed above. The following steps could help reach the goals of protecting the environment, the climate and the

consumers, without compromising on the achievements in the ease of doing business. They can also benefit the Indian economy and contribute to initiatives such as Make in India.

### **1. Develop an Indian Roadmap for Implementing Good Regulatory Practices<sup>9</sup>**

There is no single definition of good regulatory practices, but some common principles have been developed to ensure that policy serves the public interest while minimising the associated costs. Two practices are crucial as India works towards stronger regulation of certain sectors: regulatory impact assessments and stakeholder consultations.<sup>10</sup>

Systematic regulatory impact assessments can be done before (*ex-ante*) and after (*ex-post*) the introduction of a regulation. Before introducing a new technical regulation, the regulator must clearly define the policy objective, critically assess available options, conduct a needs assessment, and follow a risk-based approach. Public-policy problems are often highly complex with multiple regulators being concerned at the same time. It might therefore be helpful to define a practical roadmap to guide policymakers in conducting a cost-benefit analysis for new regulations. This systematic approach especially avoids unintended negative effects on the ease of doing business by making potential impacts visible to decision-makers.

This kind of analysis should be repeated after a regulation has been introduced.

With the implementation experience, policymakers can assess the extent to which a regulation is able to meet its specified objective and recalibrate if needed. While regulatory impact assessments sound like a good idea in theory, they might be quite cumbersome in practice, given the high complexity of most subject matters, especially considering the effects on foreign trade. Therefore, the contributions of sector experts through systematically organised stakeholder consultations is key. For the stakeholder consultations to function properly, regulators must ensure high transparency of the process, availability of early and adequate information, and inclusivity.

### **2. Embrace International Standards and Certifications**

The economic benefits of standards are well documented.<sup>11</sup> They increase compatibility, strengthen consumer trust and lead to dissemination of knowledge. International standards take this one step further as they represent a global consensus among leading experts on a specific issue. They are, thus, codified 'best practices'. International standards allow companies to apply best practices to their products, and they enhance the efficiency of global value chains and facilitate market access.

For instance, the adaption of international standards to national specifics may be necessary in dealing with climatic differences in India. However, any adaptations should be carefully considered as small alterations in standards can require significant technical or procedural

changes, defeating the very purpose of standards. Indian experts should be more active in introducing points to consider in the development of international standards, thereby making the standards better through universal applicability.

In the Indian Strategy for Standards (INSS), the Indian government expresses its intention to promote and contribute to developing international standards. This can strengthen the competitiveness of the Indian industry and support the integration of India in global and regional value chains. As outlined, duplicate testing and certification can significantly add to companies' costs. Therefore, India should consider increasing the acceptance of international certifications and test reports. International accreditation arrangements already provide the basis for the evaluation of whether the testing and certification bodies have the required capabilities.

### **3. Engage in International Regulatory Dialogue**

The growing interdependencies between countries lead to larger potential benefits of international cooperation. The OECD counts increased trade and investment, efficiency gains and cost savings for governments, companies and citizens, as well as improved safety and strengthened environmental sustainability as possible gains from international regulatory cooperation.<sup>12</sup> This cooperation can occur in various forms, whether internationally or bilaterally, formally or informally. For India, there is potential in strengthening

the regulatory dialogue with strategic economic partners. This goes beyond high-level political meetings, as regulatory gains can be achieved only by engaging in a dialogue on regulatory specifics. One example for this is the Indo-German Working Group on Quality Infrastructure, in which the countries cooperate on standardisation, conformity assessment and accreditation, and market surveillance—in close collaboration with industry—to reduce TBTs. Such working groups provide a framework to identify challenges and opportunities to trade, coordinate the commenting of draft regulations, and share policy and implementation experiences. By publishing sector-specific studies and overview documents, for example on the quality infrastructure landscape, such groups enhance the understanding of regulatory processes.

### **4. Use Online Platforms for Easy and Early Access of Information on Technical Regulations**

The costs for collecting required information are a major factor for companies when it comes to technical regulations, which are complex and frequently changing. So far, India does not have a common portal where companies can access all relevant information on technical regulations. The Indian Standards Portal is a first step to enhancing awareness of the Indian quality infrastructure system. It provides information on regulations and compliance procedures for companies. It will be beneficial if all information on new technical regulations—including drafts

under public consultation—were accessible in an easy and timely manner.

## CONCLUSION

Because of regulatory gaps in critical areas, it is likely that India will see more regulation in the future. This makes it crucial to discuss the best way to regulate, as India starts to strengthen technical regulations with the goal of protecting consumers, the environment and climate. This brief addressed some of the potential challenges

with regard to the ease of doing business, trade, and the competitiveness of the Indian industry. By developing an Indian roadmap for implementing good regulatory practices, embracing international standards and certifications, engaging in multilateral and bilateral regulatory dialogue with key countries, and developing online platforms for easy and early access to information on technical regulations, both Make in India's goals and global trade integration could come within closer reach. 

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## REFERENCES

1. Department of Commerce, Confederation of Indian Industry. “Indian Standards Conclave 2016: Challenge of Standards & Technical Regulations.” 21 June 2016.
2. European Commission. “Report from the Commission to the Council and the European Parliament on Trade and Investment Barriers and Protectionist Trends.” 20 June 2016. Accessed 15 May 2018. [http://trade.ec.europa.eu/doclib/docs/2016/june/tradoc\\_154665.pdf](http://trade.ec.europa.eu/doclib/docs/2016/june/tradoc_154665.pdf).
3. International Organisation for Standardisation (ISO). “Economic benefits of standards Volume 1.” 2011. Accessed 15 May 2018. <https://www.iso.org/publication/PUB100288.html>.
4. Kathuria, Rajat et al. “Mapping the future of high value manufacturing in India.” Indian Council for Research on International Economic Relations, Working Paper 285, July 2014. Accessed 15 May 2018. [http://icrier.org/pdf/Working\\_Paper\\_285.pdf](http://icrier.org/pdf/Working_Paper_285.pdf).
5. Kauffmann, Céline and Nikolai Malyshev. “International Regulatory Co-operation: The Menu of Approaches.” October 2015. Accessed 15 May 2018. <http://e15initiative.org/wp-content/uploads/2015/09/E15-Regulatory-Kauffmann-and-Malyshev-final.pdf>.

6. Lovely, Mary E. "Narendra Modi's Rise in Import Tariffs Will Hurt India's Economy." Website of the Peterson Institute for International Economics, 19 February 2018. Accessed 15 May 2018. <https://piie.com/commentary/op-eds/narendra-modis-rise-import-tariffs-will-hurt-indias-economy>.
7. Organisation for Economic Co-operation and Development (OECD). "International Regulatory Co-operation and Trade: Understanding the Trade Costs of Regulatory Divergence and the Remedies." 2017.
8. OECD. "How Imports Improve Productivity and Competitiveness." May 2010. Accessed 15 May 2018. <http://www.oecd.org/trade/45293596.pdf>.
9. Pelkmans, Jacques and Andrea Renda. "Does EU regulation hinder or stimulate innovation?" CEPS Special Report, November 2014. Accessed 15 May 2018. <https://www.ceps.eu/system/files/No%2096%20EU%20Legislation%20and%20Innovation.pdf>.
10. Soni, Sunil and Rahul Kumar. "Standards, Technical Regulations, Regulatory Framework, TBT-Enquiry Point." *In Role of Standards in International Trade: Challenges, Opportunities & Issues*, 2016.

## ENDNOTES

1. The authors would like to thank Dr. Kari Hiepko-Odermann for her valuable editorial comments.
2. For example, former vice-chairman of NITI Aayog: Arvind Panagariya, “Return of protectionism: Panagariya sounds alarm over Modi's new trade template for India,” *The Economic Times*, 12 February 2018; Archana Chaudhary and Anirban Nag, “Modi – the protectionist: 30-year high import duty to spur 'Make in India',” *Business Standard*, 15 February 2018.
3. European Commission, “Report from the Commission to the Council and the European Parliament on Trade and Investment Barriers and Protectionist Trends,” 20 June 2016, 13, [http://trade.ec.europa.eu/doclib/docs/2016/june/tradoc\\_154665.pdf](http://trade.ec.europa.eu/doclib/docs/2016/june/tradoc_154665.pdf).
4. Department of Commerce, Confederation of Indian Industry, “Indian Standards Conclave 2016: Challenge of Standards & Technical Regulations,” 21 June 2016, 16.
5. See also Mary E. Lovely, “Narendra Modi's Rise in Import Tariffs Will Hurt India's Economy,” Peterson Institute for International Economics, 19 February 2018, <https://piie.com/commentary/op-eds/narendra-modis-rise-import-tariffs-will-hurt-indias-economy>.
6. OECD, “How Imports Improve Productivity and Competitiveness,” May 2010, <http://www.oecd.org/trade/45293596.pdf>.
7. Rajat Kathuria et al., “Mapping the future of high value manufacturing in India,” Indian Council for Research on International Economic Relations, Working Paper 285, July 2014, [http://icrier.org/pdf/Working\\_Paper\\_285.pdf](http://icrier.org/pdf/Working_Paper_285.pdf).
8. Jacques Pelkmans and Andrea Renda, “Does EU regulation hinder or stimulate innovation?” CEPS Special Report, November 2014, 12, <https://www.ceps.eu/system/files/No%2096%20EU%20Legislation%20and%20Innovation.pdf>.
9. Sunil Soni, Rahul Kumar, “Standards, Technical Regulations, Regulatory Framework, TBT-Enquiry Point,” in *Role of Standards in International Trade: Challenges, Opportunities & Issues*, 2016, 86.
10. OECD, “International Regulatory Co-operation and Trade: Understanding the Trade Costs of Regulatory Divergence and the Remedies,” 2017.
11. ISO, “Economic benefits of standards Volume 1,” 2011, <https://www.iso.org/publication/PUB100288.html>.
12. Céline Kauffmann and Nikolai Malyshev, “International Regulatory Co-operation: The Menu of Approaches,” October 2015, <http://e15initiative.org/wp-content/uploads/2015/09/E15-Regulatory-Kauffmann-and-Malyshev-final.pdf>.



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